

**THE ADVOCATE'S GUIDE
TO EFFECTIVE PARTICIPATION
IN ENVIRONMENTAL PERMIT
PROCEEDINGS**

For New and Expanded Liquefied Natural Gas (LNG) Export Facilities

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The views expressed herein are solely those of the individual authors. Nothing in this guide constitutes legal advice. This guide has not been reviewed by any government entity.

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APPENDICES

Note: In many instances, comments, briefs, motions, and other documents below were submitted on behalf of numerous groups (sometimes dozens of groups!). To streamline the material, we have tried to list either the name of the primary entity that prepared the document or the entity listed first.

App. 1: Tulane Environmental Law Clinic’s advocacy guide titled “*Louisiana Resident Resources.*”

App. 2: (Rio Grande LNG) Opinion of the D.C. Circuit Court of Appeals in *Vecinos para el Bienstar de la Comunidad Costera v. FERC*, No. 20-10453 (Aug. 3, 2021).

Apps. 3a, 3b, 3c: (Jordan Cove LNG) Environmental Impact Statement (in three parts due to file size).

App. 4: (Jordan Cove LNG) Natural Resources Defense Council’s Motion to Intervene and Comments on the Draft Environmental Impact Statement (July 5, 2019).

App. 5: (Jordan Cove LNG) Center for Biological Diversity’s Motion to Intervene with FERC (Oct. 18, 2017).

App. 6: (Jordan Cove LNG) Western Environmental Law Center’s Motion to Intervene with FERC (2017).

App. 7: (Jordan Cove LNG) Sierra Club’s Motion to Intervene with FERC (Oct. 18, 2017).

App. 8: (Jordan Cove LNG) Natural Resources Defense Council’s Request for Rehearing with FERC (Apr. 20, 2020).

App. 8b: (Alaska LNG) Center for Biological Diversity’s Request for Rehearing with FERC (June 22, 2020).

App. 9: (Rio Grande LNG) Sierra Club’s Request for Rehearing and Stay of Order with FERC (Dec. 23, 2019).

App. 10: (Rio Grande LNG) Sierra Club’s Public Comments on Draft Environmental Impact Statement to FERC (Dec. 3, 2018).

App. 11: (Texas LNG) Sierra Club’s Request for Rehearing with FERC (Dec. 23, 2019).

App. 12: Fernández, J.A., et al., “*Use of native and transplanted mosses as complementary techniques for biomonitoring mercury around an industrial facility.*” *The Science of the Total Environment* 256:151-61 at 152 (2000).

App. 13: (Annova LNG) Sierra Club’s Request for Rehearing and Stay of Order with FERC (Dec. 23, 2019).

App. 14: (Cameron Parish LNG) Sierra Club’s comments on the Draft Environmental Impact Statement with FERC (Mar. 3, 2014).

App. 15: (Jordan Cove LNG) Western Environmental Law Center’s comments on the Draft Environmental Impact Statement with FERC (Feb. 2015).

App. 16: (Jordan Cove LNG) Oregon Shores Conservation Coalition's Supplemental Comments on Draft Environmental Impact Statement with FERC (July 5, 2019).

App. 17: (Pointe LNG) Sabin Center for Climate Change Law's scoping comments to FERC (Mar. 7, 2019).

App. 18: (Sabine Pass LNG) Opinion of the D.C. Circuit Court of Appeals in *Sierra Club v. FERC*, 827 F.3d 59 (D.C. Cir. 2016).

App. 19: (Texas LNG) Sierra Club's scoping comments with FERC (May 21, 2015).

App. 20: (Joint FERC consideration of Annova LNG, Rio Grande LNG, and Texas LNG) Defenders of Wildlife's scoping comments with FERC (Sept. 3, 2015).

App. 21: (Joint FERC consideration of Annova LNG, Rio Grande LNG, and Texas LNG) Sierra Club's scoping comments (Sept. 4, 2015).

App. 22: (Texas LNG) Sierra Club's Comments on the Draft Environmental Impact Statement (Dec. 17, 2018).

App. 23: (Jordan Cove LNG) Department of Energy Final Opinion and Order (July 6, 2020).

App. 24: (Texas LNG) Department of Energy Authorization to Export to Non-FTA Countries (Feb. 10, 2020).

App. 25: (Alaska LNG) Department of Energy's Order on Rehearing, FE Docket No. 14-96-LNG (April 15, 2021).

App. 26: (Jordan Cove LNG) Sierra Club's Answer to Amendment Application and Protest to Department of Energy (Mar. 23, 2016).

App. 27: (Alaska LNG) Sierra Club's Motion to Intervene and Protest to Department of Energy (Nov. 17, 2014).

App. 28: (Alaska LNG) Sierra Club's Request for Rehearing to Department of Energy (Sep. 21, 2020).

App. 29: (Jordan Cove LNG) Sierra Club's Motion to Intervene, Protest, and Comments to Department of Energy (Aug. 6, 2012).

App. 30: (Jordan Cove LNG) Sierra Club's Request for Rehearing to Department of Energy (Aug. 8, 2020).

App. 31: (Jordan Cove LNG) American Public Gas Association's Motion to Intervene and Protest to Department of Energy (Aug. 6, 2012).

App. 32: (Department of Energy NEPA rulemaking) Sabin Center for Climate Change Law's comments to Department of Energy (June 1, 2020).

App. 33: (Department of Energy NEPA rulemaking) Delaware Riverkeeper Network's comments to Department of Energy (June 1, 2020).

App. 34: (Department of Energy NEPA rulemaking) Sierra Club's comments to Department of Energy (June 1, 2020).

App. 35: (Department of Energy NEPA rulemaking) Center for Biological Diversity's comments to Department of Energy (June 1, 2020).

App. 36: (Rio Grande LNG) Sierra Club's Supplemental Comments Filed on Section 404 and Section 10 Applications (Oct. 21, 2019).

App. 37: Atchafalaya Basinkeeper FOIA requests and correspondence with Corps (May 30, 2017).

App. 38: Atchafalaya Basinkeeper FOIA requests and correspondence with Corps (Apr. 22, 2019).

App. 39: Atchafalaya Basinkeeper FOIA requests and correspondence with Corps (Dec. 10, 2020).

App. 40: Atchafalaya Basinkeeper FOIA requests and correspondence with EPA (May 3, 2019).

App. 41: Atchafalaya Basinkeeper FOIA requests and correspondence with EPA (Mar. 30, 2017).

App. 42: Atchafalaya Basinkeeper FOIA requests and correspondence with EPA (Apr. 4, 2017).

App. 43: Atchafalaya Basinkeeper FOIA requests and correspondence with the Pipeline and Hazardous Materials Safety Administration (Oct. 17, 2018).

App. 44: Atchafalaya Basinkeeper FOIA requests and correspondence with Louisiana Department of Wildlife and Fisheries (Feb. 14, 2020).

App. 45: Sample outline for CWA § 404 comments.

App. 46: (Annova LNG) Sierra Club's comments on CWA § 404 Application (Jan. 29, 2019).

App. 47: (Bayou Bridge Pipeline) Tulane Environmental Law Clinic's comments on CWA § 404 Applications (Jan. 31, 2017).

App. 48: (Bayou Bridge Pipeline) Atchafalaya Basinkeeper's comments on CWA § 404 Applications (Nov. 2, 2016).

App. 49: (Bayou Bridge Pipeline) Atchafalaya Basinkeeper's comments on CWA § 404 Applications (Jan. 30, 2017).

App. 50: EPA's CWA § 404 comments to the Corps on the Mountain Valley Pipeline project (May 27, 2021).

App. 51: Appalachian Mountain Advocates' CWA § 404 comments to the Corps on the Mountain Valley Pipeline (May. 28, 2021).

App. 52: EPA's CWA § 404 comments to the Corp on the Reylas Surface Mine (Mar. 23, 2009).

App. 53: Petitioners' Opening Brief in *Shrimpers & Fishermen of the RGV v. United States Army Corps of Engineers*, No. 20-60281, 2021 WL 911171 (5th Cir. Mar. 9, 2021).

App. 54: Respondent's Brief in *Shrimpers & Fishermen of the RGV v. United States Army Corps of Engineers*, No. 20-60281, 2021 WL 911171 (5th Cir. Mar. 9, 2021).

App. 55: Petitioners' Reply Brief in *Shrimpers & Fishermen of the RGV v. United States Army Corps of Engineers*, No. 20-60281, 2021 WL 911171 (5th Cir. Mar. 9, 2021).

App. 56: (Jordan Cove LNG) Oregon Shores Conservation Coalition's CWA § 401 comments to Oregon Department of Environmental Quality (Mar. 13, 2015).

App. 57 (Jordan Cove LNG) Rogue Riverkeeper's CWA § 401 comments to Oregon Department of Environmental Quality (Aug 8, 2018).

App. 58: (Cameron LNG) Gulf Restoration Network's CWA §§ 404 and 401 comments to the Corp and LDEQ (May 27, 2016).

App. 59: (Magnolia LNG) Tulane Environmental Law Clinic and Sierra Club's comments on draft air permit to LDEQ (July 29, 2021).

App. 60: (Magnolia LNG) Expert comments by Dr. Ranajit (Ron) Sahu on draft air permit to LDEQ (July 29, 2021).

App. 61: (Cameron LNG) Tulane Environmental Law Clinic and Sierra Club's comments on draft air permit to LDEQ (Oct. 15, 2021).

App. 62: (Cameron LNG) Expert comments by Dr. Ranajit (Ron) Sahu on draft air permit to LDEQ (Oct. 15, 2021).

App. 63: (Port Arthur LNG) Lone Star Legal Aid's comments on draft air permit and request for contested case hearing to TCEQ (undated but filed Sept. 15, 2020).

App. 64: (Lake Charles LNG) Sierra Club's comments on draft air permit (May 27, 2021).

App. 65: (Alaska LNG) National Parks Conservation Association expert (Victoria Stamper) comments on the best available control technology for draft air permit (Dec. 8, 2020).

App. 66: (Alaska LNG) National Parks Conservation Association expert comments (D. Howard Gebhart) on air dispersion modeling for draft air permit (Dec. 2020).

App. 67: (Cameron LNG) Expert opinion of Steven Klafka on Cameron LNG and Cameron Parish's compliance with NAAQS (including air dispersion modeling) (Oct. 14, 2021).

App. 68: (Texas Tax Incentives) Network of Texas Organizations' spreadsheet of "Winners and Losers from Chapter 313" (Feb. 2021).



Chapter 1

INTRODUCTION

CHAPTER ONE: INTRODUCTION

WHAT IS THIS GUIDE?

This is a guide for advocates who want to challenge the construction of LNG export terminals. LNG terminals are some of the largest pollution sources built in the US today. They are also among the more complex facility types to challenge because of the number of agencies involved and overlapping laws with which they must comply. The goal of this guide is to increase the number of advocates empowered to fight, stop, and police these facilities.

Who might benefit from this guide?

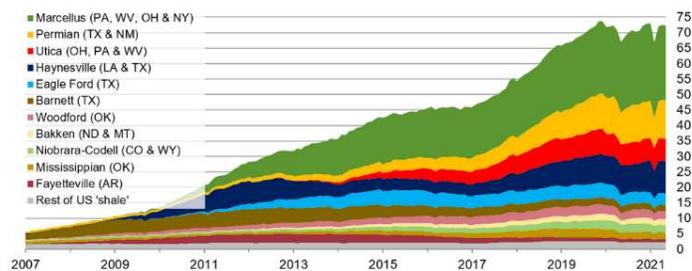
Advocates working in Texas and Louisiana in particular will benefit from this guide. This guide is geared toward legal practitioners, but a legal background is not necessary to understand this guide.

Why are we concerned about LNG export facilities now?

For many years, the U.S. was an importer of gas—the first major LNG facility was built in Massachusetts in 1971, and three others were built between then and 1982. Not until 2002 was another import facility (now known as Cameron LNG) permitted. During this time, only a single export facility was in operation, sending gas from Alaska to Japan.¹ And as recently as a decade ago, the Gulf of Mexico was being targeted as the ideal location for the construction of new facilities to import—not export—LNG.² In 2008 it was widely believed that “[t]he central issue in the development of LNG regasification [import] facilities in the U.S. is not **whether** these facilities will in fact be developed **but where and to what extent.**”³

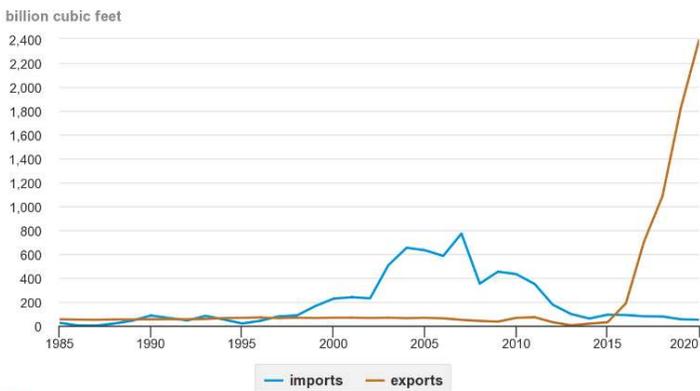
But the shale gas revolution⁴ that was underway caused these predictions of import growth to fall flat (see right).

U.S. dry shale gas production
billion cubic feet per day



Sources: EIA derived from state administrative data collected by Enerver DrillingInfo Inc. Data are through June 2021 and represent EIA's official tight gas estimates, but are not survey data. State abbreviations indicate primary state(s).

U.S. LNG imports and exports, 1985-2020
billion cubic feet



Source: U.S. Energy Information Administration, *Natural Gas Monthly*, May 2021

¹ David E. Dismukes, *Examination of the Development of Liquefied Natural Gas on the Gulf of Mexico*, U.S. DOI, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2008-017, 2008, 45. https://digital.library.unt.edu/ark:/67531/metadc955681/m2/1/high_res_d/4313.pdf (describing the ConocoPhillips LNG facility (“Kenai LNG”), a 68 Bcf per year liquefaction terminal located on the Kenai Peninsula of Alaska that has been under long-term contract with a Japanese company since 1969). See also “ConocoPhillips and Japan mark 50 years of LNG.” Nov. 13, 2019. <https://www.conocophillips.com/spiritnow/story/conocophillips-and-japan-mark-50-years-of-lng/>.

² Dismukes, *supra* note 1, 1.

³ *Supra* (emphasis added).

⁴ U.S. Energy Information Administration (EIA), “Natural gas explained: Where our natural gas comes from,” <https://www.eia.gov/energyexplained/natural-gas/where-our-natural-gas-comes-from.php> (last visited Mar. 31, 2022).

Instead, the glut of gas in the U.S. has caused the industry to look to overseas markets to consume production. Instead of import terminals, companies have turned their attention to building export facilities, in a process that has skyrocketed in the last decade (see right⁵):

Although approximately 55% of the total U.S. gas exports in 2020 were by pipeline,⁶ the vast majority of the remainder is processed first in large LNG export terminals in which the gas is liquefied (cooled and compressed) for more dense storage and then exported in enormous LNG tanker ships. To keep up with the industry's expectations of the world's appetite for U.S. LNG, many applicants are currently seeking permits to expand the capacity of existing export terminals or to construct completely new export terminals.

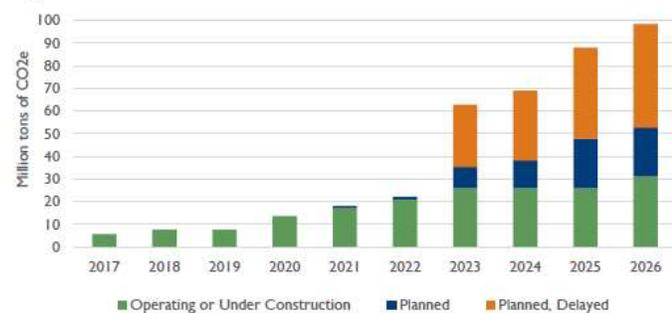
If a significant number of the planned LNG export plants are constructed, the U.S. will be invested in a high-carbon, fossil-fuel energy infrastructure for decades to come. The recent explosion in LNG export permitting activities represents a unique moment for advocates to mount a concerted effort to push back against this expansion. Each facility has site-specific attributes that will make a regulatory challenge to it unique, but almost all will need the same suite of permits. And all will seek tax abatements from local and regional authorities to justify construction. This manual highlights the similarities among facilities, and ways to fight the permits, approvals, and tax abatements that will likely be sought.

Much like the fight to stop coal power plants from proliferating across America,⁷ a concerted fight today will help stop the proliferation of gas from spreading across the globe. This is a unique opportunity to reduce reliance on fossil fuels and promote environmental justice here and abroad.

The anticipated increase in greenhouse gas emissions from the operation of these terminals is expected to dwarf that of terminals currently operating or under construction.⁸ And the main component of gas is methane—one of the more potent greenhouse gases. This gas is notoriously leaky throughout the supply chain, and additional greenhouse gas emissions result from the fuel-intensive process of liquefying the gas for transport, as well as from transport and downstream uses. A

2020 study by the nonprofit Environmental Integrity Project (EIP) estimates that the 12 new terminals and 5 expansions that have construction authorization have the potential to emit over **67 million tons of greenhouse gases per year**—"more climate-warming pollution than is released from

Figure V. Cumulative GHG Emissions from Authorized LNG Terminals³⁶



Source: Environmental Integrity Project, Emission Increase Database, August 2020. Note: Greenhouse gases are measured in carbon dioxide equivalents (CO₂e), expressed in tons per year. Emissions reflect projects' maximum potential to emit, once fully-constructed, as specified in their New Source Review permits or federal environmental impact statements.

⁵ "U.S. LNG imports and exports, 1985-2020," U.S. Energy Information Administration (May 2021) <https://www.eia.gov/energyexplained/natural-gas/liquefied-natural-gas.php>.

⁶ U.S. Energy Information Administration, "Natural gas explained: Natural gas imports and exports," <https://www.eia.gov/energyexplained/natural-gas/imports-and-exports.php>.

⁷ Michael Grunwald, "Inside the war on coal," *Politico*, May 26, 2015, <https://www.politico.com/agenda/story/2015/05/inside-war-on-coal-000002/> (describing the history of the Beyond Coal campaign).

⁸ Environmental Integrity Project, "Troubled Waters for LNG: The COVID-19 Recession and Overproduction Derail Dramatic Expansion of Liquefied Natural Gas Terminals" ("Troubled Waters"), Oct. 5, 2020, 15 (Fig. 5), <https://environmentalintegrity.org/wp-content/uploads/2020/10/LNG-Report-10.5.20-updated.pdf>.

16 coal-fired power plants operating around the clock.”⁹ These greenhouse gases associated with LNG will contribute to climate change that affects us no matter where the gas is ultimately consumed.

Unchecked, construction of new export capacity also will delay or interfere with the adoption of sustainable technologies for not just for the lifespan of a single twenty-year purchase agreement, but for decades to come. In fact, the lifespan of the Kenai terminal in Alaska¹⁰ and the length of the lease agreements facilities enter into today¹¹ show that LNG export infrastructure can be kept alive and running for *over half a century*. That’s fifty-plus years of greenhouse gas emissions that the planet simply cannot afford.

As for environmental justice, many of these facilities are sited in marginalized or low-income communities that already suffer disproportionately from industrial pollution. EIP’s 2020 study estimates: “About 38 percent of the people living within three miles of proposed LNG facilities are people of color and Hispanics or Latinos, and 39 percent are low-income (defined as households earning less than \$24,120 annually).”¹² It’s no secret that these communities continue to be targets for the siting of highly polluting industrial sources,¹³ and the agencies responsible for approving LNG terminals have historically failed to seriously scrutinize the potential effects of pollution on neighboring communities.¹⁴

Construction and operation of currently planned LNG terminals will substantially degrade local environmental quality, threatening the health of nearby residents and damaging sensitive marine and shoreline ecosystems. The non-greenhouse gas emissions from these facilities during operation are enormous: the 2020 EIP study estimates that if all projects authorized for construction but not yet built become operational, the projects could release up to 4,000 tons **per year** of particulate matter, as well as 17,900 tons of nitrogen oxides, 27,000 tons of volatile organic compounds, 1,200 tons of sulfur dioxide, and 42,300 tons of carbon monoxide.¹⁵ And air pollution is not all—impacts from construction, operation, and maintenance of export terminals (e.g., filling wetlands, dredging shipping channels, dumping of ballast water) cause water pollution that can harm marine ecosystems. LNG tanker traffic lessens the ability of others to use and enjoy shipping channels and neighboring waterfront. And all of this can end up damaging local economies, especially those based on tourism and fisheries.

⁹ Environmental Integrity Project, “Troubled Waters,” 5 (emphasis added).

¹⁰ ConocoPhillips, “ConocoPhillips and Japan mark 50 years of LNG,” Nov. 13, 2019,

<https://www.conocophillips.com/spiritnow/story/conocophillips-and-japan-mark-50-years-of-lng/>.

¹¹ Texas LNG, “Texas LNG, Subsidiary of Glenfarne Group And Alder Midstream, Announces Long-Term Lease With The Port Of Brownsville,” Global Newswire, Dec. 17, 2020, <https://www.globenewswire.com/news-release/2020/12/18/2147496/0/en/TEXAS-LNG-SUBSIDIARY-OF-GLENFARNE-GROUP-AND-ALDER-MIDSTREAM-ANNOUNCES-LONG-TERM-LEASE-WITH-THE-PORT-OF-BROWNSVILLE.html> (describing Texas LNG’s 50-year lease agreement with the Port of Brownsville).

¹² Environmental Integrity Project, “Troubled Waters,” 5.

¹³ Clean Air Task Force, “Fumes Across the Fence-Line,” Nov. 2017, 4, http://www.catf.us/wp-content/uploads/2017/11/CATF_Pub_FumesAcrossTheFenceLine.pdf.

¹⁴ Maya Weber, “DC Circuit faults FERC’s environmental analysis in two LNG project orders,” S&P Global, Aug. 3, 2021, <https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/080321-dc-circuit-faults-fercs-environmental-analysis-in-two-lng-project-orders> (reporting on the D.C. Circuit’s rejection and remand of FERC’s 2019 approval of two Texas LNG terminals, in part because of FERC’s faulty environmental justice analysis, which arbitrarily analyzed the impact on communities only within two miles of the projects, despite FERC’s determination that environmental effects would extend well beyond two miles).

¹⁵ Environmental Integrity Project, “Troubled Waters” at 5 (emphasis added).

Once facilities are permitted, it is basically impossible to put these harms to climate, communities, and the environment back in the box. Instead, these harms will be locked in for decades to come. With so many facilities seeking permits now, this is the moment for everyone to join in. Only by pooling resources and fighting these facilities on every front can success be possible.

What is an LNG terminal?

There are two main types of LNG terminals; export facilities and import facilities. Export facilities prepare gas for shipment by boat overseas. Import facilities receive LNG from boats and prepare it for distribution inside the United States. Some facilities, like Freeport LNG near Freeport, Texas, are capable of processing gas for both import and export in the same footprint. For both kinds of facilities there is some overlap between components, but some components are unique to each type.¹⁶ In the United States the shift has been to build export—rather than import—terminals. This is because of the quantity of gas produced in the United States, and the demand abroad, as explained above.

A more in-depth discussion of the components of export terminals is found in Chapter 2. Also discussed in that chapter are the ancillary infrastructure and components that terminals depend on, such as pipelines and compressor stations.

How do I use this guide?

This guide is divided into chapters, the first being the one you are reading now. The second explains where the US LNG terminals are being located. Also included is a brief technical background of the components found in the typical export LNG terminals built, permitted, and proposed today. Each terminal is different, however, and when drafting comments advocates should rely on the proposals specific to the terminal they are challenging. Advocates familiar with the underlying technology should feel free to skip this chapter.

The third chapter provides a brief overview of the federal, state, and local laws that determine what permits, certifications, and approvals each terminal will need, as well as which agencies or actors are responsible for issuing permits, certifications, and approvals. This chapter strives to show the hierarchy of the laws so that an advocate can assess where resources are best allocated given potential goals (e.g., slow, stop, or police the facility).

The next six chapters (Chapters 4-9) are divided into the types of permits, approvals, and certifications that an LNG terminal typically seeks and needs to be built and operate:

- Chapter 4: Federal Energy Regulatory Commission (FERC) certification, as lead agency, of the environmental effects. FERC's documentation typically forms the basis for other federal agency's decisions
- Chapter 5: Department of Energy (DOE) certification, which approves the export of gas to specific nations

¹⁶ Import terminals need equipment to regasify the LNG, which has typically been either via closed or open loop system. Open loop systems are especially dangerous for fish and other aquatic populations, a concern that resulted in intense opposition to these projects in South Louisiana. Dismukes, *supra* note 1, 4. But export terminal do not need this technology—instead the gas is liquefied for transport, not reheated. Unique concerns exist for export terminals, which this guide seeks to highlight.

- Chapter 6: U.S. Army Corps of Engineers (Corps) decisions and permits as to effects on the aquatic ecosystem and navigable waters (section 404, 10, 103 and 408 permits)
- Chapter 7: State water quality permits for each portion of the project and each federal license (Clean Water Act section 401)
- Chapter 8: Clean Air Act Permitting (focused on Texas and Louisiana)
- Chapter 9: Tax abatements (in particular those in Louisiana and Texas)

Chapter 10 highlights additional topics an advocate might be interested in, but that were not able to be covered in-depth in this guide: (1) coastal zone management permits and certifications; (2) easements and eminent domain; (3) the danger that certain state and local ordinances may be insufficient to stop projects because of the concept of preemption; (4) other agencies that play roles in the permitting process; and (5) permitting deepwater terminals.

Finally, the electronic appendix includes additional resources for advocates, such as previous comments, examples of filings, and other helpful documents.

What is not covered in this guide in-depth?

Not covered in depth are strategies specific to challenging LNG pipelines, or deepwater LNG terminals. The focus of this guide is on legal, not policy strategies. Coastal use permits are also not covered in depth, although they are discussed briefly in the last chapter, Chapter 10.

Even though this guide does not discuss pipelines in depth, it is important to look at LNG projects holistically. Sometimes it is easier to stop a project by challenging the pipeline. For example, if the project has a long pipeline, it may cross more wetlands and therefore have more hooks for challenging the Corps' section 404 permit (needed for dredging and filling aquatic ecosystems like wetlands). A pipeline also may impact more landowners and more environmental justice communities than a terminal, just based on its longer length. FERC also submits pipelines to a slightly different standard of review, as Chapter 4 discusses. FERC's approval of a pipeline also allows the developer to use eminent domain to seize land—a power not granted to terminal developers. The “Landowner's Rapid Response Guide,” made available by the Property Rights and Pipeline Center at <https://pipelinecenter.org/>, offers step-by-step instructions, along with five videos, for challenging pipelines and their associated imminent domain claims.

Jordan Cove is a good example of why it is important to look at an LNG project holistically at the project and its location. With Jordan Cove, the pipeline was more vulnerable in part because its length increased the expected impact on nearby waters. In addition, Oregon law allowed for greater local input in the permitting process. There is no cookie-cutter approach to fighting an LNG terminal, and an advocate should collaborate with other advocates and attorneys knowledgeable in state and local law before tackling an LNG terminal challenge.

In the end, a successful campaign to stop an LNG project likely will entail engagement in many forums. When there are resources for multiple lines of attack, they should be deployed. Remember that for a new LNG project to proceed, its proponents must be successful in obtaining every required permit and approval. A successful LNG opponent only needs to block one of them.

What are other resources out there?

What resources on LNG and LNG regulation already exist?

This is by no means the only resource available for learning about LNG facilities and for challenging permits. Some other resources include:

- Regulatory and Permitting Database. OpenEI. <https://openei.org/wiki/RAPID/Roadmap>.
A National Renewable Energy Laboratory collaborative website funded by the Department of Energy and others with summary pages and flowcharts for state and federal permits required for renewable energy projects—permitting requirements that overlap with LNG terminals. Use the search function on the RAPID page (above link) to search by permit (e.g., “404”) or agency. Although the site is hosted by NREL, non-government entities and individuals may edit the site, so information should be crosschecked with the permitting agencies.
- EPA’s Liquefied Natural Gas Regulatory Roadmap. https://www.epa.gov/sites/default/files/2015-08/documents/lng_regulatory_roadmap.pdf.
This is EPA’s 44-page general overview of the environmental laws and regulations applicable to LNG facilities. Note that it was published in 2006, and therefore is not as up to date as this Guide, but it may provide a helpful source for big-picture requirements.
- Troubled Waters for LNG: The COVID-19 Recession and Overproduction Derail Dramatic Expansion of Liquefied Natural Gas Terminals. Environmental Integrity Project. Oct. 5, 2020. <https://environmentalintegrity.org/wp-content/uploads/2020/10/LNG-Report-10.5.20-updated.pdf>.
- Global LNG Fundamentals, Department of Energy Award No. DE-FE0024160. Oct. 2017. https://www.energy.gov/sites/prod/files/2017/10/f37/Global%20LNG%20Fundamentals_0.pdf
231-page handbook covering a broad spectrum of topics involved with developing and financing an LNG project, covering in depth the considerations for an LNG export project and development of a diverse domestic market. From the perspective of international countries interested in LNG. Good for understanding LNG from the importer’s perspective, as well as a primer on LNG.
- Oil and Gas Watch. <https://oilandgaswatch.org/>.
Oil and Gas Watch is a free, public inventory that tracks new and expanded oil, gas, and petrochemical infrastructure projects across the United States. Use the map to navigate to the facility of interest. Clicking on any facility will pull up a summary table of emissions information including current permit status. Clicking on the links in the table for more information opens a dropbox of folders organized by state and further subdivided by facility. Many permit documents are available this way, including those for LNG facilities.
- The Federal Government’s Regulations Website, <https://www.regulations.gov/>.
Some dockets are searchable on this website. Note that not all agencies update to this site, for example, EPA is much more consistent in updating than the EPA. For information on how to navigate this site, see the tutorial here: <https://www.youtube.com/watch?v=290-jouzWD>

- The Federal Government's Freedom of Information Act (FOIA) Website, <https://foiaonline.gov/foiaonline/action/public/home>.
A centralized location to track FOIA requests. Not all agencies participate—as relevant to LNG challenges, currently only the EPA and the Department of the Interior (which includes Fish & Wildlife Services) participate. One point of advocacy could be pushing FERC, the Army Corps of Engineers, and the Department of Energy to participate here too.
- Clean Air Task Force's Life Cycle Assessment Tool, Sept. 10, 2021.
Clean Air Task Force has developed a Life Cycle Assessment Tool to address the variability and range of lifecycle emissions associated with generating power from either coal or LNG. "It is an interactive spreadsheet tool in which key parameters can be directly adjusted to specific local conditions, allowing the user to explore and compare different fuel options. This customizable model can be used to explore the range of lifecycle emissions associated with coal and gas power."
- BankTrack, <https://www.banktrack.org/>, is a group tracking the financing behind fossil fuel projects, including LNG export terminals. The information compiled here could be useful for public awareness campaigns.
- U.S. Climate Change Litigation: Columbia Law School and Arnold & Porter's free database of select cases related to environmental issues organized by the laws they address and jurisdiction. This should not be used as a substitute for a legal research database like Westlaw or Lexis, but it is a free compilation of major cases and some of the case briefing as well.
<http://climatecasechart.com/climate-change-litigation/us-climate-change-litigation/>.
- Sailing to Nowhere: Liquefied Natural Gas Is Not an Effective Climate Strategy. NRDC Report. Dec. 2020. <https://www.nrdc.org/sites/default/files/sailing-nowhere-liquefied-natural-gas-report.pdf>.

What are examples of challenges that have been brought against LNG facilities before?

There have been numerous challenges to LNG export terminals. Where relevant this guide cites many of the comments, briefing, orders, and environmental documents from a diversity of projects. Many of these documents can be found directly in the Appendix. The following export terminal projects summarized below are highlighted for their uniqueness and the number of challenges brought against them. In addition, two stand-alone pipeline projects are highlighted for the parallels that can be drawn in challenges to terminals.

- Jordan Cove Energy Project (Oregon).¹⁷ This combined terminal and pipeline project was defeated thanks to challenges on many fronts, including through avenues that are only available because of unique state and local laws that provide robust avenues for public participation. Because of advocates' efforts, the entire project was cancelled.¹⁸ In 2011, **the Department of Energy (DOE)** granted the project a license to export gas to free-trade countries; in 2014 DOE granted conditional approval for exports to non-free-trade countries, finding that the exports were not inconsistent with the public interest. DOE made its conditional approval final in 2020. Advocates challenged the DOE approvals administratively. On the **FERC** front, in February 2012,

¹⁷ Unless otherwise noted, the summary for this project is from: https://www.gem.wiki/Jordan_Cove_LNG_Terminal.

¹⁸ Niina Farah, N., Miranda Willson, and Carlos Anchondo, "Jordan Cove project dies. What it means for FERC, gas," E&E News, Dec. 2, 2021, <https://www.eenews.net/articles/jordan-cove-project-dies-what-it-means-for-ferc-gas/>.

the project pre-filed its application with FERC. In 2016, FERC rejected the pipeline portion, a first for the agency (the company was allowed to refile). FERC approved the project in 2020, and advocates quickly requested rehearing. When FERC failed to withdraw its certification, the advocates appealed to the D.C. Circuit. That court evidenced skepticism about the project and in November 2021, gave FERC 90 days in which to reconsider whether a stay of its order is appropriate, given the circumstances.¹⁹ As for **state challenges**, in February 2020, Oregon found that the project was inconsistent with its coastal use plan under the Coastal Zone Management Act (the federal coastal consistency review). The state also denied the section 401 water quality permit and a state dredging permit. FERC upheld the state's denial of the water quality permit in January 2021. On December 1, 2021, the developers officially pulled the plug on the project, citing its inability to get state permits.²⁰

- The three Brownsville terminals: Rio Grande LNG, Texas LNG, Annova LNG (Texas).²¹ Advocates brought a variety of challenges to all three of the export terminals proposed next to and across from each other along the Brownsville Ship Channel in south Texas. Challenges focused on the approvals given by FERC and Fish & Wildlife Service's supporting analyses. For Rio Grande LNG, challenges were also brought to the Army Corps of Engineers permit and the state air permit. The Corps challenge is on-going. No challenges were brought to the DOE authorizations for any of the three facilities but local governments did attempt to challenge the lease agreements the terminals had with the Port of Brownsville.²²

Federal authorization for Rio Grande LNG, by far the largest of the three at 27 metric tons per annum (mtpa), is at this time being reconsidered by **FERC**, after a successful challenge at the D.C. Circuit sent the certification back to FERC to fix its flawed environmental justice and climate-change analyses. FERC has been allowed to let its certification stand while it redoes those analyses, as the court found FERC "is likely to remedy any deficiencies." Towards the end of the permitting process, Rio Grande LNG revealed that it was changing its design from a six-train terminal to five. This derailed advocates' challenge to the facility's section 404 Clean Water Act permit from the **Army Corps of Engineers**, which advocates had appealed to the Fifth Circuit. That court paused proceedings until the Corps issued a revised permit to reflect the changes in dimensions of the facility, which it did in September 2021.²³ As of December 2021, advocates are challenging the reissued permit in the Fifth Circuit.²⁴ Challenges to the biological opinions and incidental take statements issued by the **U.S. Fish and Wildlife Service** were ultimately

¹⁹ Niina Farah, "Court grills FERC on climate, eminent domain review of gas project," Oct. 29, 2021, <https://www.eenews.net/articles/court-grills-ferc-on-climate-eminent-domain-review-of-gas-project/>; Mary B. Powers, "Court Pushes FERC to Reassess Its 2020 Signoff of \$10B Jordan Cove LNG," Nov. 9, 2021, <https://www.enr.com/articles/52921-court-pushes-ferc-to-reassess-its-2020-signoff-of-10b-jordan-cove-lng>.

²⁰ Farah, "Jordan Cove project dies. What it means for FERC, gas."

²¹ Unless noted, the summaries for these projects are from: https://www.gem.wiki/Rio_Grande_LNG_Terminal (Rio Grande LNG); https://www.gem.wiki/Annova_LNG_Terminal (Annova LNG); https://www.gem.wiki/Texas_LNG_Terminal (Texas LNG).

²² Davila Gaige, "Rio Grande LNG and BND amend lease, amid global oil and gas market uncertainty," *Port Isabel-South Padre Press*, May 8, 2020, <https://www.portisabelsouthpadre.com/2020/05/08/rio-grande-lng-and-bnd-amend-lease-amid-global-oil-and-gas-market-uncertainty/>.

²³ Sierra Club, "Local Residents, Environmental Groups File Three New Lawsuits Challenging Rio Grande Valley LNG Export Terminals," Mar. 27, 2020, <https://www.sierraclub.org/press-releases/2020/03/local-residents-environmental-groups-file-three-new-lawsuits-challenging-rio>.

²⁴ Sebastian Malo, "Texas natural gas projects face fresh environmental challenge," *Reuters*, Nov. 19, 2021, <https://www.reuters.com/legal/litigation/texas-natural-gas-projects-face-fresh-environmental-challenge-2021-11-19/>.

unsuccessful.²⁵ (Overturning Fish and Wildlife Service’s analyses would have severely weakened the legal support for FERC’s certification, which relied on those analyses.) Advocates’ Fifth Circuit challenge to the **state air permit** was denied on standing.²⁶ In 2021 Rio Grande LNG announced that it planned to incorporate carbon capture technology despite having argued against its feasibility in challenges to its state air permit.²⁷ As January 2022, opposition to the terminal is on-going.

Annova LNG, the second largest terminal of the three, at 6.5 mtpa and with six trains, was cancelled in March 2021 after it failed to secure any long-term offtake contracts or reach a final investment decision. Advocates believe that its difficulties were exacerbated by the number of challenges brought against the facility. For example, in 2020, advocates had challenged the **FERC** certification, which issued in 2019. A challenge to the biological opinions and incidental take statements issued by the **U.S. Fish and Wildlife Service** was ultimately unsuccessful.²⁸

Texas LNG, the smallest terminal at 4 mtpa, also received an adverse ruling at the D.C. Circuit on its FERC certification. As with the Rio Grande LNG challenge, the court told **FERC** to remedy its climate change and environmental-justice analyses. As of January 2022, the opposition to this facility continues.

- Alaska LNG export terminal (Alaska).²⁹ DOE and FERC challenges are on-going. Planned to be located southwest of Anchorage in Nikiski, Alaska, the project is a three-train, 20.1 mtpa facility that would deliver 3.5 billion cubic feet of gas a day from Alaska’s North Slope gas fields through the proposed 800-mile Alaska LNG Pipeline to the terminal, much of which destined for export to Asia. The proposal originally involved BP, ConocoPhillips, ExxonMobil, and the state-owned Alaska Gasline Development Corporation. But the private oil companies pulled out of the project as an LNG surplus shook gas prices. Alaska’s Gasline Development Corporation submitted its application to FERC on April 17, 2017, which was approved in May 2020. In June 2020, advocates that had been **challenging the FERC process** filed a formal request for FERC to reconsider its approval. Filed by the Chickaloon Village Traditional Council, the Center for Biological Diversity, Earthjustice, the Northern Alaska Environmental Center and Sierra Club, the appeal charged that FERC’s approval failed to consider the project’s impacts on climate change and endangered species, including polar bears, Cook Inlet beluga whales and North Pacific right whales. There has also been a **DOE challenge**. In August 2020, the US Department of Energy issued the project with a final authorization for LNG exports to all countries. In 2021, the DOE granted advocate’s request for rehearing of DOE’s export authorization and as of January 2022, DOE is conducting further studies as to whether exporting gas from Alaska is in the public interest. Specifically, DOE gave notice that it would be preparing to issue a supplemental Environmental Impact Statement for the project in July 2021 to analyze potential environmental impacts associated with gas

²⁵ Jamison Cocklin. “Fifth Circuit Finds Pipeline to Feed Rio Grande LNG Minor Threat to Wild Cats in South Texas,” *Natural Gas Intelligence*, March 11, 2021, <https://www.naturalgasintel.com/fifth-circuit-finds-pipeline-to-feed-rio-grande-lng-minor-threat-to-wild-cats-in-south-texas/>.

²⁶ *Shrimpers and Fishermen of the RGV v. TCEQ*, No. 19-60558 (5th Cir. 2020) <https://law.justia.com/cases/federal/appellate-courts/ca5/19-60558/19-60558-2020-07-31.html>.

²⁷ “NextDecade proposes carbon capture for Texas Rio Grande LNG project,” *Reuters*, Mar. 19, 2021, <https://www.reuters.com/article/us-nextdecade-carboncapture/nextdecade-proposes-carbon-capture-for-texas-rio-grande-lng-project-idUSKBN2BB1DC>.

²⁸ *Sierra Club v. Department of Interior*, No. 20-60319 (Mar. 10, 2021) <https://law.justia.com/cases/federal/appellate-courts/ca5/20-60319/20-60319-2021-03-10.html>.

²⁹ Unless otherwise noted, the summary for this project is from: https://www.gem.wiki/Alaska_LNG_Terminal.

production on the North Slope of Alaska and a life cycle analysis calculating the greenhouse gas emissions for LNG exported from the proposed Alaska LNG Project.³⁰

- **Pipelines.** Although pipelines are reviewed under different legal standards than export terminals, there is some overlap on strategy and this guide mentions discusses pipelines in some chapters—specifically the Mountain Valley Gas Pipeline and the Atlantic Coast Pipeline. **Mountain Valley Pipeline** is a proposed gas pipeline system that spans approximately 300 miles from northwestern West Virginia to southern Virginia. It would be located on active seismic zones, impact water quality, and be visible from multiple iconic points along the Appalachian Trail, likely affecting tourism and local economies. Fierce challenges were brought against the initial Army Corps of Engineers permit that was granted that relied on a generic “nationwide permit” and insufficient Clean Water Act section 401 authority; thanks to advocates’ efforts, the Corps is conducting its review under the more rigorous individual permitting system.³¹ The FERC certification was also challenged including for its treatment of historical indigenous sites along the pipeline route.³² Unfortunately, construction has been on-going during the legal challenges—according to the company, as of November 2021, only 20 miles were yet to be completed.³³ The construction has already caused stormwater runoff and impacts to water quality. The **Atlantic Coast Pipeline** was successfully defeated in July 2020, despite its proponents winning a Supreme Court victory on one aspect of one permit.³⁴ It would have affected environmental justice communities, Native American populations, and sensitive wildlife along the route. Among other challenges, advocates challenged the approvals issued by FERC and U.S. Forest Service, the latter of which was required because the pipeline was proposed on federal land.³⁵

More details on the number of LNG export terminals that are operating or in the permitting process can be found in Chapter 2.

³⁰ Office of Fossil Energy, Department of Energy, “Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the Alaska LNG Project,” 86 Fed. Reg. 35280-81 (July 2, 2021), <https://www.federalregister.gov/documents/2021/07/02/2021-14188/notice-of-intent-to-prepare-a-supplemental-environmental-impact-statement-for-the-alaska-lng-project>.

³¹ US Army Corps of Engineers Huntington District’s Notice of Virtual Public Hearings for the MVP project, Sept. 30, 2021, <https://www.lrh.usace.army.mil/Missions/Regulatory/Public-Notices/Article/2793909/lrh-2015-00592-gbr-lrp-2015-798-nao-2015-0898/>.

³² Kevin Ridder, “The Appalachian Pipeline Resistance Movement: ‘We’re Not Going Away,’” *The Appalachian Voice*, Oct. 28, 2020, <https://appvoices.org/2020/10/28/the-appalachian-pipeline-resistance-movement/>.

³³ Hammack, Laurence. “Mountain Valley Pipeline nears completion, but hurdles remain.” *The Roanoke Times*. (Nov. 2, 2021). https://roanoke.com/news/local/mountain-valley-pipeline-nears-completion-but-hurdles-remain/article_e613a4f4-3c24-11ec-853d-1fe5c53e7132.html.

³⁴ Becky Sullivan and Laurel Wamsley, “Supreme Court Says Pipeline May Cross Underneath Appalachian Trail,” *NPR*, June 15, 2020, <https://www.npr.org/2020/06/15/877643195/supreme-court-says-pipeline-may-cross-underneath-appalachian-trail>; Kevin Ridder, “The End of the Atlantic Coast Pipeline,” *The Appalachian Voice*, July 21, 2020, <https://appvoices.org/2020/07/21/the-end-of-the-atlantic-coast-pipeline/>.

³⁵ Southern Environmental Law Center, “FERC Faces Legal Challenge Over ACP Decision: Coalition Sues the Agency,” Jan. 30, 2018, <https://www.southernenvironment.org/press-release/ferc-faces-legal-challenge-over-acp-decision/>; Allegheny-Blue Ridge Alliance, “FERC and ACP, LLC File Response Briefs in Challenge to ACP Certificate,” <https://www.abralliance.org/2019/06/28/ferc-and-acp-llc-file-response-briefs-in-challenge-to-acp-certificate/>.



Chapter 2

TECHNICAL BACKGROUND

CHAPTER TWO: TECHNICAL BACKGROUND

This chapter gives a technical overview of LNG export facilities. Section 2.A describes LNG infrastructure in general, as well as the main components of an LNG export facility. Section 2.B identifies how many terminals are in play, the FERC docket numbers for these terminals, and specifically identifies the projects in Louisiana and Texas, the states hosting the most LNG facilities thus far. Section 2.C discusses permitting from an applicant’s perspective.

What infrastructure supports LNG export and what are the main pieces of equipment found in an LNG export facility?

LNG export terminals are simply one step in the process of moving gas from the subsurface to the ultimate consumer. The following excerpted figure depicts the steps gas takes in that process, from exploration and production to liquefaction to storage to shipping and then regasification and delivery:³⁶



Exploration and Production

World natural gas reserves are abundant, estimated at about 6,000 tcf, or 60 times the volume of natural gas used in 2004. Much of this gas is considered “stranded” because it is located in regions distant from consuming markets.



Liquefaction: Gas from the production field comes to the liquefaction plant. Contaminants are removed and the gas is cooled to a temperature of -256°F. By liquefying the gas, its volume is reduced by a factor of 600.



Storage: LNG is stored in double-walled, insulated tanks at atmospheric pressure. These tanks are designed to prevent any leaks. There is also a dike around the wall that is capable of containing the entire volume of the tank in the unlikely event of a spill.



Shipping: The typical LNG carrier can transport 125,000 to 138,000 cubic meters of LNG, which will provide about 2.6 to 2.8 bcf of natural gas. The typical carrier measures 900 feet in length, 140 feet in width and 36 feet in water draft, and costs about \$160 million.



Regasification and Delivery: LNG is pumped from the ship to insulated storage tanks at a specially designed terminal. It is then fed into a regasification plant to return the LNG to a gaseous state. The LNG is warmed by passing it through heated pipes and various terminal components. The vaporized gas is then regulated for pressure and enters the pipeline system to be transported to end users.

Upstream: Production

Exploration and production is the first stage of the process. Here, gas reserves are developed, wells are drilled, and production is initiated to extract the hydrocarbon. Some gas is produced “conventionally,” in that the gas naturally flows upwards in a well without the need for enhanced extraction techniques. Much of the gas produced in the United States today requires the high-

³⁶ Dismukes, *supra* note 1, 41 (image from Foss, M. M. Introduction to LNG. Center for Energy Economics, Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin. January 2003).

pressure addition of water, chemicals and sand for the gas to be forced to the surface, in a process known as hydraulic fracturing. The extracted gas is then collected for transportation.

Midstream (Transmission): Pipelines, Rail, Compressors

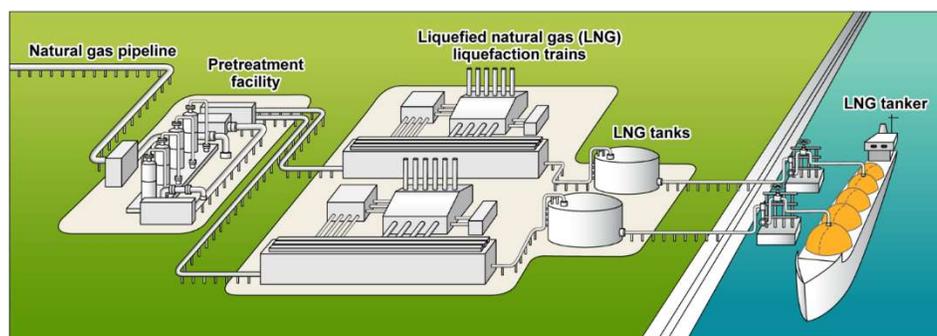
Gas is primarily transported by pipeline to a facility for processing, but it can be moved by rail or truck. Compressor stations are used to pump the gas along the pipeline and can be large sources of pollution, especially air pollution. EIP's 2020 report explains "compressor stations alone could add more than 8 million tons of greenhouse gases to the LNG sector's emissions footprint. That's almost equivalent to the carbon output of two new coal-fired power plants."³⁷ Some applicants for LNG projects will seek permits for the LNG pipeline separately from the export terminal; others will seek permits on the pipeline, compressors stations and terminal all at once. Regardless of how the project is divided, FERC is still the lead federal agency responsible for regulating the midstream infrastructure that transports gas interstate from production facilities to end-users.

A pipeline will also include valves, a header system, and metering and pig launcher/receivers. Mechanical "pigs" are used to clean the pipeline and some can monitor the health of the pipeline by identifying defects.³⁸ A header system is the portion of the pipeline that connects smaller diameter pipes into larger diameter lines.

Midstream (Processing): Liquefaction in an export facility

The processing and liquefaction of gas for export takes place at an export terminal. This terminal is typically located on the coast, so that compressed gas can easily be loaded onto massive tanker ships for export internationally. An LNG export terminal facility cools gas to a temperature near negative 260°F, converting it to a liquid state that reduces its volume by a factor of 600 or more, which facilitates shipping. The resulting product is an extremely cold, colorless, and odorless liquid³⁹ 45% the weight of water⁴⁰ and is classified as a hazardous material.⁴¹

The following illustration of some of the common components of LNG export facility is found in the 2014 study by the U.S. Government Accountability Office entitled *Federal Approval Process for Liquefied Natural Gas Exports*:⁴²



Sources: GAO analysis of industry documents. | GAO-14-762

³⁷ Environmental Integrity Project, "Troubled Waters," 5.

³⁸ "Pigging," Wikipedia, <https://en.wikipedia.org/wiki/Pigging>.

³⁹ Odorants must be added to methane gas before it is distributed by utilities for end users, so the smell can alert people to natural gas leaks from heating systems, kitchen stoves or other appliances. U.S. Energy Information Administration, "Natural Gas Explained: Liquefied Natural Gas," <https://www.eia.gov/energyexplained/natural-gas/liquefied-natural-gas.php>.

⁴⁰ Dismukes, *supra* note 1, 45.

⁴¹ 49 C.F.R. § 172.101. List of Hazardous Materials.

⁴² U.S. Government Accountability Office, "Natural Gas: Federal Approval Process for Liquefied Natural Gas Exports," Sept. 2014, GAO-14-762, Fig. 1, 5, <https://www.gao.gov/assets/gao-14-762.pdf>.

More specifically, such a facility generally would include, but not be limited to:

- one or more pretreatment facilities to remove acid gases (hydrogen sulfide and other sulfur compounds, and carbon dioxide), water, heavier hydrocarbons and mercury so that the gas can be compressed.⁴³ Note that some pretreatment facilities may not be located at the same facility as the liquefaction trains and the rest of the export facility;
- refrigeration and liquefaction facilities, including mixed refrigerant compressor turbines known as liquefaction “trains” (used to compress the gas into a liquid, can be powered by gas or electricity);
- warm wet flares, cold dry flares (used to burn excess gas and destroy volatile organic compounds that contribute to air pollution);
- acid gas thermal oxidation system (an air pollution control device);
- aboveground LNG storage tanks (typically with cryogenic pipeline connections to the liquefaction facility and berthing dock), plus one or more diesel storage tanks.
- an LNG boil off gas (BOG) compression system and/or flare (to process the gas that naturally regasifies from liquid form and keep the LNG tanks at a safe pressure);
- electric power facilities (such as an electrical transmission line and substation) to power facility equipment, including sometime the trains themselves;
- truck loading facilities with loading bays to haul off LNG and gas liquids condensate for domestic use;
- an LNG carrier berthing area with loading docks and a turning basin;
- an offloading facility to receive waterborne delivery of equipment/materials; and
- in some cases, a temporary concrete batch plant for use during construction.⁴⁴

An LNG terminal facility relies on infrastructure to handle the waste streams in gas as well. For example, aqueous ammonia needed for acid gas removal arrives by truck. Pretreatment system condensate, oily wastewater and hydrogen sulfide “scavenger” is trucked out. Trucks may also be used to carry away heavier hydrocarbons for local consumption. Consequently, related infrastructure can include pipelines, roads, truck traffic, storage facilities, construction and maintenance dredging or filling activity, and vessel emissions associated with the project.

LNG destined for export is loaded into huge shipping tankers, which arrive at the export facility filled with ballast water for weight to compensate for the lack of LNG cargo. This ballast water may have

⁴³ Methane is the predominant component of natural gas, but there are always impurities that must be removed before liquefaction. Water and other impurities are removed before the gas is liquefied, keeping its methane content at approximately 95 percent. Pre-treatment removes the heavier hydrocarbons, liquids (water vapor), and impurities that can be present in the gas stream from the production process. Some of these natural gas liquids, like ethane, propane, and butane, have commercial value. These liquids are stripped and then sent via natural gas liquids (NGL) pipelines or trucks to individual industrial users or other market centers. Dismukes, *supra* note 1, 63.

⁴⁴ FERC, “Final Environmental Impact Statement for the Driftwood LNG Project,” Jan. 2019, <https://www.ferc.gov/sites/default/files/2020-05/01-18-19-FEIS.pdf>; FERC, “Final Environmental Impact Statement for the Plaquemines LNG and Gator Express Pipeline Project,” May 2019, 1-2 <https://www.ferc.gov/sites/default/files/2020-05/05-03-19-FEIS.pdf>; FERC, “Texas LNG Project, Final Environmental Impact Statement, Volume 1,” March 2019, 2, <https://www.energy.gov/sites/prod/files/2019/03/f60/final-eis-0520-texas-lng-2019-03-volume-1.pdf>.

originated from international waters and may contain invasive species that could harm native species.

LNG tankers are specialized ships with insulated storage to keep the gas in its liquid form until is delivered to its destination.⁴⁵ Tankers are enormous—typically 975 feet long and 140 feet wide—and typically hold between 125,000 and 175,000 cubic meters of gas.⁴⁶ According to one study, “One tanker holds enough gas to fuel a typical steam electricity plant for one to two months, 51,000 residential gas customers in the GOM [Gulf of Mexico] Region, or 5 typical industrial facilities (using average consumption) along the GOM.”⁴⁷

Note that existing import facilities that add export capabilities typically add that capacity next to the existing import infrastructure.⁴⁸ Two such import facilities that have expanded to exporting LNG are Freeport LNG and Lake Charles LNG.⁴⁹

Downstream uses of gas

LNG arriving for import internationally will be first regasified through the controlled addition of heat at an import facility, then distributed by pipeline, rail and truck to the downstream user. Gas has a variety of downstream uses. It may be used in the commercial and residential sectors for electrical power, heating buildings and water, cooking, drying, refrigeration, and lighting.⁵⁰ Gas has four main industrial uses: (1) industrial electricity generation; (2) boilers used to create processed steam; (3) to fuel industrial furnaces used to create process heat; and (4) feedstock (raw materials) for the creation of petrochemicals, fertilizer, and hydrogen.⁵¹ It also may be used in the transportation sector as vehicle fuel.

How many terminals are in play, and where are they located?

This guide focuses on terminals built, permitted, or proposed in the terrestrial United States. As of February 2022, there are seven projects⁵² built, two under construction, fourteen permitted,⁵³ five seeking initial permits, and two proposed but not yet in the application stage process (in the pre-file process).⁵⁴ The U.S. Energy Information Administration releases a detailed spreadsheet tracking the facilities that are existing, are under construction, and have been permitted by FERC and DOE (land-based facilities) or DOT MARAD (off-shore facilities).⁵⁵

⁴⁵ Dismukes, *supra* note 1, 41.

⁴⁶ The International Group of Liquefied Natural Gas Importers, “LNG Information Paper #3: 2019 Update: LNG Ships,” 2019, https://giignl.org/wp-content/uploads/2021/10/giignl2019_infopapers3.pdf.

⁴⁷ Dismukes, *supra* note 1, 41.

⁴⁸ Paul O’Donnell, “Energy Transfer to take over LNG export project in Louisiana after Shell bails out,” *Dallas News*, Mar. 30, 2020, <https://www.dallasnews.com/business/energy/2020/03/30/energy-transfer-to-take-over-lng-export-project-in-louisiana-after-shell-bails-out/> (showing the export and import facilities at Lake Charles LNG side-by-side)

⁴⁹ Global Energy Monitor, “Freeport LNG Terminal,” https://www.gem.wiki/Freeport_LNG_Terminal; Lake Charles LNG Project Team, “A World-Class Export Facility,” https://energytransfering.com/Proposed_Project.html.

⁵⁰ U.S. Energy Information Administration (EIA), “Natural Gas Explained: Use of Natural Gas,” <https://www.eia.gov/energyexplained/natural-gas/use-of-natural-gas.php>

⁵¹ EIA, “Natural Gas Explained,” Dismukes, *supra* note 1, 21-22.

⁵² Projects may include expansions to existing terminals.

⁵³ By FERC and DOE (land-based facilities) or DOT MARAD (off-shore facilities).

⁵⁴ FERC, “North American LNG Export Terminals-Existing, Approved not Yet Built, and Proposed,” Mar. 29, 2022, <https://cms.ferc.gov/media/north-american-lng-export-terminals-existing-approved-not-yet-built-and-proposed-4>.

⁵⁵ U.S. EIA, “U.S. liquefaction capacity,” (Release date: July 15, 2021), <https://www.eia.gov/naturalgas/U.S.liquefactioncapacity.xlsx>. If the previous link is broken, the spreadsheet was located at the bottom of this page: <https://www.eia.gov/energyexplained/natural-gas/liquefied-natural-gas.php> (“See detailed information

Most LNG facilities are located onshore or near shore within state waters. Less common but still potentially relevant are “deepwater ports,” lying outside the boundaries of state waters. The standards and government agencies involved differ depending on which location category applies to the project. This guide focuses on onshore or near-shore LNG projects.

Most facilities fall under Louisiana or Texas’s jurisdiction.⁵⁶ This guide focuses on the law relevant to those terminals.

What projects are in Louisiana?

Louisiana is seeing an escalating concentration of LNG onshore and near-shore export facilities and proposed projects. For quarterly updates on this information, see EIA’s hyperlinked spreadsheet: <https://www.eia.gov/naturalgas/U.S.liquefactioncapacity.xlsx>

As of February 2022, the projects are as follows:

Table 2.1: Louisiana LNG Export Projects as Percentage of U.S. Total⁵⁷

TYPE OF PROJECT AND STATUS	TOTAL # US PROJECTS	SITED IN LOUISIANA	LOUISIANA PROJECTS (WITH FERC OR MARAD DOCKET INFO)
LNG export terminals currently operating in the U.S.	7	2 (29% of US total)	Cheniere’s Sabine Pass LNG Trains 1-5 (FERC No. CP11-72, CP13-552 & CP13-553) Sempra-Cameron LNG Trains 1-3 in Hackberry, LA (FERC No. CP13-25)
New or expanded LNG export terminals under construction	2	1 (50%)	Venture Global Calcasieu Pass in Cameron Parish, LA (FERC No. CP15-550)
LNG export facilities or expansion projects approved but not yet built	13	5 (38%)	Lake Charles LNG (FERC No. CP14-120) Magnolia LNG in Lake Charles, LA (FERC No. CP14-347) Sempra-Cameron LNG Trains 4 & 5 in Hackberry (FERC No. CP15-560) Driftwood LNG in Calcasieu Parish (CP17-117) Venture Global LNG in Plaquemines Parish (FERC Nos. CP17-66 & CP17-67)

about existing and under-construction large-scale U.S. liquefaction facilities (xls).”). Also see the “U.S. liquefaction capacity” xls file at <https://www.eia.gov/naturalgas/data.php#imports>.

⁵⁶ Why is this? The short answer is that the Gulf states of Texas and Louisiana have the most existing infrastructure and large gas fields, and a relatively friendly regulatory environment. For more information, especially in terms of the import market. Dismukes, *supra* note 1, 57-68.

⁵⁷ Unless otherwise indicated, data is from “North American LNG Export Terminals-Existing, Approved not Yet Built, and Proposed,” Mar. 29, 2022, <https://cms.ferc.gov/media/north-american-lng-export-terminals-existing-approved-not-yet-built-and-proposed-4>; and EIA, “U.S. liquefaction capacity,” Dec. 8, 2021, <https://www.eia.gov/naturalgas/U.S.liquefactioncapacity.xlsx>.

TYPE OF PROJECT AND STATUS	TOTAL # US PROJECTS	SITED IN LOUISIANA	LOUISIANA PROJECTS (WITH FERC OR MARAD DOCKET INFO)
LNG export applications pending before FERC	4	3 (75%)	Commonwealth LNG in Cameron Parish (FERC No. CP19-502) Venture Global CP2 Blocks 1-9 in Cameron Parish (FERC No. CP22-21) Venture Global Calcasieu Pass in Cameron Parish (FERC No. CP22-25)
LNG export projects in “pre-filing” status before FERC	2	2 (100%)	Port Fourchon LNG in LaFourche Parish (FERC No. PF17-9) Venture Global’s Delta LNG in Plaquemines Parish, LN (FERC No. PF 19-4) FERC terminated dismissed Pointe LNG’s pre-filing request in Oct. 2021 after it had failed to engage with other agencies and stakeholders for two years, and had not made any progress with FERC since July 2019.
Permitted floating LNG terminal	1	1 (100%)	Delfin, with four liquefaction vessels, planned for roughly 50 miles off the coast of Cameron Parish. ⁵⁸ (FERC No. CP15-490; MARAD No. USCG-2015-0472)

Louisiana also is the nearest coastal state to the **Louisiana Offshore Oil Port (LOOP)**, a deepwater port currently operating in the Gulf of Mexico about 18 nautical miles off the coast near Port Fourchone. The LOOP is owned and operated by Loop LLC.⁵⁹

⁵⁸ MARAD and the DOE approved the project. DOE, “Record of Decision and Floodplain Statement of Findings for the Delfin LNG LLC Application to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries,” June 1, 2017, <https://www.energy.gov/sites/prod/files/2017/06/f34/Delfin%20ROD%20-%2006-01-17.pdf>. In November 2020, Delfin announced a preliminary 15-year sales deal with city gas distributor China Gas Holdings. Chen Aizhu, “Delfin signs China Gas deal, taps Chinese banks to fund 1st US floating LNG plant -CEO,” *Reuters*, Nov. 9, 2020, <https://www.reuters.com/article/instant-article/idINL3N1NE29A>.

⁵⁹ The LOOP provides tanker offloading and temporary storage for crude oil (most of the tankers using it are too large for inland ports). It handles 13% of the nation's imported oil, about 1.2 million bbls/day, and connects by pipeline to roughly half of the refining capacity in the United States. DOE, “Record of Decision and Floodplain Statement of Findings for the Delfin LNG LLC Application to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries.”

What projects are in Texas?

Texas is also seeing an escalating concentration of LNG export facilities:

Table 2.2: Texas LNG Export Projects as Percentage of U.S. Total⁶⁰

TYPE OF PROJECT AND STATUS	TOTAL U.S. PROJECTS	SITED IN TEXAS	TEXAS PROJECTS (WITH FERC OR MARAD DOCKET INFO)
LNG export terminals currently operating in the U.S.	7	2 (29% of US total)	Cheniere's Corpus Christi LNG Trains 1-3 (FERC Nos. CP12-507 & CP12-508) Freeport LNG (FERC Nos. CP12-509, CP15-518, CP21-470)
New or expanded LNG export terminals under construction	2	1 (50%)	Golden Pass LNG in Sabine Pass, TX (FERC No. CP14-517, CP20-459)
LNG export facilities or expansion projects approved but not yet built	13	5 (38%)	Sempra-Cameron LNG Trains 4 & 5 (CP15-560) Port Arthur LNG Trains 1 & 2 (FERC No. CP17-20 & CP17-21) Freeport LNG Dev Train 4 (FERC No. CP17-470) Next Decade's Rio Grande LNG in Brownsville, TX (FERC No. CP16-454) Cheniere Corpus Christi LNG Stage III (FERC No. CP18-512 & CP18-513) <i>Annova's Texas LNG project – was approved by FERC but has abandoned in 2021.⁶¹ (FERC No. CP16-480)</i>
LNG export applications pending before FERC	4	1 (25%)	Sempra's Port Arthur LNG Trains 3 & 4 (FERC No. CP20-55)
LNG export projects in "pre-filing" status before FERC	2	0 (0%)	<i>Galveston Bay LNG (FERC No. PF18-7)– withdrew from the pre-filing process in Jan. 2021 because a portion of the proposed site was used for federal dredge management and unlikely to be released for private use⁶²</i>

⁶⁰ Unless otherwise indicated, data is from "North American LNG Export Terminals-Existing, Approved not Yet Built, and Proposed," Mar. 29, 2022, <https://cms.ferc.gov/media/north-american-lng-export-terminals-existing-approved-not-yet-built-and-proposed-4>; and "U.S. liquefaction capacity" (Dec. 8, 2021) <https://www.eia.gov/naturalgas/U.S.liquefactioncapacity.xlsx>.

⁶¹ Andreas Exarheas, "Texas LNG project axed," *Rigzone*, Mar. 23, 2021, https://www.rigzone.com/news/texan_lng_project_axed-23-mar-2021-164960-article/.

⁶² "NextDecade cancels proposed Galveston Bay LNG plant," *Oil & Gas Journal*, Feb. 1, 2021, <https://www.ogj.com/pipelines-transportation/lng/article/14196590/nextdecade-cancels-proposed-galveston-bay-lng-plant>; Letter re "Notice of Pre-Filing Withdrawal and Termination of Docket." FERC Docket No. PF18-7-000 (Galveston Bay LNG, LLC and Galveston Bay Header System) Accession No. 20210129-5374, Jan. 29, 2021.

What projects are elsewhere?

As of February 2022,⁶³ constructed and proposed LNG terminals located outside of Texas and Louisiana are as follows:

Table 2.3: LNG Terminals Located Outside of Texas and Louisiana

PROJECT NAME	PROJECT OPERATOR	LOCATION	PROJECT STATUS	PROP. DESIGN CAPACITY ⁶⁴		# OF TRAINS	IN SERVICE DATE
				(BCF/D)	(MTPA)		
Delfin FLNG (FERC Nos: CP15-490)	Fairwood Group	Gulf of Mexico (floating facility)	Construction has not started / Still undergoing FEED ⁶⁵	1.6	12	4	expected 2023
Gulf LNG (FERC Nos: CP15-521)	Kinder Morgan et al.	Pascagoula, MS	Construction has not started / Still undergoing FEED	1.5	10.9	2	expected 2024
Eagle LNG (FERC Nos: CP17-41)	Eagle LNG Partners	Jacksonville, FL	Approved in 2019, Not yet under Construction	0.13	1	3	Construction expected 2022 ⁶⁶
Alaska LNG (FERC Nos: CP17-178; PF14-21)	Alaska Gasline Development Corp. (AGDC)	Nikiski, AK	Pre-construction process	2.6	20	3	expected 2025
Cove Point (FERC Nos: CP13-113; PF12-16)	Dominion Energy	Cove Point, MD	Operating	0.82	6.23	1	Mar 2018
Elba Island (FERC Nos: CP14-103; PF13-3)	Kinder Morgan	Elba Island, GA	Operating	0.35	2.50	10	Sep '19–Mar '20, Aug '20

⁶³ Unless otherwise indicated, data is from “North American LNG Export Terminals-Existing, Approved not Yet Built, and Proposed,” Mar. 29, 2022, <https://cms.ferc.gov/media/north-american-lng-export-terminals-existing-approved-not-yet-built-and-proposed-4>; and “U.S. liquefaction capacity,” Dec. 8, 2021, <https://www.eia.gov/naturalgas/U.S.liquefactioncapacity.xlsx>.

⁶⁴ This is not always identical to the capacity approved by DOE or FERC. For this information, see EIA, “U.S. Liquefaction Capacity Spreadsheet,” <https://www.eia.gov/naturalgas/U.S.liquefactioncapacity.xlsx> (Updated quarterly).

⁶⁵ “Front end engineering design” (FEED) is the initial stage in LNG project development, in which the basic engineering including technical requirements as well as approximate investment cost for the project have been completed

⁶⁶ Mike Mendenhall, “Eagle LNG wants extra year to start \$542 million North Jacksonville export facility,” *Jacksonville Daily Record*, May 20, 2021, <https://www.jaxdailyrecord.com/article/eagle-lng-wants-extra-year-to-start-dollar542-million-north-jacksonville-export-facility>.

PROJECT NAME	PROJECT OPERATOR	LOCATION	PROJECT STATUS	PROP. DESIGN CAPACITY ⁶⁴		# OF TRAINS	IN SERVICE DATE
				(BCF/D)	(MTPA)		
Marcellus LNG Production Facility ⁶⁷	New Fortress Energy	Wyalusing, PA (landlocked export by truck and rail to marine loading facility in NJ)	Jurisdiction disputed / construction on hold (FERC Nos. CP20-522; CP20-524)	0.29 ⁶⁸	2	2	Unclear
<i>Already-constructed LNG import facility not yet permitted:</i>							
San Juan LNG import facility	New Fortress Energy	San Juan, Puerto Rico	Operating but must apply to FERC for permitting (Currently disputing FERC jurisdiction, CP20-466, D.C. Cir. Case No. 21-1157) ⁶⁹	.14	1.1 ⁷⁰	N/A	Constructe d.

What lessons can be drawn from the previous boom in import terminal permitting?

A Louisiana State University report prepared for the Minerals Management Service of the U.S. Department of the Interior in 2008 identified the following considerations that LNG applicants might consider when deciding how many projects to pursue permits for. Although the report was anticipating a spike in the construction of import facilities, the logic applies equally to export facilities. According to the report:⁷¹

“Permitting Challenges: permitting can take time and is not a certain process. Some areas in the U.S., such as very populated areas of the eastern seaboard, have faced significant permitting opposition. Developers will often “hedge” this opposition by attempting to permit several projects at the same time. That way, if one project is rejected during the permitting

⁶⁷ Corey Paul, “Small LNG developers wade into big fight at FERC over rail and export projects,” *S&P Global*, Nov. 5, 2020, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/small-lng-developers-wade-into-big-fight-at-ferc-over-rail-and-export-projects-61062831>.

⁶⁸ Environmental Integrity Project, “Troubled Waters,” 23.

⁶⁹ New Fortress began operating in April 2020 without a FERC permit, but in March 2021 FERC asserted jurisdiction over the project, which would trigger the requirement for the facility to participate in FERC’s NEPA review of the facility. New Fortress appealed that decision to the D.C. Circuit in May 2021. H. Weber, H. “New Fortress seeks US court review of FERC decision over Puerto Rico LNG facility,” *S&P Global*, May 26, 2021, <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/052621-new-fortress-seeks-us-court-review-of-ferc-decision-over-puerto-rico-lng-facility>.

⁷⁰ International Group of Liquefied Natural Gas Importers, “The LNG industry: GIIGNL Annual Report,” 2021, 48, https://giignl.org/wp-content/uploads/2021/11/GIIGNL_Annual_Report_November2021.pdf (reporting the facility as having 1.1 mtpa capacity).

⁷¹ Dismukes, *supra* note 1, 50-51.

process, there are several other projects that have the potential to replace the failed application. If several applications are approved at one time, and there are limited capital investment opportunities, developers will likely develop the project with the highest expected return on investment.

Speculative Investments: Permitting a project, while expensive, is far less costly than overall development cost. For potentially high-yield investments, spending the money to develop a project through the permitting process can be a worthwhile investment since it holds out the “option” of potentially developing on a site at a later date. Thus, many sites will be announced for development for their option value alone, though few will actually be developed. The development of a project of this type is a type of hedge that can be exercised as market or regulatory conditions change. These types of projects can also be spun-off or sold to other developers that may be willing to pay a premium for projects further along in the development process.

Capital Requirements: not all projects can be developed because many companies lack the capital, or have capital limitations, that prevent all proposed LNG facilities from being developed.

Investment Prioritization: in addition to capital requirements, there are also corporate investment prioritizations that rank order particular projects. These prioritizations can change as market conditions change.

Changing Business Environment: The internal rate of return of a particular project is directly impacted by the outlook of the environment in which this asset operates. Of particular concern for an LNG project is the outlook for natural gas prices over a long period of time. All LNG investments (production, liquefaction, transportation, and regasification) are long-lived and the return on this investment needs to be considered on a long-term basis. If the outlook for natural gas prices changes for the worse, projects can be abandoned prior, or even during any stage, of development. This is particularly true for those projects that are further back in the LNG development queue.

One take-away from this analysis of companies’ strategies is that although this means that there is always some hope that a project won’t be constructed even if advocates’ challenges are unsuccessful, it also means that to defeat one actual facility you may need to defeat multiple proposed projects.



Chapter 3

LEGAL OVERVIEW

CHAPTER THREE: LEGAL OVERVIEW

This chapter briefly describes the main laws governing LNG terminals (Section 3.A); the permits and licenses needed (Sections 3.B.1 - 3.B.3); and the state agencies involved in Texas and Louisiana (Sections 3.B.4 - 3.B.5). Section 3.C introduces the experts advocates might find helpful to consult. More detail is provided in the following chapters.

What are the main laws governing LNG terminals?

The Natural Gas Act (NGA)

The **Natural Gas Act (NGA)**⁷² is arguably the most important law governing the import and export of LNG: it defines two of the major permits LNG terminals require,⁷³ sets the hierarchy of agencies, and governs judicial review. In general, the Federal Energy Regulatory Commission (FERC) and the Department of Energy (DOE) split authority for implementing the NGA's LNG rules, with FERC permitting the infrastructure to prepare the gas for export or import and DOE permitting the actual export or import of the gas commodity. In addition, FERC is designated as lead agency, coordinating with all other agencies that permit or consult on permitting.

For **FERC**, there are two key sections of the NGA relevant to LNG challenges: Section 3 and Section 7. **Section 3** grants FERC the authority to approve or deny a developer's application to build an LNG terminal.⁷⁴ The terminal is the large facility that receives, pretreats, and liquefies the gas and then loads it onto LNG tankers. **Section 7**, meanwhile, grants FERC the authority to approve or deny a developer's application to build an interstate gas pipeline and the pipeline's associated components like compressor stations, header systems, valves, and related facilities.⁷⁵ Under Section 3 of the NGA, FERC is supposed to authorize a terminal unless it finds that the terminal "will not be consistent with the public interest."⁷⁶ Under Section 7 of the NGA, FERC is supposed to only authorize a pipeline if it finds that the pipeline is "required by the present or future public convenience and necessity; otherwise such application shall be denied."⁷⁷ Both analyses require FERC to balance the public benefits of a project against the adverse consequences; with respect to Section 7, FERC must additionally analyze whether the project is "needed." (See Chapter 4 for more on FERC's role.)

Note that this guide focuses on unique issues that arise when challenging LNG terminals—in other words, Section 3 authorizations. However, FERC applications for most new LNG projects will be **joint** Section 3 and Section 7 applications (in which the applicant seeks a Section 3 *authorization* and Section 7 *certificate*), because the applicant usually needs to supply its new terminal with gas from a

⁷² 15 U.S.C. § 717 *et seq.*

⁷³ Specifically, an authorization from the Department of Energy and a Section 3 authorization from the Federal Energy Regulatory Commission. Projects that include LNG pipelines will also require a Section 7 certification from FERC, which is also defined under the NGA.

⁷⁴ 15 U.S.C. § 717b(e)(1) (Under Section 3, the Federal Energy Regulatory Commission (FERC) has "the exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal" located onshore or in near-shore waters.) The Department of Energy delegated to FERC this authority under Natural Gas Act § 3(e), 15 U.S.C. § 717b(e), to license LNG terminals. *Also see* 42 U.S.C. § 7172(e) and DOE Delegation Order No. 0204-112, 49 Fed. Reg. 6684, 6690 (Feb. 22, 1984).

⁷⁵ 15 U.S.C. § 717f (as part of FERC's powers to permit "transportation facilities"). Other components might include metering and pig launcher/receivers to maintain the pipe.

⁷⁶ 15 U.S.C. § 717b(a). *See* 18 C.F.R. § 153 *et seq.*

⁷⁷ 15 U.S.C. § 717f(e).

pipeline.⁷⁸ (Expansions—e.g., the addition of a liquefaction train—are more likely to involve only Section 3, because there is already a pipeline connected to the terminal.) Even though this guide focuses on Section 3 issues, advocates should **always** challenge both Section 3 and Section 7 aspects of the project—as in the Jordan Cove project introduced in Chapter 1, sometimes the pipeline is more vulnerable than the terminal! Advocates can use this guide to identify issues to raise to challenge pipelines and their components, which will need many of the same permits highlighted in this guide, including Army Corps of Engineers permits, state section 401 certifications, and state air permits (e.g., for the compressors). However, some of the legal standards for FERC’s approval of a pipeline are different from its approval of a terminals (see Chapter 4, Section B.1). The approval of a pipeline also gives the developer the power of *eminent domain*,⁷⁹ which a terminal developer does not receive. This guide attempts to flag major differences between the approvals for terminals and pipelines when relevant; however, advocates should consult experienced counsel when litigating pipelines to ensure all concerns are presented properly and framed by the relevant law.⁸⁰

As for **DOE’s** authority under the NGA, Section 3 grants DOE authority to approve or disapprove the actual import or export of the gas as a commodity.⁸¹ The NGA standard for approving an application depends on whether the export or import is to or from a country with which the United States has a free trade agreement requiring national treatment for trade in gas (a FTA or non-FTA country).⁸² According to the NGA, importing from, or exporting to, a FTA country “shall be deemed to be consistent with the public interest” and must be approved—leaving little room for challenge.⁸³ Meanwhile, DOE grants approval for imports or exports to a non-FTA country “unless” it finds the proposed exporting or importing “will not be consistent with the public interest”⁸⁴—still a difficult standard to surmount, but at least not a pre-ordained conclusion. (See Chapter 5 for more on the DOE’s authorizations).

What is the NGA’s effect on local and state laws that might apply?

The Natural Gas Act preempts (i.e., blocks) some avenues that states, tribes, and localities might otherwise have used to stop a project that FERC has authorized. Specifically, courts have interpreted the Natural Gas Act as broadly preempting state and local laws that otherwise would affect the decision of where to site a terminal. This means that in most circumstances local and state laws won’t be sufficient basis to stop a project unless they are coupled to three specific federal environmental laws, discussed below:⁸⁵

⁷⁸ For an example of a joint certification see FERC’s order under Section 3 and 7 authorizing the Rio Grande LNG terminal and its associated Rio Bravo pipeline: “Order Granting Authorizations Under Sections 3 and 7 of The Natural Gas Act,” 169 FERC ¶ 61,131 (Nov. 22, 2019) (since withdrawn) <https://cms.ferc.gov/sites/default/files/whats-new/comm-meet/2019/112119/C-2.pdf>.

⁷⁹ Basically, the power to take private and public land to build the pipeline if it can’t be obtained by negotiation with the landowner. See 15 U.S.C. § 717f(h); *PennEast Pipeline Co. v. New Jersey*, 594 U.S. __ (2021) (clarifying that 15 U.S.C. § 717f(h) can be used to condemn state land as well).

⁸⁰ For information on challenging pipelines, refer to the “Landowner’s Rapid Response Guide” available at <https://pipelinecenter.org/>.

⁸¹ The Secretary of Energy has assigned authority over the export of natural gas (originally held by the now-defunct Federal Power Commission), to the Assistant Secretary of Energy for Fossil Energy, not to FERC. See *Sierra Club v. Fed. Energy Regulatory Comm’n*, 827 F.3d 59, 63 (D.C. Cir. 2016).

⁸² 15 U.S.C. § 717b(a) (non-FTA) & (c) (FTA).

⁸³ 15 U.S.C. § 717b(c).

⁸⁴ 15 U.S.C. § 717b(a).

⁸⁵ For additional information on preemption, see Chapter 10, Section C (“Other Topics”). For example, a city nuisance ordinance, standing alone, will not be powerful enough to stop a project. But local laws might not be pre-empted if they are expressly incorporated into a state’s Coastal Management Program under the Coastal Zone Management Act—one of the three federal environmental statutes unaffected by the NGA’s preemptive powers.

The preemptive power granted by the Natural Gas Act is restricted by its important “Savings Clause” in Section 3 establishing that “nothing in the [NGA] affects the rights of States” to stop or conditionally permit a gas project under the authority granted to states by three specific federal statutes.⁸⁶ These statutes are the **Clean Air Act**,⁸⁷ the Federal Water Pollution Control Act (**Clean Water Act**),⁸⁸ and the **Coastal Zone Management Act**.⁸⁹ In other words, these statutes are not preempted by the Natural Gas Act—a permit denied under one of these three laws is fatal to the project, no matter what FERC and DOE might otherwise approve. Because of this, this guide focuses on the Clean Water and Clean Air Act permits (Chapters 6-7 and Chapter 8, respectively). The Coastal Zone Management Act is introduced briefly in Chapter 10, but is not a focus of the guide because it is very state-specific.

Even though the Natural Gas Act is designed to circumvent local planning and zoning laws as well as state or local regulations that protect public safety and environmental quality, local decision-making can make a difference in three important ways that advocates should not overlook:

- Unlike applicants that FERC has approved to construct interstate gas pipelines, applicants with approvals for LNG terminals are not awarded the right to take land or force the grant of easements through eminent domain. Where a terminal requires the use of state, county or municipality-owned land, the company cannot just “take” it. Thus, local planning, zoning, and safety laws may be relevant in tweaking the site location, for example, in establishing setbacks.
- Local and state deliberations—even if they are not tied to a permit or certification that might stop a project—may elicit information that an applicant has neglected to share with a federal or state permitting agency that contradicts the applicant’s position. Advocates can and should bring such additional information to the attention of permitting agencies by including it in public comments.
- Local or state laws that are expressly incorporated into a state’s plan enacting the three federal statutes that are not preempted (the Clean Water Act, Clean Air Act and Coastal Zone Management Act) might not be preempted. Decisions made at the state or local level can therefore sometimes “trickle up” into requirements that an LNG applicant must meet before it can receive permits under one of these three statutes. Determining whether a law has been successfully incorporated can be tricky—Chapter 10 Section C provides a basic introduction—so it is important to consult an experienced local attorney before relying on a local law to challenge a project.

In sum, advocates are encouraged to focus on the certifications and permits issued under the NGA (by FERC and DOE), the Clean Water Act, Clean Air Act, and CZMA. Other federal, state, and local laws can in some circumstances also be helpful, but an expert in these local laws should be consulted before too many resources are devoted to challenging permits that cannot actually stop a project.⁹⁰

The National Environmental Policy Act (NEPA)

Another very important statute for LNG projects is the **National Environmental Policy Act (NEPA)**, a federal law that requires federal agencies to assess the environmental effects of their proposed

⁸⁶ 15 U.S.C. § 717b(d).

⁸⁷ 42 U.S.C. §§ 7401, *et seq.*

⁸⁸ 33 U.S.C. §§ 1251, *et seq.*

⁸⁹ 16 U.S.C. §§ 1451, *et seq.*

⁹⁰ For example, sometimes permits are required when a project proposes to cross a National Forest. If a proposed project **cannot** be built without crossing a National Forest, the project could potentially be stopped by just successfully challenging those permits. Check with an attorney to confirm the best strategy for each project.

actions prior to making decisions.⁹¹ All projects that require a federal permit and are not excluded must go through an environmental review for each permit. (Whether a project is excluded can depend on the agency, in FERC's review, LNG terminals should not be excluded; in 2020 DOE decided to exclude LNG exports from NEPA. DOE's exclusion is discussed further in Chapter 5 Sections B.3 and D.3.). NEPA dictates the scope of that environmental review. FERC usually does the majority of work to comply with NEPA; other agencies that must comply with NEPA typically rely on FERC's analysis and assist in FERC's drafts as consulting agencies. These agencies are not absolved of their responsibilities to comply with NEPA just because FERC takes the laboring oar in ensuring that the NEPA-required information is compiled, so for a single project sometimes there may be multiple final and draft NEPA documents that have been authorized by multiple agencies.

For large projects like LNG pipelines and terminals that are expected to have significant impacts on the environment, the NEPA documents that will be drafted are a draft and final Environmental Impact Statement. These documents are hundreds of pages long and are designed to inform decisionmakers of the expected environmental and human health impacts of the project, including as compared to other alternative ways of fulfilling the purpose of the project (and comparing these impacts to a no-action alternative). The EIS documents are available for public review and comment; most challenges to LNG projects will rely heavily on critiquing what is (or is not) in these documents.

Because the NEPA review is largely conducted by FERC, Chapter 4 (which describes FERC's role) goes into further detail about the NEPA process, the NEPA regulations an agency must follow (which are currently in flux), and how advocates can participate.

Are the NGA, NEPA, CWA, CAA and CZMA the only relevant laws I might cite in comments?

No! Although they are arguably the most important federal laws for LNG permitting, they aren't the only ones that matter when deciding what to raise in comments. These laws often require that the applicant show compliance with other federal laws: such as the Endangered Species Act; National Historic Preservation Act; Emergency Planning and Community Right-to-Know Act; Marine Protection, Research and Sanctuaries Act; Resource Conservation and Recovery Act; the Magnuson-Stevens Fishery Conservation and Management Act; Comprehensive Environmental Response, Compensation and Liability Act; and the Migratory Bird Treaty Act, to name a few.

Don't be intimidated by the various laws at play—you do not need to be an expert in these laws to raise issues in comments. This guide highlights some ways in which these other laws intertwine with the main permits—and tries to explain which permits are more narrowly focused on one environmental media (e.g., air)—but the main takeaway is that you do not need to limit your comments to identifying violations of just the main governing laws (e.g., don't just focus on NEPA or the NGA when commenting on the environmental documents drafted by FERC—raise any concern you have with the project).

⁹¹ 42 U.S.C. §§ 4321-4347. The White House Council on Environmental Quality (CEQ) establishes federal regulations for implementing NEPA (see 40 C.F.R. §§ 1500-1508); these are in the process of being rewritten (see Chapter 4 Sections B.3 and B.5). Agencies can also establish separate but consistent NEPA regulations, which FERC has done. See 18 C.F.R. Part 380 et seq.

Does the terminal's location also affect what laws apply and what permits, certificates, and approvals are required?

Yes! The state is important—this guide focuses on projects in Louisiana and Texas. You also need to know what county / parish your facility is located in, and what local laws might apply.

For example, all US on-shore and near-shore terminals⁹² will require FERC and DOE approval. The laws governing terrestrial versus deepwater permits are different: Chapter 10 (“Other Topics”) has more information on some of these differences, which for example, give a role to state governors, vests Clean Air Act authority in EPA, and places MARAD (which is part of the U.S. Department of Transportation) and the Coast Guard as co-lead agencies for review of the deepwater applications.

The Army Corps of Engineers rules and procedures will also be similar across state lines when it comes to the 404 permit (and section 10, section 103 and section 408 permits, if applicable) for on-shore and near-shore terminals. But the process for challenging an air permit will depend on which state you are in. In addition, the regime governing coastal use and water quality permits depends on your state. Tax abatement laws are also state-dependent and even county or parish / locality dependent.

It is also important to know the rules and approvals needed at the local county or parish level. Even though these permissions may not be levers to stop a project, they can be useful to build public awareness / support and elicit information about the project that might otherwise be difficult to gather. Local-level rules and approvals are beyond the scope of this guide; advocates should consult local experts to determine this on a project-by-project basis.

The location of the project can also affect where judicial appeals are heard. For example, any appeal of FERC or DOE’s orders must be brought “in the Circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia.”⁹³ Any appeal of a decision regarding an LNG project by a federal agency (other than FERC or the DOE), or a state agency “acting pursuant to Federal law to issue, condition, or deny any permit, license, concurrence, or approval . . . required under Federal law” (other than the CZMA) must be brought in the U.S. Court of Appeals for the district in which an LNG facility is proposed to be built.⁹⁴ For Louisiana and Texas projects, the appeals court is usually either the Fifth Circuit or the D.C. Circuit. There can be unforeseen nuisances as to the proper location of an appeal given the unique facts of each project—make sure to consult with an attorney before filing an appeal to determine what courts are available and preferred for a specific challenge.

Finally, different Clean Air Act requirements will apply if a facility will be located in an area that meets National Ambient Air Quality Standards (“Attainment Areas”) vs areas that do not (“Nonattainment Areas”); generally, it will be more difficult to construct an LNG export facility in a Nonattainment area, as discussed in Chapter 8.

⁹² Typically within three miles of the shore.

⁹³ 15 U.S.C. § 717r(b). This creates a decision for the advocate as to which Circuit to target. Note that if multiple appeals are filed in both Circuits, the cases are normally consolidated into one via a lottery. An advocate may still seek to transfer the case to the preferred Circuit, however success is never guaranteed.

⁹⁴ 15 U.S.C. § 717r(d)(1). An action to challenge a federal agency’s failure (other than FERC) or a state agency’s failure to act (other than under the CZMA) must be brought in the U.S. Court of Appeals for the District of Columbia. 15 U.S.C. § 717r(d)(2).

Who grants and what are the main permits, certificates, and approvals required?

There are many permits involved in an LNG project and thus many avenues to challenge a project. There are also many more agencies that participate in the process than there are required permits. This means that there are many potential partners to work with in raising concerns about the project. When working on a challenge, consider whether you may be able to leverage preexisting relationships with state agencies that are sympathetic to environmental / landowner / health and safety concerns (or forge new ones!).

Agencies and permits at the federal level

At the federal level, there are four main permits that almost all LNG terminal projects need: a DOE authorization, a FERC authorization (and FERC certificate, if a pipeline is involved), and at least two Army Corps permits (section 404 and section 10). Pursuant to the NGA, FERC must certify the infrastructure of the project and DOE must approve the export or import of the gas itself.⁹⁵ The Army Corps of Engineers is responsible for issuing Clean Water Act permits related to dredging and filling of wetlands, including 404 permits, section 10 permits, and section 103 and section 408 permits where applicable.

Other federal agencies provide a consulting role on these permits but are not usually authorized to issue any permits themselves. These federal consulting agencies may include EPA, Fish & Wildlife, the National Marine Fisheries Service, the National Park Service, and the Federal Aviation Administration, among others. State agencies are consulted as well, especially during FERC's review as lead agency, but by no means exclusively on the FERC part of permitting. For example, the state wildlife and fisheries agency can provide consulting comments to the Corps on a Clean Water Act § 404 permit, because the construction and operation of an LNG project will affect habitat and wildlife—the very things that these state agencies regulate.⁹⁶ A good rule of thumb to use to determine whether an agency will consult on a permit is whether the project might affect the resource that the agency regulates (actually or even just potentially). If so, you can assume that agency will be involved.

Agencies and permits at the state level

The state permitting agencies involved are those with power over air permits, federal consistency / coastal use permits, and water quality. (Occasionally this power is vested in a tribe or EPA, but that's not typical for terminals—pipeline projects more frequently involve tribes or EPA given the larger footprint.) Which state agencies are in charge will vary by state. Some state agencies consult on permits but don't issue their own permits (or at least LNG projects don't typically need permits from these agencies to construct or operation); these consulting agencies are often those with authority over transportation infrastructure, historical sites, parks, and wildlife.

A state environmental agency, with the relevant federally delegated authority, has the power to decide whether to grant an LNG project the following approvals:

⁹⁵ LNG facilities sited at the Canadian or Mexican border for import or export also require a Presidential Permit. FERC must obtain a favorable recommendation from the Secretaries of State and Defense before issuing a Presidential Permit. If the Secretaries do not agree, the President decides directly. See Executive Order No. 10,485, 18 Fed. Reg. 5397 (Sept. 5, 1953), <https://www.archives.gov/federal-register/codification/executive-order/10485.html>.

⁹⁶ 16 U.S.C. § 460 *et seq.*

Table 3.1: Approvals Required by State Environmental Permitting Agency

<p>CLEAN WATER ACT § 401 WATER QUALITY CERTIFICATION</p>	<p>Every state adopts its own water quality standards under the Clean Water Act.⁹⁷ For each federal permit that a project requires, the LNG developer must check with the state to make sure those permits do not conflict with the state water quality standards, in a process known as a Clean Water Act § 401 water quality certification. States may waive their right to issue a certification, but an LNG applicant must at least apply for a certification from the state agency, otherwise the federal agency issue its permits. For example, the Corps can only issue a Clean Water Act § 404 permit if the state (or authorized tribe if on tribal land) has waived its rights or if it issues the water quality certification, declaring the discharge consistent with maintaining the state’s water quality standards.⁹⁸ A certification is also needed for the federal activities covered by the FERC license as well.</p> <p><i>The Department of Environmental Quality (LDEQ) in Louisiana and the Railroad Commission in Texas exercise this power.</i></p> <p>Section 401 certifications are discussed further in Chapter 7.</p>
<p>CLEAN AIR ACT AND STATE AIR POLLUTION LAW PERMIT</p>	<p>Each state must establish an air permit program that complies with Clean Air Act regulations.⁹⁹ The state grants air permits for construction and operation under the federal law and consistent state regulations included in the EPA-approved state implementation plan (SIP) for the Clean Air Act. These permits typically are not denied but may: (1) increase disclosure of potential toxic emissions and affect the balancing of risks and benefits in an EIS or CZMA review; and (2) result in increased pollution control or monitoring requirements.</p> <p><i>The LDEQ in Louisiana and Commission on Environmental Quality and the Texas Commission on Environmental Quality (TCEQ) in Texas exercise this power.</i></p> <p>State air permits are discussed further in Chapter 8.</p>
<p>COASTAL USE PERMIT OR COASTAL CONSISTENCY STATEMENT</p>	<p>LNG export terminal activities must not conflict with a state’s Coastal Zone Management Act (CZMA) plan.</p> <p><i>Louisiana Dept. of Natural Resources (LDNR) exercises this power in Louisiana; the Railroad Commission and General Land Office exercise this power in Texas.</i></p> <p>This guide does not cover coastal permits in-depth; for a basic overview of these requirements, see Chapter 10.</p>
<p>STATE SUPERFUND OR BROWNFIELD CLEANUP AUTHORITY</p>	<p>An onshore or near shore LNG facility may require approval for cleanup of contaminated land before construction. If the land is a federal Superfund site, EPA would oversee cleanup.¹⁰⁰ If not, the state agency would manage it under a state superfund law or voluntary cleanup program. These cleanup approvals typically are not denied but may result in increased site investigation for toxic contamination and affect the balancing of risks and benefits in an EIS or coastal management review. The approval process may also result in increased pollution control or monitoring requirements.</p> <p>This guide does not cover permits required for site cleanup.</p>

⁹⁷ Clean Water Act, § 303(c).

⁹⁸ 33 U.S.C. § 1341(a).

⁹⁹ 42 U.S.C. § 7661a(d)(1) and 40 C.F.R. part 70.

¹⁰⁰ Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601, *et seq.*, commonly known as the Superfund Law.

States also have authority to set permit requirements for wastewater discharges,¹⁰¹ storm water discharges,¹⁰² and industrial pretreatment (if a facility is discharging into the local sewage treatment system or trucking its discharge to a local sewage treatment plant).¹⁰³ Such permits typically are not denied but may result in increased pollution control or monitoring requirements. **This guide does not discuss the permits for discharge and pretreatment in depth; this has not historically been a leverage point for challenging facilities.**

Local level

As discussed in Section 3.A.2, the Natural Gas Act contains provisions that make it difficult to challenge an LNG export or import terminal at the local level, as it preempts many state and local laws.

PRACTICE TIP

Work with a local attorney familiar with your state's CZMA laws and Coastal Management Plan (CMP) to identify if the CMP incorporates any helpful local ordinances (or allows for such ordinances to be passed). Incorporation allows localities pass laws that could be used to stop LNG projects that the NGA would otherwise preempt.

But local laws may not be preempted by the Natural Gas Act when the state's Coastal Management Plan (which is required by the Coastal Zone Management Act) specifically provides for local involvement, as was the case in Oregon, in which local laws were leveraged in the fight against the Jordan Cove LNG terminal. Advocates unfamiliar with their state's CMP should reach out to local land use and coastal zone management attorneys to understand what local laws and ordinances still apply.

In addition, local authorities will often be instrumental in approving tax exemptions and providing other incentives to attract the project. For example, in Texas the local school boards have had the authority to grant or deny tens of millions of dollars of tax breaks to LNG facilities under the state's industrial tax exemption program (referred to as "Chapter 313," for the program's location in the tax code). In Louisiana, the local school boards, parishes governing board, and local sheriff have similar authority under the Governor's executive order regulating the Louisiana Industrial Ad Valorem Tax Exemption Program (known as "ITEP"). For more information on tax exemptions, see Chapter 9.

For a Louisiana terminal, which agencies are involved and what are their roles?

Louisiana state agencies involved in the LNG export permitting process are listed in below.¹⁰⁴

¹⁰¹ With EPA delegation, the state has authority to grant wastewater discharge permits under the Clean Water Act § 402's National Pollutant Discharge Elimination System (NPDES) and the state's water pollution law.

¹⁰² Storm water discharges may be regulated by an individual permit, or by a pre-existing "general" permit.

¹⁰³ If the LNG facility plans to discharge industrial wastes into the sewer system (or truck it to the sewage treatment plant), it may meet the threshold to require an Industrial Wastewater Pretreatment Permit. Such dischargers must meet national General Pretreatment Regulations, 40 C.F.R. § 403, as well as the rules of the local agency that manages the sewage system and treatment plant. The General Pretreatment Regulations bar discharge of any pollutant, such as oil or a solvent, that may impair sewage treatment, pass through untreated, cause a fire or clog the system. If no federal pretreatment standard exists for a pollutant, the state or local government may set a limit or requirement.

¹⁰⁴ Excellent resources for Louisiana advocates have been compiled by Tulane Environmental Law Clinic's Community Engagement Program here: *Louisiana Resident Resources*, <https://law.tulane.edu/sites/law.tulane.edu/files/Files/TELC%20ERL%20LA%20Resources.pdf>. Attached as App. 1.

Table 3.2: Louisiana Agency Decision-Makers or Advisors on Onshore/Near-Shore Projects

LOUISIANA AGENCY	AGENCY'S AUTHORITY
<p>Louisiana Dept. of Environmental Quality (LDEQ)</p>	<p>Air permits. The LDEQ has EPA-approved power to issue or deny air permits for onshore/near-shore LNG facilities, that permit (or permits¹⁰⁵) will satisfy the Clean Air Act's various permitting requirements:</p> <ul style="list-style-type: none"> • Part 70 (Title V) Operating permit • Prevention of Significant Deterioration (PSD) construction permit • Nonattainment New Source Review (NNSR) permit • Acid Rain (Title IV) permit • Clean Air Interstate Rule (CAIR) approval.¹⁰⁶ <p>Clean Water Act § 401 Water Quality Certification. Has EPA-delegated power to issue or deny a § 401 Water Quality Certification, without which the terminal cannot be built. An appeal of the LDEQ's decision can be filed in federal court within 30 days after notice is provided.</p> <p>Wastewater discharge permits. Has EPA-delegated authority to issue wastewater discharge permits under the Louisiana Pollutant Discharge Elimination System (LPDES).¹⁰⁷ LDEQ must allow at least 30 for public comment on such permits,¹⁰⁸ and shall hold a hearing whenever public requests indicate significant public interest in the draft permit. LDEQ may also hold a hearing whenever, in its discretion, it decides that a hearing might "clarify" an issue.¹⁰⁹ Note that Louisiana wastewater regulations apply to vessels as well as land-based facilities.¹¹⁰</p> <p>Contaminated land cleanup. Manages Louisiana's law addressing cleanup of inactive and abandoned hazardous waste sites. A seller of a known hazardous waste site must assess the site and either clean up the site or obtain an approved cleanup plan prior to real property transfer.¹¹¹ Also approves or denies site investigation and cleanup plans under Louisiana's Voluntary Remediation Program, after public notice and opportunity for a public hearing,¹¹²</p>
<p>Louisiana Dept. of Natural Resources (LDNR)</p>	<p>Issues Coastal Use Permits (CUPs) for activities that take place on lands that lie within Louisiana's designated "coastal zone." Its Coastal Use Plan is approved by NOAA under the federal CZMA. The coastal use permit acts as a consistency decision—i.e., that the use is consistent with the state's CZMA.</p> <p>LDNR must also conduct a public trust analysis when state lands and water bottoms are potentially affected.¹¹³</p>

¹⁰⁵ LDEQ may issue separate permits under each Clean Air Act permitting requirement, but in practice the agency typically issues one combined permit. Chapter 8 discusses in more depth.

¹⁰⁶ The Louisiana Environmental Quality Act, L.R.S. 30:2054, provides the Secretary of the LDEQ with broad legal authority for regulating air quality. For a Part 70 source, the public is allowed at least 30 days to comment on the proposed permit action. LAC 33:III.531.A.3.C (Part 70) and LAC 33:111.509.Q (Prevention of Significant Deterioration construction permits).

¹⁰⁷ Louisiana Administrative Code (LAC) 33:IX.2301 to 33:IX.7129.

<https://www.deq.louisiana.gov/index.cfm?md=resource&tmp=category&catid=regulations-lac-title-33>

¹⁰⁸ LAC 33:IX.3113.B.

¹⁰⁹ LAC 33:IX.3117.

¹¹⁰ LAC 33:IX.701 to 33:IX.713.

¹¹¹ LRS 30:2271 to 30:2279, with regulations at LAC 33:VI.101 to 33:VI.803.

¹¹² La. R.S. 30: 2285.1 and 2286.1. See program description at <https://www.deq.louisiana.gov/page/brownfields>.

¹¹³ LRS 41:1701.

LOUISIANA AGENCY	AGENCY'S AUTHORITY
Louisiana Office of State Lands	<p>The Louisiana Office of State Lands is in the Division of Administration. The head of this office is not a separately elected official but instead answers to the Commissioner of Administration, who is appointed by the Governor.</p> <p>Has the authority to issue or deny a permit and lease for use of “State Water Bottoms” (state-owned underwater land held in trust by the state for the public).¹¹⁴</p> <p>Develops a comprehensive state master plan for administration of state lands and water bottoms, which “shall ensure that all public lands and water bottoms are protected, administered, and conserved in a manner consistent with the constitution.”¹¹⁵ The plan is subject to approval by the Governor, the Attorney General, the Department of Wildlife and Fisheries, and the Department of Natural Resources.¹¹⁶</p>
Louisiana Dept. of Transportation and Development (DOTD)	<p>Has authority to issue approvals for such activities as driveway access, trestle crossing, and temporary conveyor crossing. For example, Tellurian’s proposed Driftwood LNG facility requires the widening of a state highway to accommodate workers.¹¹⁷</p>
Louisiana Dept. of Wildlife and Fisheries (LDWF) <i>It issues permits for dredging of state water bottoms but exempts ports and terminals.</i>	<p>Can advise FERC on environmental review under NEPA and the Corps on § 404 and Rivers & Harbors Act permits regarding impacts on fisheries resources, endangered species, and migratory birds.¹¹⁸</p> <p>While this agency has authority to approve or deny a Scenic Rivers Permit under the Louisiana Scenic Rivers Act,¹¹⁹ the law may be preempted. But if LDWF finds that an activity could have an adverse impact on a designated Scenic River,¹²⁰ such as a road, rail or pipeline crossings; discharges; piers; structures; or water withdrawals, that finding may be relevant for water quality certification or review under NEPA or the CZMA.</p>
Louisiana Dept. of Culture, Recreation and Tourism, Division of Archaeology	<p>Can provide advice under the National Historic Preservation Act, § 106 and NEPA environmental review.¹²¹</p>
Port Authorities	<p>May lease facilities for an LNG terminal or conduct dredging or other activity that accommodates it.</p>

For a Texas terminal, which agencies are involved and what are their roles?

Texas state agencies involved in the LNG export permitting process are in listed the following table.

¹¹⁴ LRS 41:1701-1714.

¹¹⁵ LRS 41: 1701(C).

¹¹⁶ LRS 41: 1701(C).

¹¹⁷ Harry Weber, “Tellurian to prepare Driftwood LNG site for construction, build new pipeline,” *S&P Global*, June 22, 2021, <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/062221-tellurian-to-prepare-driftwood-Ing-site-for-full-construction-build-new-pipeline>

¹¹⁸ 16 U.S.C. § 460 *et seq.* See also 16 U.S.C. §§ 661 *et seq.*, and §§ 688, 703, and 1536(a)(2).

¹¹⁹ LRS 56:1840 *et seq.*

¹²⁰ The list of designated Scenic rivers is at <https://www.wlf.louisiana.gov/page/scenic-rivers-descriptions-and-map>.

¹²¹ 136 C.F.R. § 800.

Table 3.3: Texas Agency Decision-Makers or Advisors on Onshore/Near-Shore LNG Projects

TEXAS AGENCY	AGENCY'S AUTHORITY
<p>Texas Commission on Environmental Quality (TCEQ).</p>	<p>Air permits. Has EPA-approved power to issue or deny air permits for onshore/near-shore LNG facilities.</p> <p>Has jurisdiction over odor contaminants. Texas law requires that the TCEQ must consider “possible adverse short-term or long-term side effects of air contaminants or nuisance odors... on the individuals attending the school facilities” in deciding on issuance of a permit for a facility “within 3,000 feet of an elementary, junior high, or senior high school.”¹²²</p> <p>Wastewater discharge permits. Recently gained EPA-delegated authority to issue wastewater discharge permits under the Texas Pollutant Discharge Elimination System (TPDES).¹²³</p> <p>Has primary duty to implement a Pretreatment Program for discharges into sewers or sewage treatment plants.¹²⁴</p>
<p>Texas General Land Office (GLO)¹²⁵ The GLO Commissioner of is elected every four years.¹²⁶</p>	<p>Has the power to issue or deny a lease or easement for use of state-owned underwater land.¹²⁷ Depending on the parcel involved, this authority may be shared with the School Land Board.</p> <p>Has the power to issue or deny “coastal consistency determinations” for projects pursuant to its NOAA-approved Coastal Management Plan.¹²⁸ It does not issue coastal use permits, but rather ensures that other state agencies’ permit programs are consistent with the Coastal Management Plan. The Railroad Commission of Texas appears to be in charge of coastal consistency determinations for oil and gas projects; the division of authority between GLO and RRC for consistency determinations is difficult to define; both may have responsibilities for LNG projects.</p> <p>Must protect the public trust in state lands, underwater lands and waters.</p> <p>Oversees the coastal Oil Spill Response Program for spills greater than 240 barrels, but not LNG. LNG spills are managed by the RRC.</p>
<p>The Railroad Commission of Texas regulates the state’s oil and gas industry, gas utilities, pipeline safety, liquefied petroleum gas industry safety,</p>	<p><u>Clean Water Act § 401 Water Quality Certification.</u> Has EPA-delegated power to issue or deny a Clean Water Act § 401 Water</p>

¹²² 15 TAC § 382.052. (The Texas Clean Air Act is found in chapter 382 of the Texas Administrative Code.)

¹²³ TCEQ, “TCEQ to administer Clean Water Program, EPA Announces,” Jan. 15, 2021, https://www.einnews.com/pr_news/534610695/tceq-to-administer-clean-water-program-epa-announces.

¹²⁴ TWC § 26.047 and TCEQ rules contained in Title 30 Texas Administrative Code (30 TAC) Chapter 315.

¹²⁵ The GLO manages state lands and mineral rights, including properties in West Texas, Gulf Coast beaches and bays and all “submerged” lands 10.35 miles out into the Gulf of Mexico, as well as state agency acreage and timberlands in East Texas. The GLO leases these lands to benefit the Permanent School Fund, an endowment to support Texas public schools.

¹²⁶ Texas Constitution, Art. 4, § 23. <https://law.justia.com/constitution/texas/sections/cn000400-002300.html>.

¹²⁷ Tex. Nat. Res. Code (TNRC), § 51.291. <https://codes.findlaw.com/tx/natural-resources-code/nat-res-sect-51-291.html>.

¹²⁸ See also Texas General Land Office, “Texas Coastal Management Program Biennial Report 2019-2020,” Dec. 2020, <https://www.glo.texas.gov/coast/coastal-management/forms/files/2019-2020-cmp-biennial-report.pdf>.

TEXAS AGENCY	AGENCY'S AUTHORITY
<p>and surface coal and uranium mining.¹²⁹ It has delegated responsibilities under several federal laws.¹³⁰</p>	<p>Quality Certification,¹³¹ without which the LNG terminal cannot be built.</p> <p>Along with the GLO, has the power to issue or deny coastal consistency determinations for projects pursuant to its NOAA-approved Coastal Management Plan. It does not issue coastal use permits, but rather ensures that other state agencies' permit programs are consistent with the Coastal Management Plan. The Railroad Commission of Texas appears to be in charge of coastal consistency determinations for oil and gas projects; the division of authority between GLO and RRC for consistency determinations is difficult to define; both may have responsibilities for LNG projects.</p> <p><u>Contaminated land cleanup.</u> Manages Texas's law addressing cleanup of inactive and abandoned oil and gas waste sites. Works with the TCEQ if the site also contains industrial waste.¹³² A seller of a known hazardous waste site must clean it up or obtain an approved cleanup plan before transferring ownership.</p> <p>Approves or denies site investigation and cleanup plans under Texas's Voluntary Remediation Program, after public notice and opportunity for a public hearing. Also provides funding for free site assessments and cleanups of brownfields under certain conditions. Note: Houston, San Antonio and some other cities also have brownfield programs.</p> <p>Approves or denies permits for intrastate pipelines.¹³³</p>
<p>Texas Dept. of Transportation¹³⁴</p>	<p>Has authority to issue approvals for such activities as access to any roadway that is part of the state highway system.</p>
<p>Texas Parks and Wildlife Department</p>	<p>Can advise FERC and the Army Corps about impacts on fisheries, endangered species and migratory birds, particularly with regard to state-listed species.¹³⁵</p>

¹²⁹ The RRC exists under provisions of the Texas Constitution, which provides that when a RRC is created by law, it shall be comprised of three commissioners elected statewide for 6-year terms, staggered such that one Railroad Commissioner is elected every two years. Texas Constitution, Art. XVI, § 30(b).

¹³⁰ In addition to the Clean Water Act, the Railroad Commission has responsibilities under the federal Surface Coal Mining Control and Reclamation Act, Safe Drinking Water Act, Pipeline Safety Act and Resource Conservation Recovery Act.

¹³¹ TX Admin Code Tit. 16, Part 1, Ch. 3, Rule § 3:30(b)(2)(B)(iii) (Memorandum of Understanding between the Railroad Commission of TX and the TX Commission on Environmental Quality).

¹³² See Memorandum of Understanding between TCEQ and RRC, 16 Texas Admin. Code § 3.30. Also see Texas Admin. Code, Title 30, Chapter 335, Subchapter K (Texas Superfund Rules) and Texas Health and Safety Code, Ch. 361, Subch. S and § 361.602 (Voluntary Cleanup Program).

¹³³ TNRC, § 81.051. The Railroad's jurisdiction over pipelines and other oil and gas operations is exclusive and preempts municipality or county ordinances or regulations except that measures addressing aboveground activity, including fire and emergency response, traffic, lights, noise or reasonable setback requirements, may be allowed so long as it is "commercially reasonable" and "does not effectively prohibit an oil and gas operation conducted by a reasonably prudent operator" and is not otherwise preempted. TNRC, § 81.0523(c).

¹³⁴ The Texas Department of Transportation oversees construction and maintenance of state highways within its jurisdiction, and regulates access to the state highway system.

¹³⁵ See 16 U.S.C. §§ 661 *et seq.* (Fish and Wildlife Coordination Act); *id.* §§ 703 *et seq.* (Migratory Bird Treaty); *id.* § 1536(a)(2) (federal agency consultation requirement).

TEXAS AGENCY	AGENCY'S AUTHORITY
Texas Historical Commission	Can provide advice under the National Historic Preservation Act, § 106 and NEPA environmental review. ¹³⁶
Texas Water Development Board (TWDB)¹³⁷	May advise on the availability of water to meet facility needs, if relevant.
Port Authorities	May lease facilities for an LNG terminal or conduct dredging or other activity that accommodates it.

What sort of experts might be helpful in challenging an LNG project?

Although often it is possible to file comments based on commonsense concerns, it can be helpful to consult with a technical expert in the field so that your comments are as robust as possible. In some permitting processes—for example, for state air permits—experts may be essential in order to convince an agency of the errors in an application. In addition, courts give more weight to expert opinion. As a first step, an attorney can help you navigate the cost-benefits of experts including when and who to retain.

Ideally, experts should be found and retained as soon as it becomes apparent that a company will seek to build or expand an LNG facility. A single expert may be useful in challenging multiple permits, as long as the subject matter is within that expert’s field of knowledge. Credible experts should have years of experience in the subject matter on which they are opining, either academically or in the field (preferably both). Although an in-state expert may be preferable in terms of experience with the project area and reduced travel costs (which are not always an issue), be mindful that out-of-state experts may need to be retained if in-state options have conflicts of interests and/or ties to fossil fuel industry work.

Sections 4.E and 6.B.10 go into more depth about experts that can be useful in FERC and Corps challenges, respectively. In general, the following experts can be useful places to start:

For FERC permits:

- An economics expert to review the socioeconomic sections of environmental documents (including industry’s effects on job creation and real property values); ideally this person will have experience as an ecological economist, to quantify the lost value from replacing wetlands and other natural areas with industry, an area of overlap with the Corps permits;
- If any protected species may be harmed, an expert in that species or someone generally knowledgeable about the protection of wildlife;
- An industrial safety expert knowledgeable in reliability and safety issues related to vessels as well as terrestrial industrial sites;

¹³⁶ 136 C.F.R. § 800.

¹³⁷ The Texas Water Development Board also issues bonds not for developing reservoirs, water facilities, and flood control projects. Texas Constitution, Art. III, § 49c.

For DOE permits:

- An expert in macroeconomics—for example how increased supply of gas affects the use of renewables;

For Corps challenges:

- A wetlands delineation expert who can help identify wetlands, jurisdictional waters, and special aquatic sites (these legal terms are described in detail in Chapter 4);
- A “404(b)(1) Guidelines” expert (a particular series of laws the Corps must follow before issuing a 404 permit);
- An expert familiar with the success (or failure) of mitigation plans located in the same area as the proposed project;

For 401 water quality certifications:

- A water quality expert, preferably one who is already familiar with the state’s rules including the designated uses of waterbodies, numeric and narrative criteria, and other water quality standards;

For air permits:

- An expert who can evaluate emissions estimates (to identify defective quantifications that underestimate emissions and help a facility evade more stringent requirements);
- An expert familiar with the costs and types of pollution control technology that a state might require;
- An air quality expert with experience in air modeling, especially in modelling coastal regions, as the ocean often impacts the air flow and currents that disperse pollutants in a different manner than if the project was located inland.

As for where to find experts, consult other advocates and attorneys who have challenged facilities in your area, even if they have not worked specifically on LNG projects. In addition, EIP’s Center for Applied Environmental Science is a potential resource for advocates looking for referrals and funding for experts. Information about the Center and its list of independent experts can be found here: <https://caes.info/about/>.



Chapter 4

FERC CERTIFICATES & AUTHORIZATIONS

CHAPTER FOUR: FEDERAL FERC APPROVALS

Background

What is FERC’s role in permitting LNG terminals?

The Federal Energy Regulatory Commission (FERC or “the Commission”) is the most important agency in the entire LNG permitting process because Congress has tapped it as the lead federal agency on permitting LNG export and import facilities (“Section 3 projects”) and interstate gas pipelines (“Section 7 projects”).¹³⁸

With the authority given to it from the Natural Gas Act,¹³⁹ FERC regulates the infrastructure (e.g., an LNG terminal) while DOE regulates the commodity (export of gas) and everyone else (i.e., other agencies) regulates specific impacted resources (e.g., wetlands, water, air, coastal zone, etc.). In Congress’s words, under Section 3 of the NGA, FERC has “the exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal” located onshore or in near-shore waters.¹⁴⁰ FERC evaluates locations, impacts, and safety of these terminals. When FERC approves (or in other words, “certifies”) a terminal, it does so in a certificate order (also known as a “certificate”¹⁴¹).

FERC is responsible for ensuring that the Natural Gas Act is followed, that the administrative record is complete (including a record of other federal agency decisions on the project), and that environmental review of the entire project is properly conducted according to the law (namely, the National Environmental Policy Act (NEPA)). FERC’s review is intended to be so comprehensive such that other federal agencies may rely on FERC’s environmental review documents to support the issuance of their own permits (although it not always is). FERC is also responsible for establishing and maintaining a schedule for all other federal authorizations and coordinating with federal and state agencies in obtaining comments on the proposed project where appropriate. In short, for many

TERMINALS VS. PIPELINES

FERC is responsible for permitting both LNG terminals and interstate gas pipelines (reviewing requests for Section 3 authorizations and Section 7 certificates, respectively). The laws governing these two types of infrastructure differ in several important ways (see Section 4.B.1). Even though this guide focuses on challenging terminals, it is very important to challenge both, both optically and because sometimes—as was true in the Jordan Cove challenge—the most powerful arguments against a project relate exclusively to its pipelines.

¹³⁸ Section 3 and Section 7 refer to the relative sections of the Natural Gas Act from which FERC derives its oversight authority for each type of project. FERC was made lead agency for projects to build LNG import and export terminals in the 2005 amendment to the NGA (the Energy Policy Act of 2005).

¹³⁹ 15 U.S.C. § 717 *et seq.*

¹⁴⁰ 15 U.S.C. § 717b(e)(1). The Department of Energy delegated to FERC the authority under Natural Gas Act § 3(e), 15 U.S.C. § 717b(e), to license LNG terminals. Also see 42 U.S.C. § 7172(e) and DOE Delegation Order No. 0204-112, 49 Fed. Reg. 6684, 6690 (Feb. 22, 1984). LNG facilities sited at the Canadian or Mexican border for import or export also require a Presidential Permit. FERC must obtain a favorable recommendation from the Secretaries of State and Defense before issuing a Presidential Permit. If the Secretaries do not agree, the President decides directly. Executive Order No. 10,485, 18 Fed. Reg. at 5397.

¹⁴¹ When FERC approves (or “authorizes”) a pipeline, it does so in an “authorization.” For projects that include a terminal and a pipeline, FERC typically issues its decision in a single document, sometimes referred to simply as a “Certificate Order” even though it also includes the authorization as well. Sometimes this order is just referred to as FERC’s “order,”—but this can be ambiguous because FERC has authority to issue many types of orders (e.g., ruling on who is a party, setting deadlines, deciding other issues). It’s typically only used to refer to a certificate order when the meaning is clear from the context.

environmental issues, FERC’s certification process is the best place for advocates to raise their concerns.

Note that as introduced in Chapter 3.A.1, this guide focuses on the issues that arise when FERC reviews a Section 3 application (for a terminal), but often an applicant will file a joint application under Section 3 *and* Section 7 (for a pipeline) at the same time, as it needs to construct both an export terminal *and* the pipeline to supply it with gas. Under the Natural Gas Act there are several key differences in how FERC must analyze applications for pipelines as compared to terminals, which this guide highlights in Section 4.B.1. As the Jordan Cove challenge showed, the pipeline portion may be the most vulnerable part of the project, so it should never be overlooked. In addition, applicants that successfully receive a certificate to build a pipeline can exercise eminent domain to take land for construction, whereas that power cannot be used to construct a terminal. This has huge potential ramifications for landowners along the pipeline route. Therefore, even though this guide focuses on challenges to terminals, advocates challenging an application that has both a Section 3 and Section 7 component should strongly consider mounting a challenge to both the terminal and the pipeline.

Who is FERC and what are the relevant offices and people for LNG challenges?

FERC is a federal agency that regulates a number of energy-related activities and things beyond LNG terminals, including: applications to build interstate gas pipelines and affiliated facilities; rates and services for electricity; rates and services for gas pipelines; rates and services for oil pipelines; and hydropower licensing and safety. It is an “independent” agency¹⁴² organized under the Department of Energy.¹⁴³ At its head are up to five commissioners appointed by the President and confirmed by the Senate¹⁴⁴—the commission sometimes has less than five commissioners due to delays appointing or confirming replacements; three is the minimum number needed for quorum.¹⁴⁵ One commissioner is designated the chairman. The chairman can help



¹⁴² Agencies that are “independent” have more freedom from the influence and control of the U.S. president and their executive department than other agencies do (like EPA). For example, FERC’s status as an independent agency affects whether it is bound by executive orders or guidance—it generally has more discretion than a regular agency to treat such directives as not binding. See Section 4.E.14 (highlighting this difference in the context of environmental justice). The president’s authority to remove the heads of an independent agency (which in FERC’s case are called commissioners) is very limited: FERC’s commissioners may not be fired except for extreme misconduct, although the president *can* demote the lead commissioner (the “chairwoman” or “chairman”). For example, in 2020, the president abruptly demoted then-Chairman Neil Chatterjee after he began supporting more climate-friendly policies. Dan Gearino, “Trump Demoted FERC Chairman Chatterjee After He Expressed Support for Carbon Pricing,” *Inside Climate News*, Nov. 6, 2020, <https://insideclimatenews.org/news/06112020/trump-ferc-chairman-neil-chatterjee/>. Chatterjee continued as a commissioner and the other Republican appointee, James Danly, was elevated to chairman in his place.

¹⁴³ The fact that FERC is an independent agency organized under DOE means it is not beholden to the head of the DOE or even the president—it simply is organized under the same laws as DOE. This link between FERC and DOE does foreshadow a different issue, namely the difficulties that persist in determining which agency has authority for different aspects of gas permitting—including which agency is responsible for analyzing upstream and downstream emissions from a project. Gillian Giannetti, *Federal Agencies Play Hot Potato on LNG Emissions*, NRDC, Dec. 8, 2020, <https://www.nrdc.org/experts/gillian-giannetti/federal-agencies-play-hot-potato-lng-emissions>.

¹⁴⁴ Each commissioner serves for a five-year term. Because of this and the fact that FERC is an independent agency, commissioners often serve presidential administrations that did not appoint them. In addition, no more than three commissioners can be from a single political party. As such, a Republican president may need to nominate a Democrat for the Commission, and vice versa.

¹⁴⁵ For example, for part of 2019 and 2020, FERC operated with only three commissioners due to the Senate’s failure to confirm replacements after one commissioner retired and another died. David Bradley, “FERC Continues With Two Vacancies — For Now,” *NGI*, Jan. 9, 2020, <https://www.naturalgasintel.com/ferc-continues-with-two-vacancies-for-now/>; Congressional

steer FERC’s prioritizes when it comes to setting policy, analyzing applications, and organizing the application process itself, but the chairman has no greater vote on any given application than any other commissioner. The chairman also dictates which applications are placed on FERC’s agenda for review—and if an application is not placed on the agenda, it can’t be approved!

The commissioners oversee thirteen offices within FERC, four of which are particularly relevant for LNG terminal permitting and litigation:

1. Office of Energy Projects: The staff of this office is responsible for the substantive work in reviewing applications for LNG projects and creating the necessary environmental review documents required under NEPA.¹⁴⁶ The staff also makes recommendations to the Commissioners of mandatory conditions that should be placed on a certificate limiting the project.¹⁴⁷ The Commissioners review recommendations of the staff and decide whether to include the staff’s recommendations and conditions in FERC’s certificate order.
2. Office of General Counsel: This office includes the lawyers that defend FERC’s certificate orders in federal court if they are appealed.¹⁴⁸ The office now includes a new senior counsel for environmental justice and equity position that has been filled with a long-time environmental justice advocate who publicly states that FERC needs to do better on environmental justice.¹⁴⁹
3. Office of Enforcement: This office is directed to serve the public interest by: “protecting consumers through market oversight and surveillance; assuring compliance with tariffs, rules, regulations, and orders; detecting, auditing, and investigating potential violations; and crafting appropriate remedies, including civil penalties and other measures.”¹⁵⁰ This office makes sure that an LNG applicant/operator follows the conditions set in the order authorizing a project.

Research Service, “The Loss of Quorum at the Federal Energy Regulatory Commission,” CRS Report R44767, Feb. 6, 2017, <https://www.everycrsreport.com/reports/R44767.html> (describing other recent vacancies and how a loss of quorum affects FERC).

¹⁴⁶ FERC, “Office of Energy Projects (OEP),” <https://www.ferc.gov/office-energy-projects-oeep>. In particular, FERC’s Division of Gas – Environment and Engineering (DG2E) staff is responsible for managing the NEPA process, making recommendations to the Commission to avoid, minimize, and mitigate impacts, and monitoring compliance. FERC, E-Learning, “FERC Environmental Review and Compliance for Natural Gas Facilities, Module 1 – FERC’s Regulatory Responsibilities,” 3:16, <https://www.ferc.gov/industries-data/natural-gas/environment/e-learning>.

¹⁴⁷ See 15 U.S.C. § 717b(a) (“The Commission may by its order grant such application [to export LNG], in whole or in part, with such modification **and upon such terms and conditions** as the Commission may find necessary or appropriate”) (emphasis added); see also 15 U.S.C. § 717b(e)(3)(A) (“the Commission may approve an application described in paragraph (2) [an application to “site, construct, expand, or operate an LNG terminal”], in whole or part, **with such modifications and upon such terms and conditions as the Commission find necessary or appropriate**) (emphasis added). Some conditions are standard and included as examples in FERC’s regulations. See 18 C.F.R. § 157.20 (giving a non-exclusive list of general conditions applicable to certificates). In NEPA documents, staff recommendations are often in boldface and bulleted text.

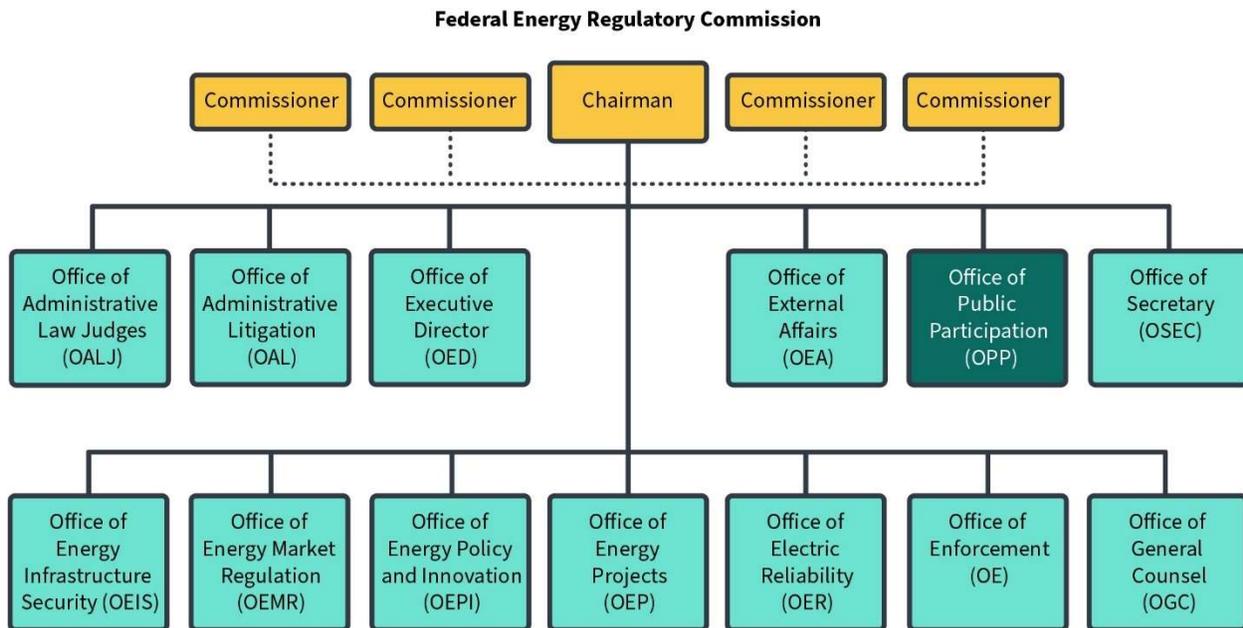
¹⁴⁸ FERC, “Office of the General Counsel (OGC),” <https://www.ferc.gov/office-general-counsel-ogc>.

¹⁴⁹ FERC, “Open Access: Montana Cole Discusses Environmental Justice and Equity,” <https://www.ferc.gov/news-events/news/open-access-montina-cole-discusses-environmental-justice-and-equity>. FERC’s senior counsel on environmental justice, Montana Cole, was previously at NRDC where she penned the following criticism of FERC’s historical handling of these issues: “Pipeline Case Brief: FERC Enables Environmental Injustice,” <https://www.nrdc.org/experts/montina-cole/pipeline-case-brief-ferc-enables-environmental-injustice>.

¹⁵⁰ FERC, “Enforcement,” <https://www.ferc.gov/enforcement>. See also FERC, “Staff Report on the Office of Enforcement’s activities during Fiscal Year 2021,” <https://www.ferc.gov/news-events/news/staff-presentation-staff-report-office-enforcements-activities-during-fiscal-year>.

4. Office of Public Participation: The purpose of this newly formed office is to assist the public in navigating FERC proceedings of all types. Staff is directed to help the public understand when and how to intervene, comment, file motions, or seek rehearing.¹⁵¹

All of FERC’s offices are shown below:¹⁵²



As of December 3, 2021, there is a full contingent of five commissioners.¹⁵³ The Commission consists of three Democrats and two Republicans, with Democrat Richard Glick as chairman. Many expect Chairman Glick and the Democratic majority will help to make FERC more responsive to the arguments of communities and environmental advocates.

What must an applicant receive from FERC to proceed with construction?

If a project is approved after all of FERC’s environmental analyses are conducted, FERC issues an order certifying the project and authorizing the construction and operation of the facilities. (Sometimes referred to as a “Certificate Order,” “Order,” or “Certificate” when both a pipeline and a terminal is permitted, and an “Authorization” or “Authorization Order” if just the terminal is permitted, as was the case with Alaska LNG.) At least three Commissioners must approve or deny a proposed project, and a decision can pass through a simple majority vote. The certificate order discusses FERC’s decision to accept (*i.e.*, authorize) or reject a project. FERC’s authorization of a project is typically conditioned on the applicant complying with construction and operation requirements specified in the order. These certificate orders are often dozens, if not over a hundred, pages long. The length is needed to justify their conditions and to respond to comments on the environmental documents—comments often submitted by advocates opposed to the facility.

¹⁵¹ FERC, “Office of Public Participation (OPP),” <https://www.ferc.gov/OPP>.

¹⁵² FERC, “Offices,” <https://www.ferc.gov/offices>.

¹⁵³ FERC, “Willie L. Phillips Sworn in as FERC Commissioner,” Dec. 3, 2021, <https://cms.ferc.gov/news-events/news/willie-l-phillips-sworn-ferc-commissioner>.

An example approval order under Section 3 and Section 7 of the Natural Gas Act can be found here: <https://cms.ferc.gov/sites/default/files/whats-new/comm-meet/2019/112119/C-2.pdf> (Rio Grande LNG Order, since withdrawn).

Why should I participate in the FERC process?

FERC's certification is the main approval that a facility needs. Although a project cannot go forward without also obtaining the necessary Clean Air Act, Coastal Zone Management, and Clean Water Act permits, among other federal permits, the FERC certification process is the agency review that focuses holistically on the terminal facility itself. The Department of Energy must certify the export of gas as a commodity—which it may do in part even before FERC's process even begins¹⁵⁴—and state permitting agencies may be reviewing certain aspects of the project concurrently (and may issue their permits prior to FERC certification), but no other agency is responsible for such a broad review of the LNG terminal as FERC. In other words, problems with a proposed project that other agencies might be able to ignore as outside of their jurisdiction (*i.e.*, not their problem) usually cannot be ignored by FERC.¹⁵⁵ Moreover, to challenge the other permits without challenging FERC is optically confusing and strategically poor, because FERC's role of lead agency means that its analysis of environmental impacts, alternatives, and project scope is often what other *federal* agencies defer to and rely on when issuing their own permits.¹⁵⁶

In addition, internal and external pressures on FERC—such as the formation of an Office of Public Participation and the federal D.C. Circuit Court's increased discomfort with FERC's handling of key issues—should translate into an increased likelihood of advocates successfully defeating projects at FERC. Finally, FERC's process is relatively more transparent than some of the other federal agencies, making the barrier to entry a little less than for other permitting processes.

What are the primary ways an advocate can participate in the FERC process?

- Sign up for automatic notifications of new filings added to the FERC dockets for the project at the pre-filing stage and the application stage (each stage has its own docket and the pipeline and terminal portions will have separate dockets)
- Participate in any open houses held by the company
- Submit scoping comments during the pre-filing stage
- Attend the scoping meeting during the pre-filing stage
- Timely intervene during the application process (necessary to later litigate the certificate)

¹⁵⁴ Typically before applying with FERC, applicants file at least the portion of their DOE application that requests authorization to export to countries with free-trade agreements requiring national treatment for trade in natural gas ("FTA countries"). FTA-country applications are fast-tracked with minimal review, so applicants quickly receive these approvals and then can bolster their FERC applications by stating they already have export approval—even if they never intend to export gas to these countries at all. For more on the DOE process see Chapter 5.

¹⁵⁵ This is why advocates should file comments challenging **any** aspect of the project that appears concerning during FERC proceedings, even if they can't tie these issues to the two main statutes that FERC must comply with (the Natural Gas Act and the National Environmental Policy Act—see Section 4.B)—those issues are still valid and should be considered.

¹⁵⁶ For example, FERC and the Corps have an official memorandum of understanding as to what extent the Corps will defer to FERC's interpretation of the project purpose and how the Corps will otherwise participate in FERC's NEPA review of gas facilities and pipelines. *Memorandum of Understanding between the Army Corps of Engineers and the Federal Energy Regulatory Commission for Interstate Natural Gas Pipeline Projects*, June 30, 2005, <https://www.ferc.gov/sites/default/files/2021-04/mou-30.pdf>.

- Comment on the draft environmental impact statement (note, comments never need to be limited to pointing out potential violations of the NGA or NEPA, or any other particular statute)
- Comment on the final environmental impact statement
- File a request for rehearing
- Appeal the certificate in Federal Circuit Court¹⁵⁷ (either the D.C. Circuit or the circuit court presiding over the project location, e.g., often the Fifth Circuit for Louisiana and Texas facilities)

What are other resources on FERC's process for permitting LNG facilities?

There are many other resources online that can be helpful for advocates looking to challenge LNG facilities. When looking for NEPA guidance online, be aware that each agency charged with implementing NEPA has some legal discretion as to how and when to involve the public.¹⁵⁸ The only NEPA regulations relevant for FERC's certification of LNG projects are issued by FERC itself or by the Council on Environmental Quality ("CEQ," for more details, see Section 4.B.3). Therefore, it is important to look for FERC- or CEQ-specific resources to understand FERC's NEPA practices.

Some helpful resources include:

- FERC's July 2015 brochure "Suggested Best Practices for Industry Outreach Programs to Stakeholders" contains a succinct summary of the applicant's pre-filing process, open houses, scoping meetings, application process, and EIS basics.¹⁵⁹
- FERC's Guidance Manual for Environmental Report Preparation, Volume I¹⁶⁰ and Volume II.¹⁶¹ A comprehensive manual geared for an applicant audience, it is a great resource for advocates wanting to understand the intricacies of FERC's relationship with the applicant and how FERC reviews requests for certification under the Natural Gas Act. Volume II of FERC's Guidance Manual for Environmental Report Preparation focuses on the Resource Reports specific to LNG facilities: RR 11 and 13.
- FERC has produced several online tutorials that describe its environmental review and compliance process for gas facilities. Modules 1-5 are most relevant for advocates challenging the certification process: <https://www.ferc.gov/industries-data/natural-gas/environment/e-learning>.
- For a quick overview of FERC's NEPA responsibilities and process, see <https://openei.org/wiki/RAPID/Roadmap/9-FD-i>.
- A redline of the Council on Environmental Quality's (CEQ) NEPA regulations, comparing the 1978 version with the 2020 version, which as of January 2022 is in the process of being rewritten to more closely resemble the 1978 version: <https://ceq.doe.gov/docs/laws-regulations/ceq-final->

¹⁵⁷ 15 U.S.C. § 717r(a) ("Any party to a proceeding under this chapter aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia. . .")

¹⁵⁸ For example, whether scoping comments are solicited during the EA process varies by lead agency. FERC does not ask for scoping comments during an EA.

¹⁵⁹ FERC, *Suggested Best Practices for Industry Outreach Programs to Stakeholders*, July 2015, 17-24. <https://www.ferc.gov/sites/default/files/2020-04/stakeholder-brochure.pdf>.

¹⁶⁰ FERC, *Guidance Manual For Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. I*, Feb. 2017, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

¹⁶¹ FERC, *Guidance Manual For Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. II*, Feb. 2017, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-2.pdf>.

[rule-redline-changes-2020-07-16.pdf](#). Different versions of CEQ’s NEPA regulations may be relevant for different LNG challenges, but some free legal research software only publishes the most recent version of these regulations. In addition, as of January 2022, the 1978 regulations are one of the better sources for predicting what *future* regulations will look like, given that the revisions to the 2020 version are still being drafted. This comparison document also can help advocates understand the citations in FERC orders and advocate comments published *before* 2020, when the 1978 version controlled (see Section 4.B.3 for more).

How is this chapter organized?

Section 4.B overviews the laws that FERC must comply with before issuing a certificate, such as the Natural Gas Act and NEPA. Section 4.B also lists the federal agencies that FERC must consult with and changes on the horizon with FERC. Section 4.C walks step-by-step through FERC’s review process, from pre-filing, application, rehearing, and judicial appeal. Section 4.D describes in detail the opportunities for public participation in FERC’s process up through the rehearing stage. Section 4.E gives specific examples of issues that could be raised in comments and Section 4.F provides links to comments filed by other advocates.

What laws must FERC comply with before issuing a certificate?

The main statutes governing FERC’s certification of LNG facilities are the Natural Gas Act (NGA) and the National Environmental Policy Act (NEPA). FERC also has developed regulations that it is bound to follow when analyzing and approving projects, including some regulations specific to its approvals of LNG terminals. In addition, the Council on Environmental Quality (CEQ)—the federal agency with responsibility for overseeing all NEPA assessments and regulations¹⁶²—has NEPA regulations that FERC has followed.¹⁶³ (As of January 2022, these regulations are in flux, as Sections 4.B.3 and 4.B.5 describe.) The table below summarizes the statutes and regulations relevant to FERC’s LNG approval process:

TABLE 4.1: The main laws and regulations that govern FERC’s review

GAS LAWS		ENVIRONMENTAL LAWS	
Natural Gas Act	Section 3: Exportation / Importation of Gas): governs the construction or modification of LNG terminals (15 U.S.C. § 717b) Section 7(c) (15 U.S.C. § 717f(c)) governs the construction of interstate pipelines	National Environmental Policy Act	42 U.S.C. §§ 4321 – 4370m-12
FERC’s general and procedural regulations (not specific to LNG)	18 C.F.R. Subpart X	CEQ’s NEPA regulations	40 C.F.R. §§ 1500-1508

¹⁶² 42 U.S.C. § 4344(3).

¹⁶³ As it did in the Rio Grande LNG FEIS in 2020. FERC, “Rio Grande LNG Project, Final Environmental Impact Statement, Volume 1,” May 2020, 1-6, https://www.ferc.gov/sites/default/files/2020-05/FEIS-volume-1_0.pdf. (“Based on its authority under the NGA, the FERC is the lead agency for preparation of this EIS in compliance with the requirements of NEPA, the Council on Environmental Quality’s (CEQ) regulations for implementing NEPA (Title 40 of the Code of Federal Regulations, Parts 1500–1508 [40 CFR 1500–1508]), and the FERC regulations implementing NEPA (18 CFR 380).”).

GAS LAWS		ENVIRONMENTAL LAWS	
			(undergoing revision as of January 2022)
FERC's NGA regs on LNG export and import facilities	18 C.F.R. § 153 et seq.	FERC's NEPA regulations¹⁶⁴	18 C.F.R. Part 380

FERC's failure to follow these statutes or regulations in certifying a project should provide a solid basis for a court to overturn a certificate (although an experienced NEPA attorney should always be consulted to structure specific litigation arguments).¹⁶⁵ Therefore, it is important for advocates to read these laws and have a firm grasp on the responsibilities they place on FERC and the applicant.¹⁶⁶ Note that advocates should not limit themselves when filing comments to just raising issues that are potential violations of these laws—advocates can and should challenge any aspect of the project that is concerning, including issues that fall entirely outside of NEPA and the NGA. As introduced in Chapter 3 Section A.3, there are many other federal laws that applicants must show compliance with before FERC can issue a permit. This guide highlights some of these in Section 4.E as part of the sample comments.

Although an advocate should be familiar with both the NGA and NEPA, these two laws are not the same levers when it comes to challenging terminals. NEPA requires that FERC take a “hard look” at many very specific aspects of the project and their impacts—while the NGA requires that a terminal be more vaguely “consistent with the public interest” (and that the pipeline be both in the public convenience and necessary). Both laws are useful tools and may be subject to future refinement, either by acts of Congress or by court decisions that alter the understanding of these laws. This guide discusses both.

¹⁶⁴ In general, if FERC's regulations on NEPA conflict with CEQ's, CEQ's regulations win out. 40 C.F.R. § 1507.3(a) (1978). The 2020 CEQ regulations were more draconian and prohibited other agencies like FERC from conducting a more thorough NEPA review than the basic review the 2020 CEQ regulations envisioned. 40 C.F.R. § 1507.3(b) (2020). It's likely that the new regulations will revert largely to the 1978 version, which gives agencies like FERC more flexibility in setting regulations.

¹⁶⁵ It has historically been understood that CEQ's *regulations* on NEPA (which were subjected to notice-and-comment) apply to independent regulatory agencies like FERC. See 40 C.F.R. § 1507.3 (1978); see also CEQ's 40 Questions Memorandum to Agencies, 46 Fed. Reg. 18,026 (as amended 1986), 24 (Question 31a), <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>. Note, however, that one judge on the influential D.C. Circuit in 2021 questioned whether CEQ had authority to issue those regulations in the first place. *Food & Water Watch v. U.S. Dep't of Agric.*, 1 F.4th 1112, 1118-19 (D.C. Cir. 2021) (Randolph, J., concurring) (explaining how that question creates doubts whether “CEQ's regulations bind executive and independent agencies alike”); see also Thomas C. Jackson & Jeffrey H. Wood, “Advisor or Authority? Role of Council on Environmental Quality in NEPA Regulations,” National Hydropower Association, July 12, 2021, <https://www.hydro.org/powerhouse/article/advisor-or-authority-role-of-council-on-environmental-quality-in-nepa-regulations/> (highlighting this issue). Although FERC has acted as if CEQ's regulations bind it in the past, FERC may dispute whether CEQ's guidance documents or executive orders apply to it if it has not expressly adopted them (for example, by incorporating them into the EIS). An experienced NEPA attorney is an essential advocate during litigation to navigate these issues.

¹⁶⁶ Regulations and statutes are published online for free; Cornell Law School's Legal Information Institute has all of the regulations in a relatively easy-to-navigate format: <https://www.law.cornell.edu/>. They are also available on many government websites.

What should I know about the Natural Gas Act and its related regulations?

The **Natural Gas Act**¹⁶⁷ gives FERC “the exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal” located onshore or in near-shore waters (under Section 3)¹⁶⁸ and to approve interstate “transportation facilities” like pipelines (under Section 7).¹⁶⁹

For **FERC**, there are two key sections of the NGA relevant to LNG challenges: Section 3 and Section 7. **Section 3** grants FERC the authority to approve or deny a developer’s application to build an LNG terminal.¹⁷⁰ The terminal is the large facility that pretreats and liquefies the gas, which is then loaded onto LNG tankers. **Section 7**, meanwhile, grants FERC the authority to approve or deny a developer’s application to build an interstate gas pipeline and the pipeline’s associated components like compressor stations, header systems, valves, and related facilities.¹⁷¹

Note that this guide focuses on unique issues that arise when challenging LNG terminals—in other words, Section 3 authorizations. However, applications for most new LNG projects will be **joint** Section 3 and Section 7 applications, because the applicant typically needs to supply its new terminal via pipeline.¹⁷² (Expansions—e.g., the addition of a liquefaction train—are more likely to involve only Section 3.) Advocates should **always** challenge both Section 3 and Section 7 aspects of the project—as in the Jordan Cove project, sometimes the pipeline is more vulnerable than the terminal! Advocates can use this guide to identify issues to raise to challenge pipelines and their components, which will need many of the same permits highlighted in this guide, including Army Corps of Engineers permits, state section 401 certifications, and state air permits (for the compressors). However, some of the legal standards for approving pipelines are different from those for terminals. The approval of a pipeline also gives the developer the power of eminent domain, which a terminal developer does not receive. This guide attempts to flag major differences between the approvals for terminals and pipelines when relevant; however, advocates should consult experienced counsel when litigating pipelines to ensure all concerns are presented under the appropriate standard of review.

FERC’s regulations put the burden on the applicant to provide FERC with all necessary information to decide on the application.¹⁷³ The NGA has several important facets:

- **FERC is lead agency.** The Natural Gas Act establishes FERC as the lead agency “for the purposes of coordinating all applicable Federal authorizations,” and each federal and state agency involved

¹⁶⁷ 15 U.S.C. § 717 *et seq.*

¹⁶⁸ 15 U.S.C. § 717b(e)(1). The Department of Energy delegated to FERC the authority under Natural Gas Act § 3(e), 15 U.S.C. § 717b(e), to license LNG terminals. *Also see* 42 U.S.C. § 7172(e) and DOE Delegation Order No. 0204-112, 49 Fed. Reg. 6684, 6690 (Feb. 22, 1984).

¹⁶⁹ 15 U.S.C. § 717f(c).

¹⁷⁰ 15 U.S.C. § 717b(e)(1) (Under Section 3, the Federal Energy Regulatory Commission (FERC) has “the exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal” located onshore or in near-shore waters.) The Department of Energy delegated to FERC this authority under Natural Gas Act § 3(e), 15 U.S.C. § 717b(e), to license LNG terminals. *Also see* 42 U.S.C. § 7172(e) and DOE Delegation Order No. 0204-112, 49 Fed. Reg. 6684, 6690 (Feb. 22, 1984).

¹⁷¹ 15 U.S.C. § 717f (as part of FERC’s powers to permit “transportation facilities”). Other components might include metering and pig launcher/receivers to maintain the pipe.

¹⁷² For an example of a joint certification see FERC’s order under Section 3 and 7 authorizing the Rio Grande LNG terminal and its associated Rio Bravo pipeline: “Order Granting Authorizations Under Sections 3 and 7 of The Natural Gas Act.” 169 FERC ¶ 61,131 (Nov. 22, 2019) (since withdrawn) <https://cms.ferc.gov/sites/default/files/whats-new/comm-meet/2019/112119/C-2.pdf>.

¹⁷³ 18 C.F.R. § 157.5(c).

must “cooperate” with FERC and “comply with the deadlines” established by FERC. (An agency’s failure to comply with FERC-established deadlines can be grounds for parties to a FERC application to appeal.¹⁷⁴) Because of FERC’s role as lead agency, other federal agencies involved often rely on FERC’s NEPA analysis. In addition, advocates may be able to track the deadlines and progress at other agencies more easily by keeping up with the applicant’s FERC filings. For example, the applicant must file publicly available documents with FERC describing its progress of getting Corps permits, often leaving more clues than would be available from just the Corps’ website or its public notices.

- For terminals in particular, there is a presumption in favor of granting an authorization.** Section 3 of the Natural Gas Act establishes a presumption favoring the licensing of terminals to import or export LNG. It provides that FERC “shall” grant an “Authorization to Construct and Operate” a proposed LNG terminal project “unless” it finds that construction and operation of the facility “**will not be consistent with the public interest.**”¹⁷⁵ There is no definition of “public interest” in the Natural Gas Act¹⁷⁶ or in FERC’s regulations, meaning FERC has broad latitude how it identifies and weighs factors that affect “the public interest.” Unfortunately, FERC’s interpretation of “public interest” often does not currently take into much consideration what neighboring communities and environmental groups would consider to be “public interest.” That’s not to say advocates’ arguments for a different or more inclusive definition of public interest should not be included in comments or litigation—just that because FERC’s interpretation of public interest will be given deference by the reviewing courts that otherwise might overturn FERC’s certification of a facility under the NGA, advocates may not have much immediate success arguing that the construction of LNG terminals are not in the public interest. There have been some wins related to the NGA, however—for example, in August 2021, the D.C. Circuit found that FERC’s NGA public-interest analysis for two terminals was faulty because it had based its public-interest conclusion on EIS documents that contained flawed environmental-justice and climate-change analyses (analyses required by NEPA).¹⁷⁷ Because FERC had erred, the Court remanded the certificate orders on the two LNG projects at issue back to FERC to redo its analysis.¹⁷⁸

PRACTICE TIP:

Even if FERC interprets a statute and its responsibilities one way, it is ok to raise comments and arguments that contradict FERC. A reviewing court, or, eventually, FERC itself, may agree with you! Just make sure to work with an experienced attorney during the litigation phase (and when planning litigation!), as the outcome of litigation in one challenge may affect all other terminals.

Broad change on what goes into the public interest analysis would likely need to come from Congress, which has the power to change the statutes that circumscribe FERC’s review. In the current political climate it would be a difficult change to pass into law, but Congress could clarify the definition of public interest by, for example, removing FERC’s very broad latitude in choosing

¹⁷⁴ 15 U.S.C. § 717n(b) and (c); *id.* § 717r(d)(2) (describing which court has jurisdiction over an appeal based on delay).

¹⁷⁵ 15 U.S.C. § 717b(a). See 18 C.F.R. § 153 et seq.

¹⁷⁶ See 15 U.S.C. § 717a (providing no definition).

¹⁷⁷ *Vecinos para el Bienstar de la Comunidad Costera v. FERC*, No. 20-10453 (“Rio Grande Op.”) at 17 (Aug. 3, 2021), [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf). Attached as App. 2.

¹⁷⁸ *Id.*

the factors used to determine the public interest and instead narrowly defining those factors in a way that would disfavor fossil fuel projects (e.g., requiring that FERC disfavor projects that contribute to climate change). It could amend the NGA to no longer presume that LNG projects are in the public interest.

- **The NGA approval standard for a terminal is more lenient than for pipelines.** The standard for approval of an LNG terminal under Section 3 of the NGA differs significantly from the standard for approving interstate gas pipelines under Section 7 of the NGA. Under Section 3 of the NGA, FERC is supposed to authorize a terminal unless it finds that the terminal “will not be consistent with the public interest.”¹⁷⁹ Under Section 7 of the NGA, FERC can only authorize a pipeline if it finds that the pipeline is “required by the present or future public convenience and necessity; otherwise such application shall be denied.”¹⁸⁰ Both analyses require FERC to balance the public benefits of a project against the adverse consequences; with respect to Section 7, however, FERC must additionally analyze whether the project is “needed.”

Because of the additional analysis required, the pipeline can be easier to challenge than the terminal itself. The larger size of the pipeline can also make it more vulnerable. It may affect more parties (such as landowners facing eminent domain), meaning more potential opponents with unique concerns; it may cross more habitat, meaning more affected species and waterbodies.

- **The NGA requires that applicants for terminals use the elongated pre-filing process.** The NGA requires that applicants seeking to build LNG terminals go through a pre-filing process before they may file an official application for authorization (pipeline applicants often choose to participate as well).¹⁸¹ The pre-file process requires FERC to seek additional public input. The process must last at least six months; only after these six months may the applicant file an official application for the project (if it has completed other necessary steps as well). The pre-filing process is discussed in further in Sections 4.C.3–4.C.5.
- **Terminals can’t use eminent domain to obtain the land needed for the project; pipelines can.** A project applicant that is constructing a terminal will not be able to use federal eminent domain to take the land needed for the terminal’s construction: LNG export terminals (approved under section 3 of the Natural Gas Act) are not statutorily authorized to use eminent domain to obtain property for their development.¹⁸² Any state or local agency with public land stewardship authority retains its power to decide whether to approve land lease or easement applications. In some states, such as Texas, the public lands commissioner is independently elected. In other states, such as Louisiana, the position is an executive branch appointment.

However, LNG-related pipelines are a different matter. Once a pipeline is certified by FERC, the project sponsor can avail itself of the eminent domain condemnation powers that interstate gas pipeline project sponsors enjoy under 15 U.S.C. § 717f(h), regardless of whether the land is privately or state-owned.¹⁸³ This is another reason why it is so important to challenge the pipeline

¹⁷⁹ 15 U.S.C. § 717b(a). See 18 C.F.R. § 153 et seq.

¹⁸⁰ 15 U.S.C. § 717f(e).

¹⁸¹ 15 U.S.C. § 717b-1(a).

¹⁸² Compare 15 U.S.C. § 717b with 15 U.S.C. § 717.

¹⁸³ In a pipeline case decided by the U.S. Supreme Court in 2021, the Court held that a developer that has received a FERC certificate to build a pipeline may use eminent domain to obtain both private and state lands that it needs for the pipeline’s construction. *PennEast Pipeline Co., LLC v. New Jersey*, 594 U.S. ___, No. 19-1039, 2021 WL 2653262, (U.S. June 29, 2021) (“By

part of a project as well.

In sum, the NGA gives FERC the power to approve LNG terminals that are in the “public interest” and places FERC at the head of other permitting agencies. However, there’s one more very important statute at play—NEPA—that provides an advocate many hooks to challenge FERC’s certification. (And generally if FERC errs when implementing NEPA, it also will have erred in implementing the NGA!)

What does the National Environmental Policy Act’s environmental review require?

All projects that entail a federal action, including those that require a federal permit, must go through an environmental review unless they are categorically excluded by statute or regulation. (LNG terminals are not excluded in FERC’s review.) The **National Environmental Policy Act (NEPA)**¹⁸⁴ is the statute that dictates the scope of that environmental review; regulations authored by the federal **Council on Environmental Quality (CEQ)** and each implementing agency (here, FERC) are also important. Because FERC is lead agency for LNG terminal projects, FERC has primary responsibility for complying with NEPA for LNG projects.¹⁸⁵ If FERC’s NEPA documents do not address the requirements of all federal agencies issuing approvals under federal law, those agencies must conduct their own NEPA analyses.

WHO IS CEQ AND WHY DOES IT MATTER?

CEQ is the White House Council on Environmental Quality, a federal agency tasked with ensuring that agencies implement NEPA correctly. As of January 2022, CEQ’s role in LNG projects is in flux and a little uncertain. For decades CEQ’s regulations—which all agencies implementing NEPA are expected to follow—were unchanged (the “1978 regulations”). In 2020, CEQ revamped them but their reign will be short-lived, as they are being rewritten again under the Biden Administration. For more, see Section 4.B.3.

its terms, [15 U.S.C.] § 717f(h) authorizes FERC certificate holders to condemn all necessary rights-of-way, whether owned by private parties or States.”). It’s interesting to note that even though the PennEast developers won at the Supreme Court, by September 2021 they canceled the pipeline—because the project had not yet received all of its required permits, including a water quality certification in New Jersey! Disavino, Scott. “*PennEast becomes the latest to scuttle a natural gas pipeline project.*” (Sept. 27, 2021). <https://www.reuters.com/business/energy/penneast-end-development-pennsylvania-new-jersey-natgas-pipe-2021-09-27/>.

¹⁸⁴ 42 U.S.C. §§ 4321-4347. The White House Council on Environmental Quality establishes federal regulations for implementing NEPA (see 40 C.F.R. §§ 1500-1508); these are being rewritten as of January 2022. Agencies can also establish separate but consistent NEPA regulations, which FERC has done. See 18 C.F.R. Part 380 et seq.

¹⁸⁵ Indeed, the NGA specifically envisions that applicants will comply with NEPA’s pre-filing process, usually reserved for the most complicated of projects. 15 U.S.C. § 717b-1(a).

NEPA does not dictate an outcome but rather a process. Specifically, it mandates an environmental review process and the subsequent issuance of a decision document based on that review (in FERC's case, the certificate order or an order denying the application), in which decision-makers decide whether a project should be granted a permit or approval, and under what conditions or restrictions, if any.¹⁸⁶ FERC does not necessarily violate NEPA if it approves the most environmentally damaging alternative of a project.

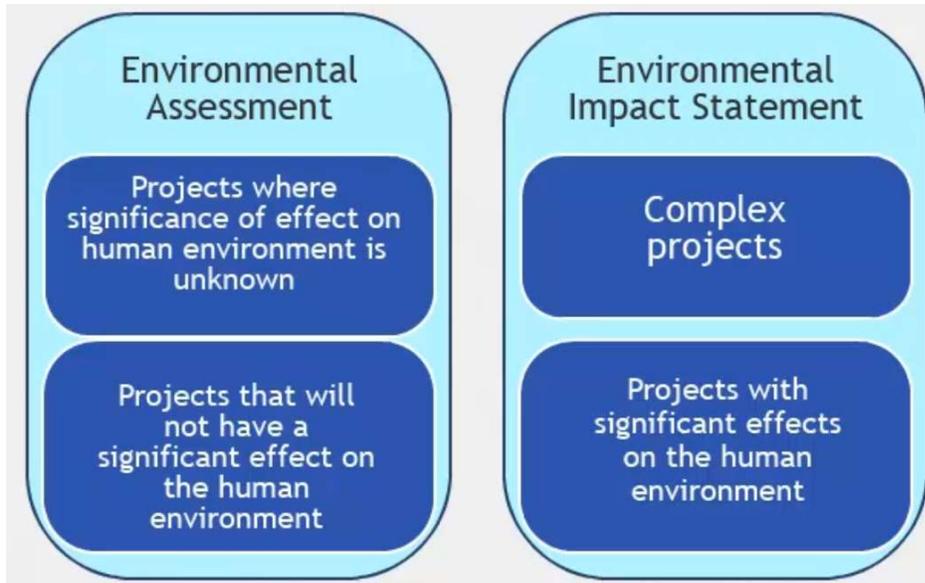
PRACTICE POINTER:

Other federal agencies are not absolved of their NEPA responsibilities just because FERC is lead agency for NEPA purposes. Each federal permitting agency involved in the process must make sure that FERC's NEPA analysis is sufficient for its own permits before it may rely on FERC's analysis—for example, the Corps still must confirm that FERC's NEPA analysis sufficiently covers the environmental impacts caused by the LNG work the Corps is permitting. If it does not, the Corps must work with FERC to remedy FERC's analysis or the Corps must conduct its own NEPA analysis. If NEPA is not followed for any federal permit, that is grounds to challenge that permit in court.

If the agency implementing NEPA has reason to believe that an applicant's project likely will have significant impacts on the environment, it must fulfill its NEPA duties by documenting its analysis in an Environmental Impact Statement (EIS) (typically released for public comment twice as a draft and a final—but if circumstances change during or after the certification process sometimes more than two documents are needed, in which case FERC may issue a supplemental EIS—both draft and final).¹⁸⁷ But if the agency believes there will be no significant environmental impacts from a project, it may do an Environmental Assessment (EA) first (a much shorter, less involved environmental review). If at the end of the EA process the agency concludes that there are likely significant impacts from the project, it will then do a full EIS. (For more on these documents and what to expect in LNG projects, see Section 4.C.14). The basic analytical framework remains the same, however.

¹⁸⁶ See 40 C.F.R. § 1500.1(a) (2020) (“The purpose and function of NEPA is satisfied if Federal agencies have considered relevant environmental information, and the public has been informed regarding the decision-making process. NEPA does not mandate particular results or substantive outcomes. NEPA's purpose is not to generate paperwork or litigation, but to provide for informed decision making and foster excellent action.”). This is similar to the purpose described in the 1978 regulations: “NEPA's purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on an understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.” 40 C.F.R. § 1500.1(c) (1978). The 1978 regulations also highlighted the importance of public participation in the NEPA process: “NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.” *Id.* § 1500.1(b) (1978).

¹⁸⁷ 15 U.S.C. § 717n(b)(1). Also see 15 U.S.C. § 717b-1(a).



¹⁸⁸ The NEPA analysis is driven by the applicant’s **stated project purpose**¹⁸⁹ (e.g., an applicant might claim that its purpose is to export 27 million metric tonnes of LNG sourced from the Permian Basin¹⁹⁰) and **actual project plans** (e.g., a detailed plan to achieve the purpose by constructing an LNG terminal in a preferred location). A NEPA

analysis must document the **expected environmental impacts** from the project plans, a range of **reasonable alternative plans** that would still achieve the project purpose, and the impacts from those alternatives. This includes a **no-action alternative**, which is meant to evaluate the environmental effects of not pursuing the project. The NEPA analysis must show that FERC has taken a “hard look” at a project’s impacts, informed the public of these impacts, solicited and responded to relevant public comments, and determined whether the adoption and implementation of an alternative(s) would be preferable to the proposed action—if it has not, then FERC’s certificate order may be vulnerable in court to being overturned.

¹⁸⁸ FERC, “Module 2 – Overview of the FERC Process for Reviewing Proposed Natural Gas Projects” at 10:19, https://www.ferc.gov/sites/default/files/2020-06/module_2_0.mp4.

¹⁸⁹ How FERC decides to define the project’s stated purpose is important for two big reasons. First, the project’s stated purpose determines what alternatives are reasonable to include in the NEPA environmental review process. Second, because FERC is “lead agency” for LNG applications, other federal permitting agencies often look to FERC’s definition of the project purpose before conducting their own analyses as to whether *they* should grant permits. For example—and as is explained further in Chapter 6.B.3—the Corps’ regulations state that the Corps may only grant a Clean Water Act section 404 permit to projects that represent the “least environmentally damaging practicable alternative” (“LEDPA”). The Corps identifies the universe of possible alternatives from which to select this LEDPA in part by first determining what the project’s “basic” and “overall” purposes are—concepts similar but not identical to FERC’s determination of project purpose. Department of the Army, Memorandum, “Updated Standard Operating Procedures for the U.S. Army Corps of Engineers Regulatory Program,” July 1, 2009, 15-16, <https://www.spd.usace.army.mil/Portals/13/docs/regulatory/qmsref/eis/Regulatory%20SOP%20July%202009.pdf> (outlining the Corps’ and the lead agency’s responsibilities when it comes to defining “basic project purpose,” “overall project purpose and alternatives analysis,” and NEPA’s “purpose and need”). Despite differences in the definitions of these related terms, the Corps defers when possible to FERC’s interpretation of the project’s purpose in part because of FERC’s role as lead agency. See MOU, *supra* note 156. Therefore, challenging FERC on its definition of project purpose can pay dividends in a challenge to the Corps’ permits.

¹⁹⁰ FERC often simply copy-pastes the project applicant’s proposal, without giving it the proper scrutiny. This can allow an applicant to improperly narrow the NEPA review such that only its project can meet the stated purpose.

- **Alternatives.** One of the alternatives considered must be the “no-action” (i.e., “no-build”) alternative,¹⁹¹ which serves as a baseline against which the impacts of the proposed action are compared and contrasted. There is no rule on the number of alternatives that must be considered; the final NEPA document for Jordan Cove LNG explicitly considered approximately two dozen alternatives, including alternative terminal locations and alternative power supplies for the compressor equipment.¹⁹² Alternatives may be only slight changes to the project; as in the example of alternative power sources or alternate pipeline or road routes.

When deciding whether an alternative should be adopted, FERC historically¹⁹³ has evaluated each alternative using three criteria: “(1) does the alternative meet the stated purpose of the project; (2) is it technically and economically feasible and practical; and (3) does it offer a significant environmental advantage over a proposed action.”¹⁹⁴ In evaluating aboveground facility locations (like LNG terminals, as opposed to pipelines), FERC considers: “the amount of available land, current land use, adjacent land use, location accessibility, engineering requirements, stakeholder comments, and impacts on the natural and human environments.”¹⁹⁵ Because pipelines are linear routes between two points instead of fixed, there will likely be more alternative locations—at least for certain pipeline segments—and FERC’s analysis is slightly different, as the Jordan Cove FEIS points out.¹⁹⁶

For specific comments that might be raised on a NEPA alternatives analysis, see Section 4.E.2.

- **Environmental impacts.** NEPA requires that FERC analyze the impacts expected from the proposed project and each alternative to the existing natural and human environment. Impacts are to be analyzed by resource type, category, and duration. Impacted resources are wide-

ALTERNATIVES RECAP:

FERC has stated that: “[t]o determine if an alternative would be preferable to a proposed action, we generally evaluate an alternative using three criteria:

1. does the alternative meet the stated purpose of the project;
2. is it technically and economically feasible and practical; and
3. does it offer a significant environmental advantage over a proposed action.”

An example of this analysis is in Part 1 of the final EIS for the Jordan Cove LNG terminal and pipeline.

See App. 3a, Jordan Cove FEIS Part 1 at 3-1 to 3-52.
https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf

¹⁹¹ See 40 C.F.R. § 1502.14(c) (2020) and 40 C.F.R. § 1502.14(d) (1978) (both requiring no-action consideration).

¹⁹² Including the no-action alternative; “systems” alternatives (alternatives that would make use of existing infrastructure); LNG terminal site alternatives (including in other states and inland); power supply alternatives for equipment; and pipeline route alternatives. App. 3, Jordan Cove FEIS, 3-1 to 3-52. https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf. In the end, only one alternative from the final EIS was integrated into the project—a change to the pipeline route that would avoid long-term and permanent impacts to certain forest habitat. Jordan Cove FEIS, 3-26 & 3-52. (Some of the other pipeline route alternatives that were raised earlier in the NEPA process had already been integrated.) Jordan Cove FEIS, 3-2.

¹⁹³ As is discussed in the next section (4.B.3), CEQ’s NEPA regulations were updated in 2020. They narrowed the definition of what alternatives can be considered. These regulations are expected to quickly become obsolete and the alternatives analysis is expected to revert to the something more similar, if not identical, to the old regulations. Consult an attorney to determine which regulations your alternatives arguments should be based on.

¹⁹⁴ Jordan Cove FEIS, 3-3.

¹⁹⁵ Jordan Cove FEIS, 3-4 (summary); 3-5 – 3-18 (application).

¹⁹⁶ Jordan Cove FEIS, 3-3 (summary); 3-18 – 3-50 (application).

ranging, from geological to cultural to socioeconomical to biological and chemical (See Section 4.E for a full list and possible issues to raise in comments for each). When determining how significant of an impact a proposal or alternative will have on a specific resource, FERC historically has considered: the duration of the impact; the geographic, biological, and/or social context in which the impact would occur; and the magnitude and intensity of the impact (see Section 4.B.5). (These are all factors that an advocate should consider and address when filing comments.)

All in all, NEPA requires federal agencies to assess the potential environmental effects of “major federal actions”¹⁹⁷ that may significantly affect the quality of the human environment **before** deciding whether and in what form to act.¹⁹⁸ Agencies are required to provide meaningful opportunities for public participation in this process and to show-their-work when assessing potential environmental effects—although some project information might **not** be disclosed because it is privileged or of a sensitive nature (e.g., in terms of national security, economic security, or public health and safety), the conclusions that are made from that information must be public.¹⁹⁹ NEPA **does not** mandate particular results or substantive outcomes. However, an agency that does not follow NEPA’s requirements opens itself up to a federal lawsuit over its final action in which the agency’s compliance with NEPA will be scrutinized under the Administrative Procedure Act’s standard of review: whether the agency acted in an arbitrary and capricious manner in conducting the NEPA analysis.²⁰⁰ Most LNG projects will end up having to be litigated in federal court under this Act to ensure that FERC or other agencies have complied with NEPA.

Who is CEQ and why does CEQ matter?

The Council on Environmental Quality (CEQ) is the federal agency with responsibility for overseeing all NEPA assessments and regulations.²⁰¹ LNG applicants do not need a permit from CEQ—but permitting agencies that implement NEPA have historically been required to follow CEQ’s regulations, as well as their own NEPA regulations.

Unfortunately, as of January 2022, CEQ’s regulations are in flux. CEQ first issued NEPA regulations in 1978 (the “1978 regulations”). These 1978 regulations were heavily revised in 2020 and weakened NEPA implementation and the scrutiny placed on projects.²⁰² For example, the 2020 regulations prohibit agencies from scrutinizing potential impacts of a proposed project beyond what CEQ’s rules require.

¹⁹⁷ A legal term that would include issuing federal permits to build LNG pipelines and terminals.

¹⁹⁸ 42 U.S.C. § 4332(2)(C).

¹⁹⁹ This latter category is known as Critical Energy Infrastructure Information (“CEII”) and discussed further in Section 4.D.3. Federal agencies sometimes withhold too much information; sometimes an advocate must challenge the withholding either through the agency’s appeals process or by filing a Freedom of Information Act (“FOIA”) request—a tool discussed in Section 6.C.12, using the Corps as an example agency. An experienced attorney can help decide if, how, and when to request information that appears to be missing.

²⁰⁰ The Administrative Procedures Act standard is codified here: 5 U.S.C. § 706(2).

²⁰¹ 42 U.S.C. § 4344(3).

²⁰² *Brookings* describes the rule changes as follows: The 2020 rule established a new, presumptive two-year deadline for agencies to prepare EIS documents. It also limited the role of climate change in environmental assessment, by eliminating the requirement for agencies to consider the “cumulative effects” of their actions and restricting the analysis to effects with a “reasonably close causal relationship” in NEPA assessments, which limits greenhouse gas emission considerations. The rule also allowed agencies to exclude projects using “minimal federal funding” from the NEPA review process. Brookings, “Tracking regulatory changes in the Biden era,” Last updated Jan. 18, 2022, <https://www.brookings.edu/interactives/tracking-regulatory-changes-in-the-biden-era/>.

A redline of the rules showing the changes from 1978 to 2020 can be found here: <https://ceq.doe.gov/docs/laws-regulations/ceq-final-rule-redline-changes-2020-07-16.pdf>. The Biden Administration has since announced that it will revise the regulations in two phases to restore three key regulatory provisions that were gutted by the 2020 rules. The first phase of revisions has been proposed but as of January 2022 is not yet in effect.²⁰³

As of January 2022, the 2020 rules are in effect and will remain so until a court vacates them or CEQ finalizes its new rules. The 2020 rules state that they apply to any new NEPA review begun after September 14, 2020, **but for NEPA projects that were on-going on that date**, agencies may choose whether use the 1978 rules or 2020 rules.²⁰⁴ Therefore it can be tricky to determine which rules—the 1978 or 2020 version—govern older projects. At least one court has cast doubt on whether the 2020 rules would change any agencies’ NEPA analysis;²⁰⁵ but other courts have reviewed pre-2020 NEPA analyses under the 2020 regulations.²⁰⁶ It’s therefore possible that even if an agency conducts its NEPA analysis under the 2020 rules now, by the time the agency’s decision is appealed to federal court, the Biden Administration’s new rules will be the measuring stick by which the NEPA analysis is judged! Because of this uncertainty it is best to consult with an attorney or agency staff to determine which rules apply.²⁰⁷

As another part of CEQ’s 2020 rewrite, CEQ directed all implementing agencies (like FERC) to rewrite their own NEPA regulations. Few if any agencies complied with CEQ’s direction before the Biden Administration’s CEQ announced it would be scrapping the 2020 rules and postponed

A NOTE ABOUT CITATIONS

When possible, this guide cites to both versions of CEQ’s rules, with the year the rules were promulgated in parentheses after the citation (e.g., 40 C.F.R. § 1502.14(c) (2020) and 40 C.F.R. § 1502.14(d) (1978) both describe the requirement to consider a no-action alternative). Once the rules are revised again, it is almost certain that the citations will change again so do not simply copy-paste comments and citations from prior challenges—make sure to use the current rules!

²⁰³ CEQ Proposed Rule: National Environmental Policy Act Implementing Regulations Revisions. 86 Fed. Reg. 55,757 (Oct. 7, 2021), <https://www.federalregister.gov/documents/2021/10/07/2021-21867/national-environmental-policy-act-implementing-regulations-revisions> (proposing that the definition of “impacts” be restored to include direct, indirect **and** cumulative effects; restoring the definition of “reasonable alternatives” and broadening agencies’ authorities to define a project’s purpose and need).

²⁰⁴ Council on Environmental Quality, “Memorandum for Heads of Federal Departments and Agencies: Implementation of Updated National Environmental Policy Act Regulations,” July 16, 2020, 2, <https://ceq.doe.gov/docs/laws-regulations/memo-implementation-updated-regs-2020-07-16-withdrawn.pdf> (citing 40 C.F.R. § 1506.13).

²⁰⁵ Emily Orlor, et al., “Federal Court Dismisses Challenge to Trump’s NEPA Regulations,” Arnold & Porter, June 23, 2021, <https://www.arnoldporter.com/en/perspectives/blogs/environmental-edge/2021/06/court-dismisses-challenge-to-trump-nepa-regs> (describing a decision by a Virginia district court to not vacate the 2020 regulations).

²⁰⁶ *E.g., Ctr. for Biological Diversity v. Walsh*, No. 18-CV-00558-MSK, 2021 WL 1193190, at *5 (D. Colo. Mar. 30, 2021), appeal dismissed, No. 21-1200, 2021 WL 5917523 (10th Cir. July 28, 2021) (opining in a U.S. Fish & Wildlife Service case that: “Although APA cases focus on the decision-making process at a fixed point in the past, courts have recognized that they “[are] not limited to determining whether an agency’s action was ‘reasonable’ in light of the law as it existed at the time of its decision; instead, **the APA requires a court to determine whether a decision is ‘in accordance with law’ as it exists at the time of review.**”) (citing *New York v. U.S. Dept. of Health and Human Servs.*, 414 F.Supp.3d 475, 535 (S.D.N.Y. 2019), quoting *Georgetown Univ. Hosp. v. Bowen*, 698 F.Supp. 290, 297 (D.D.C. 1987).) (emphasis added). See also *Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1328 (D.C. Cir. 2021) (finding that FERC failed to comply with the 2020 regulation (which was unchanged from the 1978 version that FERC used when certifying the Rio Grande LNG project at issue) without explicitly finding that the court was required analyze the case under the 2020 regulations).

²⁰⁷ And even if it is the 2020 regulations, there may be room to argue that the 1978 regulations—or the revised regulations—should apply. That legal argument is beyond the scope of this guide, but might be relevant.

agencies' obligations to rewrite their own regulations. As of January 2022, FERC has not updated its rules.

This regulatory uncertainty has three practical implications for advocates: (1) FERC's NEPA regulations are the best place to start for understanding whether FERC complied with its NEPA duties for any given LNG project; (2) arguments about and the citations to CEQ's NEPA regulations may be different from those used in briefing filed before September 2020; and (3) if possible, consult with an experienced NEPA attorney (or the agency itself) to know what regulations to cite for a particular project. In general, and until new regulations replace the 2020 version, advocates writing comments are advised to treat the 1978 CEQ regulations as a binding floor for FERC's NEPA analysis unless and until an experienced attorney informs them otherwise.²⁰⁸ (As always, seek the advice of an attorney if you are in litigation!)

A different rule-of-thumb applies for CEQ's guidance documents (i.e., CEQ documents that are not subject to the rulemaking public notice-and-comment period). Unless FERC has specifically incorporated CEQ's guidance in its own guidance or regulations (which it has done)—or if it has adopted CEQ's guidance in a specific project (for example, if FERC states in EIS documents or in the certificate order that it is following CEQ's guidance)—FERC probably will not agree that its NEPA analysis must conform to CEQ's guidance. So the strongest argument that FERC has failed in its NEPA obligations will rely on more than just a CEQ guidance document. An experienced NEPA attorney is an essential advocate during litigation to help navigate these issues.

What human and natural resources are reviewed for impacts under NEPA?

For LNG facilities, FERC reviews the following resources for impacts; each resource usually will have its own subsection in the EA/EIS documents:

- geological resources;
- soils and sediments;
- water resources and wetlands,
- vegetation;
- wildlife and aquatic resources;
- threatened, endangered and other special status species;
- land use;
- recreation and visual resources;
- socioeconomics;
- transportation;
- cultural resources;
- air quality and noise; and
- reliability and safety.

Flaws or gaps in FERC's analysis of impacts to any of these resources are important to raise in comments. But it is not an exhaustive list of what an advocate may raise in the NEPA review process—advocates can and should raise **any** impacts the terminal may have and are encouraged to examine and comment on whether FERC has considered all necessary data or if it has drawn correct

²⁰⁸ It has historically been understood that CEQ's NEPA *regulations* (which were subjected to notice-and-comment) apply to independent regulatory agencies like FERC. See 40 C.F.R. § 1507.3 (1978); see also CEQ's 40 Questions Memorandum to Agencies, 46 Fed. Reg. 18,026 (as amended 1986) at p. 24 (Question 31a) <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>. Note, however, that one judge on the influential D.C. Circuit in 2021 questioned whether CEQ had authority to issue those regulations in the first place. *Food & Water Watch v. U.S. Dep't of Agric.*, 1 F.4th 1112, 1118-19 (D.C. Cir. 2021) (Randolph, J., concurring) (explaining how that question creates doubts whether "CEQ's regulations bind executive and independent agencies alike"); see also Jackson, C. Thomas and Jeffrey H. Wood, "Advisor or Authority? Role of Council on Environmental Quality in NEPA Regulations," National Hydropower Association, July 12, 2021, <https://www.hydro.org/powerhouse/article/advisor-or-authority-role-of-council-on-environmental-quality-in-nepa-regulations/> (highlighting this issue).

conclusions from the data. No other LNG permit or approval requires that such a breadth of issues be considered before the project moves forward—another reason why a FERC challenge is strategically important.

What types of impacts to human and natural resources must be considered under NEPA?

NEPA requires that the agency consider the impacts of the proposed project and its alternatives. These impacts are often characterized in the NEPA documents as direct, indirect, and/or cumulative.²⁰⁹ The terms “primary” and “secondary” impacts are sometimes also used, to describe direct and indirect impacts, respectively. In addition, knowing the difference between upstream and downstream impacts is important in understanding what is and isn’t considered in a NEPA analysis of LNG terminals.

Note that the regulatory uncertainty at CEQ makes this section in particular potentially difficult to navigate, because some of these impacts and factors were changed or eliminated by the 2020 regulations—and some of those changes are in the process of being reversed! Pay attention to which set of regulations governs the project you are challenging and which version is described below.

- **Direct impacts.** Direct impacts (*i.e.*, effects) are impacts directly caused by the action and occur simultaneously and at the same place as the action.²¹⁰ For example, a direct effect of construction may be the felling of trees and leveling of the land where the terminal is to be built, destroying habitat or cultural resources. Direct impacts would be included under both the 1978 and 2020 CEQ regulations.
- **Indirect impacts.** Under the 1978 CEQ regulations, indirect effects are caused by the action and are reasonably foreseeable²¹¹ at the time of the action but may occur later or at a distance. For example, indirect effects of the LNG project may be: a change in land use nearby (*e.g.*, that undeveloped or wild lands near the facility become commercial or residential to support the new workers drawn by the project) or the economic hardship that befalls commercial and recreational fishing industries if runoff and dredging during the project’s construction destroys fish hatcheries.

²⁰⁹ One excellent summary of this information is found here: Gillian Giannetti, *FERC Takes a Step Backward on Environmental Impacts*, NRDC, <https://www.nrdc.org/experts/gillian-giannetti/ferc-takes-step-backward-environmental-impacts>.

²¹⁰ 40 C.F.R. § 1508.8 (1978). The 2020 definition of effects or impacts does not divide effects into direct or indirect and is found in § 1508.1(g) (2020): “Effects or impacts means changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives.” The 2020 regulations also explained that: “A “but for” causal relationship is insufficient to make an agency responsible for a particular effect under NEPA. Effects should generally not be considered if they are remote in time, geographically remote, or the product of a lengthy causal chain. Effects do not include those effects that the agency has no ability to prevent due to its limited statutory authority or would occur regardless of the proposed action.” CEQ’s phase I proposal restores the 1978 definitions, but as of January 2022, is not yet final. CEQ, *Proposed Rule: National Environmental Policy Act Implementing Regulations Revisions*, 86 Fed. Reg. 55,757 (Oct. 7, 2021), <https://www.federalregister.gov/documents/2021/10/07/2021-21867/national-environmental-policy-act-implementing-regulations-revisions>.

²¹¹ In 2020, CEQ defined effects and impacts without specifically referring to them as indirect or direct. It defined “reasonably foreseeable” to mean “sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision.” 40 C.F.R. § 1508.1(aa) (2020). In the 1978 regulations, the term was only defined in the context of § 1502.22 to include (but not be limited to) “impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.” When commenting, it is sufficient to use a common-sense definition of this term; an experienced attorney can help during litigation to make sure arguments conform to what the current version of the regulations require.

As of January 2022, FERC does not treat the impacts of upstream gas production or downstream gas use as indirect effects for LNG terminals²¹²—examining these impacts is understood to be DOE’s responsibility in the NEPA process.²¹³ (Yet leaving these emissions to DOE’s consideration is a method to avoid NEPA analysis altogether because, as of January 2022, DOE excludes LNG export projects from NEPA altogether: For more about the DOE-FERC division of labor, see Chapter 5 Section D.2.) The 2020 regulations define effects more narrowly and do not explicitly distinguish between indirect and direct effects; however, because the revised rules are expected to revert to the 1978 definitions, advocates may be on solid legal ground referencing the 1978’s more expansive definition in comments—unless and until an attorney informs them otherwise.

- **Duration of impacts (i.e., “temporal scope”).** Under the 1978 CEQ regulations, FERC typically looks at impacts across four time periods: temporary, short-term, long-term, and permanent. According to NEPA documents from one LNG project: “A **temporary** impact generally occurs during construction with the resource returning to preconstruction condition almost immediately afterward. A **short-term** impact could continue for up to three years following construction. An impact is considered **long-term** if the resource would require more than three years to recover. A **permanent** impact would occur if an activity modifies a resource to the extent that it would not return to preconstruction conditions during the life of the Project. Permanent impacts may also extend beyond the life of the Project.”²¹⁴ This “temporal scope” of impacts is also relevant when considering cumulative impacts.

The 2020 regulations narrowed the temporal scope of impacts to be considered to exclude effects that are “remote in time, geographically remote, or the product of a lengthy causal chain.”²¹⁵ Revised regulations may hew closer to the 1978 regulations—just be aware that if you decide to use the 1978 regulations to guide your comments during this interim period before the new regulations are final, FERC or a reviewing court may ultimately decide some comments aren’t legally relevant once the new regulations are released.²¹⁶

²¹² For example, the air pollution created during gas extraction are upstream effects because they happen before the gas is transported to the LNG terminal. The emissions created through burning gas at power plants are downstream effects because they happen after the gas is transported from the LNG terminal.

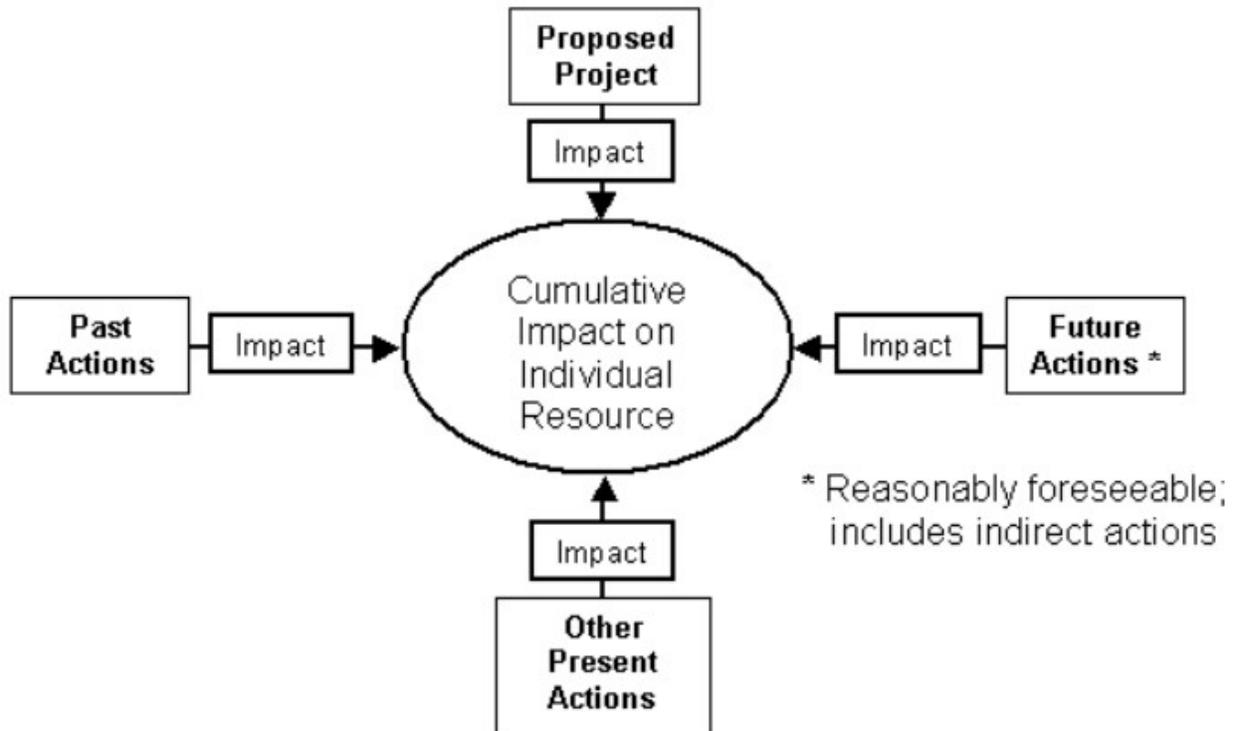
²¹³ Giannetti, *Hot Potato*, *supra* note 143.

²¹⁴ FEIS for the Jordan Cove Energy Project, Part I (Nor. 2019) t 4-1 (pdf p. 207) https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf (emphasis added).

²¹⁵ 40 C.F.R. § 1508.1(g)(2) (2020).

²¹⁶ An outcome that is unfortunate, but not a reason to self-censor and not raise issues of legitimate concern.

- Cumulative impacts.** Under the 1978 regulations and current²¹⁷ proposed revision, cumulative impacts are the impacts that result to the same resources from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions, be they federal, state, or private, in the same geographic area or time period.²¹⁸ The 2020 regulations directed agencies to ignore cumulative impacts completely; the replacement regulations may require agencies to consider cumulative impacts and so advocates should include such impacts in comments. The Federal Highway Administration, another agency that applies NEPA, depicts the definition of cumulative impacts helpfully as follows:²¹⁹



Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.²²⁰ FERC provides guidance²²¹ to applicants on how to address cumulative impacts; this guidance is equally helpful for advocates seeking to understand these impacts better and make sure no cumulative impacts have been overlooked during the NEPA process.²²²

²¹⁷ As of January 2022.

²¹⁸ 40 C.F.R. § 1508.7 (1978).

²¹⁹ Federal Highway Administration, U.S. Department of Transportation, “NEPA and Transportation Decisionmaking: Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process.” Figure 1. Cumulative Impact Diagram, <https://www.environment.fhwa.dot.gov/nepa/QAimpact.aspx>.

²²⁰ 40 C.F.R. § 1508.7 (1978).

²²¹ FERC, “Guidance Manual For Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. I, Feb. 2017, 37-42, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

²²² FERC’s guidance documents are referenced and described here as useful resources for advocates because its guidance documents contain more plain-English explanations of its and CEQ’s regulations implementing the NEPA statute. However, if

As of January 2022 and based on CEQ's 1978 regulations, FERC recommends that applicants approach the cumulative impacts analysis by: first, **determining the resources** that are indirectly and directly impacted;²²³ second, **determining the geographic scope** of impacts; and third, **identifying the temporal scope** of the impact. (This same method should be used by advocates when making cumulative effects arguments.) The geographic and temporal scope for each resource potentially affected should be examined individually and will likely be different from resource to resource.

Geographic scope is related to the magnitude of the impact (e.g., how far does pollution travel from the site). It may follow natural boundaries (like watersheds) or be influenced by natural factors (like wind direction). For example, the geographic scope for looking at cumulative impacts to fishery resources might be a stream, river basin, estuary, or parts thereof; or spawning area and migration route.²²⁴ Meanwhile, the geographic scope for cumulative impacts to air resources might be a metropolitan area, airshed, or global atmosphere.²²⁵ For impacts to socioeconomic / human resources, an administrative boundary (like county) might be more appropriate.

Once the geographic and temporal scopes for each resource potentially affected by the project is determined, the applicant should identify other past, present, and reasonably foreseeable actions (federal, non-federal, and private) that could contribute to cumulative impacts on each resource. Actions that could contribute cumulatively are those that have direct or indirect impacts that need to be considered in conjunction with the direct and indirect impacts of the current project to adequately disclose the additive impact to a resource within the geographic scope considered. Note that past, present and reasonably foreseeable actions could be located outside of the geographic scope of the current project's direct and indirect impacts on a resource but still might result in a cumulative impact. For example, climate change—which occurs on a global scale—could exacerbate the risks the project already poses to the local ecosystem and migratory species.

In the past LNG applicants have avoided considering actions that occur outside the geographic scope of impacted resources, writing off their potential to contribute with little or no analysis. What should be considered in cumulative impacts is heavily disputed and often the subject of litigation, so advocates working on specific projects should heavily scrutinize the project and its NEPA documents for missing or faulty cumulative impacts analyses.

there is a conflict between these sources of information, a reviewing court will look first to the NEPA statute, then to CEQ regulations, then to FERC's regulations to determine whether FERC erred in conducting its NEPA analysis. The guidance documents themselves do not place legal responsibilities on FERC, although failure to follow guidance documents could be evidence that FERC was "arbitrary and capricious" in issuing the certification—a finding that could require the agency to void its certification and redo portions of the NEPA analysis.

²²³ Under CEQ's 1978 regulations, NEPA does not require cumulative impacts on a resource to be considered if the project does not have a direct or indirect impacts on a resource.

²²⁴ FERC, "Guidance Manual For Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. I." Feb. 2017, Attachment 2, Table 2, 246, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf> (reproducing CEQ's table from the January 1997 document "Considering Cumulative Effects Under the National Environmental Policy Act").

²²⁵ *Id.*

How does FERC decide if it will issue an EA first or go straight to an EIS?

To comply with NEPA when reviewing a proposal to construct an LNG terminal, FERC must conduct and publish a written environmental review, either in the form of an Environmental Assessment (EA) first or by going straight to an Environmental Impact Statement (EIS).²²⁶

FERC's regulations state that it will "normally" prepare an EIS for an LNG terminal, but it has the option not to do so if the project "may not be a major federal action significantly affecting the quality of the human environment."²²⁷ If the application is for a new project, FERC will almost certainly skip the EA process and go straight to the preparation of an EIS. It becomes more difficult to predict what FERC will do when the application is for a modification or expansion of a terminal, and FERC's choice affects when and what information becomes publicly available, the proper window to intervene, and the number of opportunities to comment. Thus, it is important for advocates to have a basic understanding of the EA and the EIS processes, even though most often large projects that are being challenged will only involve EIS documents.

An **EIS** is the most comprehensive review required under NEPA; together, the documents created to satisfy NEPA (the draft and final EIS documents and appendices) can run thousands of pages.²²⁸ An EIS is prepared when significant environmental impacts are expected based on the size and type of project or FERC's prior experience. FERC routinely prepares EIS documents for new LNG terminals without conducting an EA first,²²⁹ so a project involving the construction of a new terminal should always trigger an EIS without the need for an EA first. For the public participation process in an EIS, see Section 4.C.

However, as noted, NEPA reviews of terminal expansions may start with an EA first. An **EA** is a less stringent document that FERC as lead agency prepares to determine **if** the project will likely have significant environmental effects. If after going through the EA process FERC realizes that the project will likely have significant impacts, it must go back and complete a full EIS. If FERC determines that an EIS is not needed—a highly unlikely conclusion for LNG terminals—it will issue a single EA and a Finding of No Significant Impact ("FONSI").²³⁰

Unlike an EIS, in which a draft is published and open to public comment before a final EIS is issued, there is no draft EA. Under the 1978 regulations, FERC must provide public notice of the final EA.²³¹ A comment period of 30 days has been typical after a final EA issues. FERC typically addresses the

²²⁶ Some activities are "categorically excluded" by law from needing an EA or EIS (see 18 C.F.R. § 380.4 for FERC's list; CEQ's regulations can be found at: 40 C.F.R. § 1501.4 (2020) and 40 C.F.R. § 1508.4 (1978)); the construction of an LNG terminal should not fall into one of these categories. See 18 C.F.R. § 380.5. If it appears a project is being treated as within a categorical exclusion—i.e., no EA or EIS is being issued, consult a lawyer with FERC and NEPA experience. Each agency can create its own categorical exclusions, however; and DOE has recently added some LNG projects to that list, excluding them from NEPA review. For more information on DOE's categorical exclusions, see Section 5.B.3 and 5.D.3.

²²⁷ 18 C.F.R. § 380.6(a) and (b).

²²⁸ Even excluding appendices, the Final EIS documents in the Jordan Cove project are so large they are split into three parts: https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf; (364 pages); https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_2.pdf; (364 pages); https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf (364 pages).

²²⁹ 18 C.F.R. § 380.6(a)(1) (listing LNG projects as those for which an EIS will "normally be prepared first").

²³⁰ Agencies must make FONSI's available to the public under the 1978 and 2020 regulations; the regulations for FONSI's are found here: 40 C.F.R. § 1501.6 (2020) and 40 C.F.R. § 1501.4 (1978). If a FONSI is issued for a LNG project, consult with an experienced NEPA attorney to determine next steps.

²³¹ 40 C.F.R. § 1501.4(e)(1) (1978). The 2020 regulations direct agencies to involve the public in the EA process, 40 C.F.R. § 1501.5(e) (2020); and provide notice of the availability of environmental documents like EAs. *Id.* § 1506.6(b) (2020).

substantive comments received in its approval order but does not modify the EA based on the submitted comments.

FERC may attempt to first conduct an EA when permitting the expansion of a terminal; if so, advocates should take advantage of the EA comment period to hammer home that the impacts of the project are significant and require an EIS. The same types of comments that you might raise in the EIS comment period should be raised during the EA period. For examples, see Section 4.E. In addition, if an advocate suspects that only an EA will issue for a project, the advocate should intervene as soon as the project application is filed because no draft EIS will issue that might prolong the intervention window.

Both EA and EIS documents may contain FERC's staff's recommendation to the Commission as to mandatory conditions that should be included in the approval order. For an example of conditions attached to a project, see the Rio Grande LNG Certificate order, pages 64-91 <https://cms.ferc.gov/sites/default/files/whats-new/comm-meet/2019/112119/C-2.pdf>.

Who drafts the environmental documents?

For new LNG terminals, the applicant must propose at least three potential third-party contractors to help prepare the EIS documents, and FERC staff chooses one to perform the work.²³² (An Environmental Assessment document may be drafted by FERC staff, by a third-party contractor, or by the applicant.)²³³ In all cases, FERC staff review and approve the document before it is finalized. If a third party drafts the EA or EIS, there should be a publicly available MOU between FERC, the applicant, and the contractor.²³⁴ At a minimum for LNG terminal projects, FERC's regulations require that any third-party contractor used be identified in FERC's public notice of approval of the applicant's pre-filing request (typically the second or third document filed in the pre-file docket).²³⁵ Third-party contractors are often consultants from large engineering firms that regularly conduct environmental compliance projects for industry clients.

Which federal agencies consult with FERC during the environmental review process?

Other federal agencies are involved in FERC's review for two main reasons. First, other federal agencies have their own permitting process that must be considered as part of FERC's EIS and thus these agencies work closely with FERC on the EIS (e.g., the Corps issues permits and often relies on FERC's EIS to satisfy its own NEPA requirements). Second, other agencies may advise FERC on the environmental impacts to natural and human resources within their realm of expertise (e.g., the Coast Guard does not issue a permit to LNG facilities, but FERC consults with it on the impacts of a proposed LNG facility on port safety and security). All cooperating agencies and agencies that are authorized to develop and enforce environmental standards must comment on EIS documents during the comment period, even if it is simply to reply that it has no comment.²³⁶

²³² 18 C.F.R. § 157.21(d)(8).

²³³ FERC, "Guidance for Applicant-Prepared Draft Environmental Assessments For Certain Proposed Natural Gas Projects," Apr. 28, 2011, <https://www.ferc.gov/sites/default/files/2020-04/draft-ea-guidance.pdf>.

²³⁴ An example of such a memorandum can be found here: "Memorandum of Understanding Between The Federal Energy Regulatory Commission; Mountain Valley Pipeline, LLC; And Cardno, Inc," Jan. 12, 2018, http://www.mountainvalleypipeline.info/wp-content/uploads/2019/03/Public_Attachment-N-4.pdf.

²³⁵ See 18 C.F.R. § 157.21(e). For an example of this notice, see the Rio Grande LNG project, Docket No. PF15-200, Accession Number 20150413-3036 ("Letter acknowledging Norton Rose Fulbright US LLP's 3/20/15 request for approval of pre-filing request for the Rio Grande LNG, LLC's planned Rio Grande LNG Export Project et al under PF15-20.") (Identifying Edge Engineering and Science, LLC).

²³⁶ 40 C.F.R. § 1503.2 ("Duty to comment") (substantively the same for both 2020 and 1978 versions).

Advocates are encouraged to scrutinize the comments and analysis conducted by consulting agencies because it may reveal ways that the permit or permitting process violates laws beyond just NEPA or NGA. If such flaws are identified, they should be raised in comments on the EIS at a minimum.

Table 4.1: Federal Agencies that Advise or Coordinate with FERC on LNG Applications

FEDERAL AGENCY	ROLE IN FERC REVIEW OF LNG TERMINAL APPLICATIONS
<p>Environmental Protection Agency and Army Corps of Engineers</p>	<p>EPA and the Corps comment on the NEPA documents. If the Corps is to rely on FERC’s NEPA analysis to support its own permits, it must review the NEPA documents closely to make sure they are sufficient to satisfy the Corps’ own obligations. EPA consults on matters of its experience (air, water, hazardous substances, noise etc.) and given its responsibility to also ensure that the Corps 404(b) permit has been properly issued, may offer its own comments to the Corps or FERC on the sufficiency of FERC’s NEPA analysis.</p>
<p>National Marine Fisheries Service (in U.S. Dept. of Commerce) and U.S. Fish & Wildlife Service (in U.S. Dept. of the Interior)</p>	<p>FERC must comply with the Endangered Species Act,²³⁷ Magnuson Stevens Fishery Conservation and Management Act,²³⁸ and Marine Mammal Protection Act.²³⁹ The National Marine Fisheries Service and U.S. Fish and Wildlife Service advise FERC on a project’s potential impact on terrestrial and aquatic wildlife and habitat, including endangered species.²⁴⁰</p>
<p>Pipeline and Hazardous Materials Safety Administration (PHMSA) (in the U.S. Department of Transportation (DOT))</p>	<p>PHMSA issues a letter of determination on whether an LNG facility would be able to comply with USDOT safety standards.²⁴¹ It sets minimum standards for location, design, construction, operation, and maintenance of large LNG facilities outside navigable waters.²⁴² FERC may issue stricter requirements.²⁴³</p>

²³⁷ The Endangered Species Act, § 7, requires federal agencies to ensure that the project does not jeopardize the existence of any endangered or threatened species, or destroy or adversely modify their critical habitat. 16 U.S.C. § 1536(a)(2).

²³⁸ 50 U.S.C. § 191.

²³⁹ 16 U.S.C. § 1362 – 1407.

²⁴⁰ A Marine Mammal Protection Act Level B harassment authorization may be required for underwater noise associated with pile driving during construction.

²⁴¹ FERC, “Memorandum of Understanding Between the Department of Transportation and the Federal Energy Regulatory Commission Regarding Liquefied Natural Gas Transportation Facilities” [pursuant to Executive Order 13807], 2018, https://www.ferc.gov/sites/default/files/2020-05/FERC-PHMSA-MOU_0.pdf.

²⁴² Pipeline Safety Act, 49 U.S.C. § 60101, *et seq.* Also see: 49 C.F.R. §§ 192 and 193. Compliance is overseen by the PHMSA, typically in collaboration with the state’s department of transportation.

²⁴³ FERC and USDOT, Notice of Agreement Regarding Liquefied Natural Gas, 31 FERC ¶ 61,232 (1985).

FEDERAL AGENCY	ROLE IN FERC REVIEW OF LNG TERMINAL APPLICATIONS
U.S. Coast Guard	The Coast Guard advises on the impact of the LNG project on safety and security of U.S. ports, waterways, and coasts. The captain of the port issues a Letter of Recommendation, with a “Water Suitability Assessment.” ²⁴⁴ The letter is not binding and thus cannot be appealed. ²⁴⁵ One of the pre-filing requirements is that the applicant has been in communication with the Coast Guard and that the Coast Guard has issued a Preliminary Water Suitability Assessment.
Department of Energy	Authorizes the export of gas and consults on the terminal’s potential effect on military operations (if applicable).
The Federal Highway Administration (FHWA) and the Federal Aviation Administration (FAA) (in DOT)	If the LNG project requires changes to the highway system, DOT’s Federal Highway Administration may consult. Likewise, DOT’s Federal Aviation Administration may also be a consulting agency, for example, when the terminal is proposed to be sited near an airport.
U.S. Department of the Interior Bureau of Land Management (BLM)	The BLM is typically involved only when a project proposes to use land that is under the BLM’s management. BLM must make sure that projects on its lands are consistent with the lands’ resource management plan (“RMP”); if not, the RMP(s) must be amended. BLM lands are more likely to be impacted by the pipeline portion of a project as opposed to the terminal (as was the case in Jordan Cove). For more see 43 U.S.C. §§ 1711-1712 and the regulations in 43 C.F.R. § 1600.
U.S. Department of Agriculture Forest Service (Forest Service)	As with BLM, the Forest Service is typically involved only when the project proposes to use lands under the Forest Service’s management. Activities on land managed by the Forest Service must be consistent with the land management plans for each unit (LRMP) or the plan must be amended. Forest Service lands are more likely to be impacted by the pipeline portion of a project, as it was in Jordan Cove. For more see 16 U.S.C. § 1600 et seq. and the regulations in 36 C.F.R. § 219.
U.S. Department of the Interior Bureau of Reclamation (Reclamation)	Reclamation has jurisdiction only in the 17 western states (including Texas but not Louisiana) and oversees water resource management in that area. If the proposed project may impact Reclamation’s projects, it too may be a consulting agency and it might rely on FERC’s EIS to fulfill its own NEPA duties. Reclamation was consulted on the pipeline portion of the Jordan Cove proposal.

²⁴⁴ 33 C.F.R. § 127.009. Also see: Maritime Transportation Security Act of 2002, 46 U.S.C. § 701; Ports and Waterways Safety Act, 33 U.S.C. §§ 1221-1236; Executive Order 10173, 15 Fed. Reg. 7005 (Oct. 18, 1950), and Coast Guard Authorization Act of 2010, P.L. 111-281, § 813, 124 Stat. 2905, 2999. Also see U.S. Coast Guard, “Guidance Related to Waterfront Liquefied Natural Gas (LNG) Facilities,” NVIC 01-11, Jan. 24, 2011, <https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/5ps/NVIC/2011/NVIC%2001-2011%20Final.pdf>.

²⁴⁵ *Columbia Riverkeeper v. United States Coast Guard*, 761 F.3d 1084 (9th Cir. 2014).

FEDERAL AGENCY	ROLE IN FERC REVIEW OF LNG TERMINAL APPLICATIONS
U.S. Department of the Interior National Park Service (NPS)	The NPS may be a cooperating agency for a proposed LNG project if lands under its management may be impacted. For example, NPS was consulted on the Rio Grande LNG proposal because several cultural heritage sites were in the vicinity of the project’s proposed pipeline and terminal.

A full list of federal consulting agencies (and information about the state agencies and tribal governments involved) is typically included in the notices FERC publishes about the project to the Federal Register and the project’s docket. This information is usually summarized early in the draft and final EIS documents.

Are there reforms at FERC on the horizon relevant to LNG terminals?

Several reforms at FERC may make challenging LNG terminals easier, at least procedurally.

First, in 2021—for the first time ever—FERC formed an Office of Public Participation,²⁴⁶ as part of its statutory requirement to do so.²⁴⁷ Although the exact scope of its assistance is still being determined, the Office is required by law to assist the public and intervenors in participating in proceedings.²⁴⁸ The law also contemplates that the Office may be responsible for providing financial assistance to certain intervenors—again, the scope of this assistance is still being determined.²⁴⁹ The Office of Public Participation’s website is the official source for updates and changes as the office formalizes its mission and functions: <https://www.ferc.gov/OPP>. Elin Katz officially assumed the role of OPP Director in late 2021.²⁵⁰

Second, FERC is in the process of reviewing and updating its 1999 Policy Statement on the Certification of New Interstate Natural Gas Facilities. Although this review focuses on certifying pipelines, not terminals, it may change how advocates approach challenges to LNG infrastructure in general. FERC began this review in 2018, soliciting comments on four main topics: “(1) the reliance on precedent agreements to demonstrate need for a proposed project; (2) the potential exercise of eminent domain and landowner interests; (3) the Commission’s evaluation of alternatives and environmental effects under NEPA and the Natural Gas Act (NGA); and (4) the efficiency and effectiveness of the Commission’s certificate processes.”²⁵¹ After a pause, FERC reopened comments and added environmental justice communities as a topic for comment, namely “how it identifies and addresses potential health or environmental effects of its pipeline certification programs, policies and activities on environmental justice communities.”²⁵² Updates to FERC’s policies on these topics—even if made in the context of pipelines—could directly influence FERC’s

²⁴⁶ “FERC Establishes Office of Public Participation.” <https://www.ferc.gov/news-events/news/ferc-establishes-office-public-participation>.

²⁴⁷ See 16 U.S.C. § 825q-1 (mandating that the OPP be established).

²⁴⁸ 16 U.S.C. § 825q-1(b)(1).

²⁴⁹ 16 U.S.C. § 825q-1(b)(2).

²⁵⁰ See “Glick Announces Appointment of Elin Katz as Director Of FERC’s New Office of Public Participation.” FERC. <https://www.ferc.gov/Elin-Katz-Director-Of-OPP>.

²⁵¹ Notice of Inquiry, Certification of New Interstate Natural Gas Facilities, (Docket No. PL18-1-000) (Issued Feb. 28, 2021) 74 FERC ¶ 61,125, at PP 1-2 <https://www.ferc.gov/media/c-1-pl18-1-000>.

²⁵² FERC Revisits Review of Policy Statement on Interstate Natural Gas Pipeline Proposals (Feb. 18, 2021) <https://www.ferc.gov/news-events/news/ferc-revisits-review-policy-statement-interstate-natural-gas-pipeline-proposals>.

review of all aspects of an LNG project, including the terminal. For more information on potential changes to the Gas Policy and advocate comments that were filed, see <https://www.nrdc.org/experts/gillian-giannetti/nrdc-50-orgs-send-clear-message-its-time-ferc-reform-0>.²⁵³

Third, the previously open fifth commissioner's seat was filled in late 2021 by Willie Phillips, a Democrat, bringing the Commission to a full roster with three Democrats and two Republicans.²⁵⁴ It is hoped that this new Commission, which is chaired by Democrat Richard Glick, will be more mindful of impacts to environmental justice communities and the impacts LNG projects have on climate change.

Step-by-step, how does FERC satisfy its NGA and NEPA requirements and review LNG terminal applications?

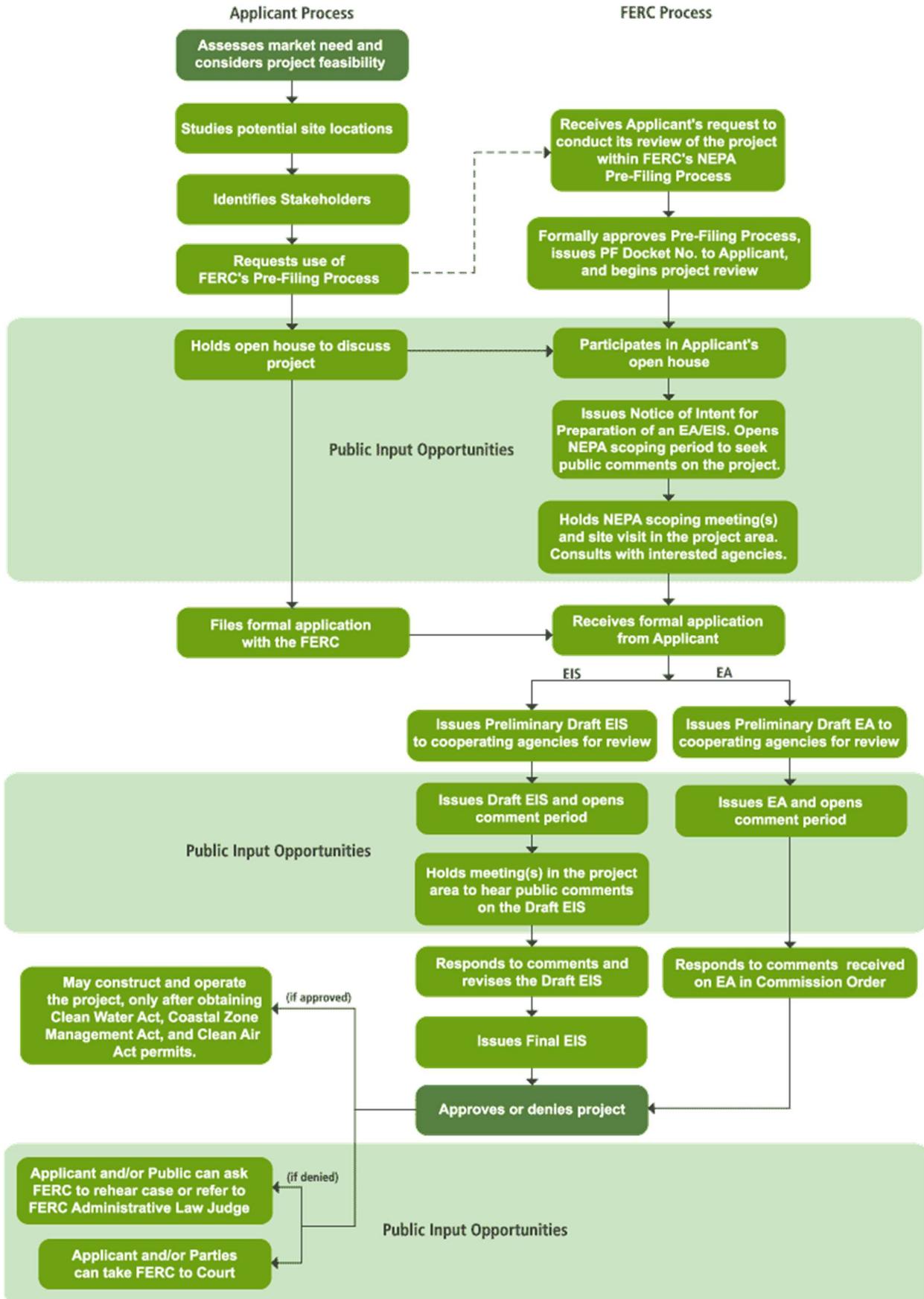
Does FERC publish a flowchart of steps relevant to its certification process?

Yes. The following is a flowchart of the pre-filing and application processes for an LNG terminal:

<https://www.ferc.gov/media/pre-filing-environmental-review-process>:

²⁵³ A link to the comments filed are here: <https://sustainableferc.org/wp-content/uploads/2021/05/PL18-1-NOI-PIO-Comments-FINAL.pdf>.

²⁵⁴ FERC, "Willie L. Phillips Sworn in as FERC Commissioner," Dec. 3, 2021, <https://cms.ferc.gov/news-events/news/willie-l-phillips-sworn-ferc-commissioner>. See also "President Biden Intends to Nominate Willie L. Phillips, Jr. as a Commissioner of the Federal Energy Regulatory Commission (FERC)," White House Briefing Room Statement and Releases, Sept. 9, 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/09/president-biden-intends-to-nominate-willie-l-phillips-jr-as-a-commissioner-of-federal-energy-regulatory-commission-ferc/>.



Several of the steps in this process are described in depth in the sections below.

1. Applicant's idea for a project (see Section 4.C.2)
2. Applicant requests use of FERC's pre-filing process (see Section 4.C.3)
3. Applicant submits information to satisfy pre-filing requirements (see Section 4.C.4)
4. Applicant meets pre-filing criteria and pre-filing docket number is issued, starting the pre-filing process (see Section 4.C.5)
5. Information the applicant provides during the pre-filing process: resource reports (see Section 4.C.6)
6. Open House (see Section 4.C.7)
7. Notice of Intent to Prepare environmental documents (see Section 4.C.8)
8. Scoping comments solicited / scoping meeting held (see Section 4.C.9)
9. Formal application filed and accepted by FERC, ending the pre-filing process (see Section 4.C.10)
10. General application process begins (see Section 4.C.11)
11. Cooperating agency reviews preliminary draft EIS (see Section 4.C.12)
12. Draft EIS comment period (see Section 4.C.13)
13. EIS format (see Section 4.C.14)
14. Draft EIS public meetings (see Section 4.C.15)
15. Final EIS drafted and issued (see Section 4.C.16)
16. Supplemental environmental documents (see Section 4.C.17)
17. The Commission's Order (see Section 4.C.18)
18. Request for rehearing, the rehearing order and filing an appeal in federal circuit court (see Sections 4.C.19 - 4.C.20)

How does an LNG project begin?

An LNG project begins with the applicant assessing the viability of an LNG export facility. This likely will involve assessing the gas market, consulting with financial backers, figuring out the preliminary engineering design, soliciting sources and consumers of the gas, studying potential project sites, and identifying likely stakeholders. It is during this phase that the applicant shapes its "stated project purpose," which must not be neither too narrow nor too broad and will become a critical reference point for FERC's NEPA analysis and the analyses conducted by other permitting agencies. FERC is not involved with the applicant's proposal at this point.

How does an applicant begin the process of seeking FERC's approval for a project?

Once an applicant has fleshed out the initial details of a project on its own, it is ready to approach FERC for an initial consultation. FERC requires that applicants proposing to construct an LNG terminal use an involved “pre-filing” process before filing a formal application.²⁵⁵ (Although applicants for pipeline project don't need to use the pre-filing process, they often do—and not just when applicants apply for the terminal and pipeline at the same time!) FERC's pre-filing procedures are codified at 18 C.F.R. § 157.21 and as with any regulations, may change after this guide's publication.

Before an applicant may request to use the pre-filing process, it must conduct an initial consultation, or “pre-filing meeting,” with FERC's Director of Office of Energy Projects.²⁵⁶ (Note that despite the fact that FERC sometimes refers to this consultation as a “pre-filing meeting,” pre-filing has not officially yet begun, and no pre-file docket will have been opened yet.)

This is the first official opportunity the applicant has to introduce FERC to its proposed project. During this initial consultation, FERC considers what NEPA document will be most appropriate for the project and whether a third-party contractor will be hired to draft the NEPA documents. FERC also requests that an applicant bring a draft of its pre-filing request and a draft request for a third-party contractor to the meeting.²⁵⁷

The pre-filing request must contain all of the information required by 18 C.F.R. § 157.21(d), which is discussed in further detail in the next section. FERC works with the applicant during and after the initial consultation to help ensure that the pre-file request is complete before the applicant files it. Mere weeks may elapse between FERC reviewing the applicant's draft pre-filing request during the initial consultation and the applicant finalizing the request and formally sending it to FERC for approval. (See Rio Grande LNG example in textbox.²⁵⁸)

INITIAL CONSULTATION & PRE-FILING TIMING: A TEXAS EXAMPLE

Each project will differ, but here is the schedule that the Rio Grande LNG took to get to pre-filing:

Feb. 24, 2015: Initial consultation with FERC's OEP, during which FERC reviewed the applicant's draft pre-filing process request and discussed the project and the applicant's progress toward complying with 18 C.F.R. §§ 157.21(a), (c), & (d).

Mar. 20, 2015: Rio Grande LNG applicant sends FERC a letter formally requesting to use the pre-file system (“the pre-filing request” or as 18 C.F.R. § 157.21(d) calls it, the “initial filing”)

Apr. 13, 2015: OEP approves the request to use the pre-file system and issues a pre-file docket number; the March pre-file request is docketed as the first document. **Pre-filing has begun.**

²⁵⁵ 18 C.F.R. § 157.21(a). The rules also apply to modifications that involve significant state and local safety considerations not previously addressed, such as the addition of LNG storage tanks or increases in throughput. 18 C.F.R. § 157.21(a) (“Examples of such modifications include, but are not limited to, the addition of LNG storage tanks; increasing throughput requiring additional tanker arrivals or the use of larger vessels[.]”)

²⁵⁶ 18 C.F.R. § 157.21(c).

²⁵⁷ FERC, “Guidance Manual For Environmental Report Preparation: For Applications Filed Under The Natural Gas Act,” Vol. I, Feb. 2017, 3-1-3-2, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

²⁵⁸ The details of Rio Grande LNG's schedule can be found in the pre-file request (PF15-200, Accession Number 20150320-5280 at 11) and in FEIS Volume 1 at ES-3 (https://www.ferc.gov/sites/default/files/2020-05/FEIS-volume-1_0.pdf).

Once FERC's Director of OEP reviews the applicant's formal request to pre-file and confirms that all of the required information is included, FERC will create a publicly accessible pre-file docket number for the project and file a notice in that docket approving of the applicant's use of the pre-file process. But even though the project may progress quickly from the initial consultation to FERC approving the applicant's use of the pre-file process, the applicant must conduct significant legwork before the approval to pre-file issues—as the next section describes.

What must the applicant submit in preparation for the pre-filing process?

As mentioned in the previous section, before FERC approves an applicant's pre-file request and opens the pre-file docket, the applicant must provide FERC with certain information as required by 18 C.F.R. §§ 157.21(d).²⁵⁹

These regulations require the applicant:

- to provide a description of the project;
- to propose a permitting schedule for FERC;
- to describe the zoning and availability of the proposed site and marine facility location;
- to identify the agency designated by the state's governor to consult with FERC regarding state and local safety considerations and identify those contact persons;
- to list the environmental and engineering firms engaged for the project development as well as other persons and organizations who have been contacted about the project;
- to already have begun drafting a public participation plan that includes a project website and a single point of contact for the public;
- to certify that the process of involving the Coast Guard in the project has already begun;
- to document the progress made toward obtaining other state and federal permits, specifically the applicant must include an estimated timetable for when the applicant will formally seek other necessary permits and approvals. The applicant must demonstrate that it has already contacted these other agencies to inform them that the applicant will be requesting to pre-file with FERC; and
- to acknowledge that a complete environmental report and complete application are required at the time of filing the actual application for a Section 3 authorization and/or Section 7 certificate (i.e. at the end of the pre-file process).²⁶⁰ The "complete environmental report" is actually thirteen "resource reports" drafted by the applicant or its consultants that provide a starting point for FERC to begin drafting the EIS documents. Resource reports are covered in more detail in Section 4.C.6.

²⁵⁹ 18 C.F.R. § 157.21(a)(3).

²⁶⁰ 18 C.F.R. § 157.21(d).

The close collaboration between FERC and the applicant to ensure that the applicant’s pre-file request complies with FERC’s regulations means that FERC, the applicant, and likely other agencies will already have invested significant time into the LNG project even before the applicant formally requests to pre-file. This early relationship, however, is not transparent to the public and can make it difficult for communities and advocates to be seen as equal participants in the permitting process, even though prospective landowners, community members, and anyone else affected by the project have—on paper—the right to provide input as soon as the pre-filing process begins.

What happens once an applicant meets the pre-filing criteria?

Once the applicant has prepared a final draft of its pre-file request, it formally sends that request to FERC. FERC’s Director of OEP then reviews the request for compliance with the relevant sections of 18 C.F.R. § 157.21.²⁶¹ If it is compliant (which it should be by then because FERC and the applicant have collaborating on it), FERC issues a notice of that finding and a pre-filing docket number (prefaced by “PF”²⁶²) is issued, which begins the official pre-filing process.²⁶³

The pre-filing process clock begins on the date of FERC’s notice that the project qualifies for pre-filing status. This date triggers the start of many deadlines for the applicant and FERC, which FERC’s regulations succinctly lay out the *default* timeline as follows:

WHAT WILL BE ON THE RECORD?

FERC staff and applicants communicate a lot during the pre-filing and the application process. But not all of these communications will be made public. During the pre-filing stage, most communications—even those related to the merits—may be off-the-record. (For example, FERC expects that regular weekly or bi-weekly conference calls with the applicant will be necessary during pre-filing.)

Advocates—including prospective landowners and community members—also have the right to meet with FERC off-the-record during the pre-filing process. This is a too-often underutilized tool of advocacy that should not be overlooked!

Once pre-filing ends and the application process starts, FERC is bound by the “*ex parte*” regulations at 18 C.F.R. § 385.2201 about what it can and can’t discuss with an applicant in private. During the application stage, unless FERC is answering an applicant’s procedural questions, or facilitating consultation with an agency that isn’t a party (and agencies typically aren’t parties), it generally must file a record of the conversation in the public docket. If an advocate believes that communications are improperly not being made public, a FOIA request may be a good first step towards uncovering such oversights!

See <https://www.ferc.gov/sites/default/files/2020-04/cultural-guidelines-final.pdf> at 3-3 (describing FERC’s expectations for communicating with the applicant during pre-filing) and at 2-3 (explaining off-the-record conversations).

²⁶¹ Namely, 18 C.F.R. §§ 157.21(a) (describing the pre-filing procedures), (c) (requiring the initial consultation) and (d) (describing the contents of the pre-file request)

²⁶² For more on FERC’s abbreviations, see FERC’s Docket Prefix List: <https://elibrary.ferc.gov/eLibrary/assets/docket-prefix.pdf>.

²⁶³ Publicly available documents can be found on FERC’s e-Library using the project’s docket number. FERC’s eLibrary is accessible here: <https://elibrary.ferc.gov/eLibrary/search>.

THE APPLICANT'S DEFAULT TIMELINE DURING PRE-FILING

FERC's default rules state that "Upon the Director's issuance of a notice commencing a prospective applicant's pre-filing process, the prospective applicant must:

1. Within **seven** days and after consultation with Commission staff, **establish the dates and locations at which the prospective applicant will conduct open houses and meetings with stakeholders** (including agencies) and Commission staff. *[See Section 4.C.7]*
2. Within **14** days, conclude the contract with the selected third-party contractor. *[See Section 4.B.7]*
3. Within **14** days, **contact all stakeholders not already informed about the project**, including all affected landowners as defined in paragraph § 157.6(d)(2) of this section.
4. Within **30** days, submit a stakeholder mailing list to Commission staff.
5. Within **30** days, file a draft of **Resource Report 1**, in accordance with § 380.12(c), **and a summary of the alternatives considered or under consideration**. *[See Sections 4.B.4, 4.C.6, and 4.E.2]*
6. On a **monthly basis**, file status reports detailing the applicant's project activities including surveys, stakeholder communications, and agency meetings.
7. Be prepared to provide a description of the proposed project and to answer questions from the public at the scoping meetings held by OEP staff.
8. Be prepared to attend site visits and other stakeholder and agency meetings arranged by the Commission staff, as required.
9. Within **14 days of the end of the scoping comment period, respond to issues raised during scoping**. *[See Section 4.C.9]*
10. Within **60 days of the end of the scoping comment period, file draft Resource Reports 1 through 12**. *[See Section 4.C.6]*
11. At least **60** days **prior** to filing an application, **file revised draft Resource Reports 1 through 12**, if requested by Commission staff.
12. At least **90** days **prior** to filing an application, file **draft Resource Report 13** (for LNG terminal facilities)." *[See Section 4.C.6]*

28 C.F.R. § 157.21(f)(1)-(12).

In addition to these deadlines, an applicant must also produce a Public Participation Plan for stakeholder communications.²⁶⁴ Also note that the prescribed timeframes above may be modified by FERC when project-specific issues warrant a change. Therefore, do not assume that the default timeline applies to any specific LNG project—keep abreast of FERC's docket and the applicant's communications filed therein to track whether a different timeline has been set.

²⁶⁴ 18 C.F.R. § 157.21(d)(11).

What environmental information does the applicant need to provide during the pre-filing process?

Environmental information that an applicant must compile during the pre-filing process is organized into thirteen **Resource Reports**. (These resource reports are the environmental documents that the applicant acknowledged in its pre-file request that it would be required to prepare and submit as part of its actual application.) FERC requires the applicant to file *drafts* of these reports during the pre-filing process so that it may provide feedback before the applicant files them with its application for certification / authorization.

FERC uses these reports as a starting point for its own environmental review that it must conduct; if information is missing from the reports, FERC should request it of the applicant. Advocates can access the resource reports on FERC’s pre-filing docket for the facility although there may be data gaps because the applicant is still obtaining that information. Modules 4 and 5 of FERC’s e-learning series is a basic overview of these reports.²⁶⁵

Each report must:

1. *Address conditions or resources that might be directly or indirectly affected by the project;*
2. *Identify significant environmental effects expected to occur as a result of the project;*
3. *Identify the effects of construction, operation (including maintenance and malfunctions), and termination of the project, as well as cumulative effects resulting from existing or reasonably foreseeable projects;*
4. *Identify measures proposed to enhance the environment or to avoid, mitigate, or compensate for adverse effects of the project;*²⁶⁶

The thirteen Resource Reports are as follows:²⁶⁷

Table 4.2: Resource Reports

1	General Project Description	6	Geological resources	11	Reliability and safety
2	Water use and quality	7	Soils	12	PCB contamination
3	Fish, wildlife, and vegetation	8	Land use, recreation and aesthetics	13	Engineering and design material
4	Cultural resources	9	Air and noise quality		
5	Socioeconomics	10	Alternatives		

²⁶⁵FERC, E-Learning, <https://www.ferc.gov/industries-data/natural-gas/environment/e-learning>.

²⁶⁶ 18 C.F.R. 380.12(b). The reports must also include supporting documents and agency contacts that support the reports’ conclusions. *See id.*

²⁶⁷ See 18 C.F.R. § 380.12.

(Note that the draft and final EIS will not be organized the same way as the Resource Reports, but NEPA requires that all of these topics be discussed in-depth.)

Many of these Resource Reports are similar to those that would be required for non-LNG project applications. However, Resource Reports 11 (Reliability and Safety) and 13 (Engineering and Design Material) are specific to LNG facilities and are required for proposals for new LNG facilities, expansions of existing LNG facilities, or re-commissioning of existing LNG facilities.²⁶⁸ In 2017, FERC published a guide for applicants drafting Reports 11 and 13; while this is quite a lengthy document and creates no new legal responsibilities for applicants,²⁶⁹ it can be helpful for advocates who want to understand this material better.²⁷⁰ FERC's guidance for drafting the remainder of the reports is likewise lengthy, but also summarizes the pre-filing process and is a good resource for advocates that want an in-depth understanding of the relationship between FERC and the applicant at this stage.²⁷¹

PRACTICE TIP:

An applicant may workshop various facilities and locations for its project before settling on a final version to propose in its FERC application. Application materials and resource reports still often reference and analyze these rejected options—sometimes even in lieu of the applicant's actually proposed facility.¹ Advocates should keep an eye out for such errors, which may also make their way into agency consultation letters or cultural resource survey reports. These errors may reveal alternatives that should have been considered or other flaws in proposal.

¹<https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf> at 4-4.

During the pre-filing process, FERC and the applicant will engage in a back-and-forth as FERC comments on the reports and requests additional information of the applicant. This dialogue should be publicly available on FERC's docket. The applicant incorporates additional information during the pre-filing process into the reports; once the application is filed after the pre-file process concludes, additional missing information is responded to separately from the reports.²⁷²

FERC uses the first draft of Resource Report 1 (General Project Description) to issue its Notice of Intent to prepare a NEPA document; that document also must include the alternatives to the project that will eventually be explored in more detail in Resource Report 10. For LNG terminals, the alternatives should include alternative locations for the project.²⁷³ Unless a different schedule has been agreed upon, the applicant must submit draft Resource Reports 1 (a second draft) through 12

²⁶⁸ See 18 C.F.R. § 380.12.

²⁶⁹ In other words, if an applicant doesn't do the recommended or suggested things in this guidance, it isn't likely that that failure will be the sole reason that a court overturns an issued certification. Instead, base arguments on the NEPA statutes, regulations, and caselaw, which do create legally binding requirements.

²⁷⁰ FERC, "Guidance Manual for Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. II, Feb. 2017, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-2.pdf>.

²⁷¹ FERC, "Guidance Manual for Environmental Report Preparation For Applications Filed Under the Natural Gas Act, Vol. I," Feb. 2017, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

²⁷² FERC, E-Learning, Module 4, Minutes 5:27, <https://www.ferc.gov/industries-data/natural-gas/environment/e-learning>.

²⁷³ FERC, "Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act, Vol. I," Feb. 2017, 28, <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

within 60 days of the end of the scoping period. Resource Report 13 must be filed at least 90 days before the applicant may file its application for the project.

What happens during open house(s) hosted by the applicant?

During the pre-file process, the applicant must hold at least one open house to publicly and formally introduce the project to stakeholders.²⁷⁴ The open houses should be scheduled within seven days of pre-filing approval. Generally, open houses are held within 30-45 days after receiving a PF number, although this timeframe may change depending on the project and the availability of FERC and/or the third-party contractor, who attend to address questions about the environmental review process. Unlike public hearings that are held later in the process, open houses are facilitated by the applicant itself (and the applicant is responsible for notifying stakeholders).²⁷⁵

Advocates and impacted communities should attend any open house that is held, but these will likely be most useful to raise public awareness about the project and mobilize communities. Advocate comments made at applicant-led open houses will not be part of the official public record and advocates cannot rely on these meetings to get points into the record that can be used later in challenging FERC's certification. However, open houses are an opportunity to gather information about the applicant and proposed project—facts that later can be incorporated into comments or litigation. It is highly advisable to work with skilled community organizers when preparing to attend any public meeting or hearing, including the applicant's open house.

What is the Notice of Intent to prepare NEPA documents?

FERC uses the information that the applicant has provided thus far in the pre-file process to prepare a Notice of Intent to prepare a NEPA document. Under the 1978 regulations, FERC's issuance of the Notice of Intent to prepare a NEPA document formally starts the NEPA process and scoping period,²⁷⁶ even though no application will have yet been filed. (Note that the 2020 CEQ regulations expressly allow the scoping process to begin before the Notice of Intent and requires a Notice of Intent only after a determination that the proposal is sufficiently developed to allow meaningful public comment and that an EIS is required.²⁷⁷)

The Notice of Intent announces the dates and locations of scoping sessions, if applicable, that FERC will host. Public comments provided at the scoping session become part of the public record. The scoping sessions are FERC-led sessions, although the applicant almost always attends as well.

The Notice of Intent to prepare a NEPA document identifies the closing date of the official scoping period. After the close of the scoping period, the applicant must address the scoping comments received by updating its resource reports. Note that it has been FERC's state policy to "continue to accept and respond to [public] comments at any time during and after the pre-filing period [i.e., even during the application phase] until it is no longer practical."²⁷⁸ Advocates should not delay in filing

²⁷⁴ During the initial project planning stages, FERC considers stakeholders to include local community leaders, local special interest groups, and non-governmental organizations. See *Suggested Best Practices*, at 13. Environmental groups that have not already been contacted before the pre-filing process should be contacted in time for the open house. *Id.* at 20.

²⁷⁵ *Id.* at 19.

²⁷⁶ Although the regulations could be read to require scoping *prior to* FERC determining of whether or not to require an environmental impact statement, FERC historically has generally only issued a request for scoping comments if it makes a finding of significant effect and issues a notice of intent to prepare an EIS.

²⁷⁷ 40 C.F.R. § 1501.9(d) (2020).

²⁷⁸ FERC, "Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act, Vol. I," at 29.

comments, however—be they scoping comments or on the NEPA document itself—and should treat FERC’s policy as one that allows for the public to continue to raise issues that might become apparent only after official deadlines for comment have closed.

What happens during the “scoping comments” period, i.e., the first major comment deadline for a project?

As explained in the previous section, during the pre-filing process FERC will issue a notice of intent for the preparation of its environmental documents (an EA or EIS), which will include a request for scoping comments. FERC will invite the participation of affected federal, state, and local agencies, any affected Indian tribe, the developer, and other interested persons. Scoping comments and the scoping meeting are used to determine the range of issues that should be examined in an environmental impact review.²⁷⁹ Scoping is also used to identify and eliminate from detailed study the issues which are not significant or which have been covered by a previous environmental review.

Specifically, the scoping comment period is an opportunity to help FERC identify information that it should solicit from the applicant.²⁸⁰ FERC advocates have found that sometimes FERC will request information of the applicant based on a scoping comment. Thus, advocates should use this opportunity to raise issues that are site-specific that the applicant or FERC might not be aware of or otherwise pay attention to, such as the existence of unique cultural resources, or specific uses of the shipping channels and land by neighboring communities that might be impacted. Scoping is also useful to identify possible indirect and cumulative impacts that should be addressed in NEPA documents.

Once the scoping period closes, the applicant has at least 14 days to respond to issues raised in comments. If the applicant needs an extension of this time period, it must file a statement in the docket stating when it expects to respond to comments. As noted in the previous section, FERC will continue to accept comments after the scoping period closes, but the applicant may not be required to address those comments in its resource reports. (The issues raised in such comments should be addressed by the NEPA documents, however.)

What must the application contain for FERC to accept it and start the application process?

An applicant must wait at least 180 days from its pre-filing date and satisfy all of the pre-filing steps described above in Section 4.C.5 before it may submit an application for certification and/or authorization to FERC.²⁸¹ Substantively, the applicant must also provide all of the information required by law, which largely focuses on having finalized Resource Reports that satisfy FERC’s initial concerns about the project and the scoping issues raised during pre-filing. The resource reports are contained in Exhibit F-1 of the application (“the Environmental Report”). These resource reports must contain all the information required by Appendix A of 18 C.F.R. § 380 and § 380.12. The resource reports must address the comments raised by FERC and stakeholders during the pre-filing process.

In addition to requiring the resource reports, FERC directs an applicant to submit its requests for other required federal authorizations, including those delegated to state agencies *before or at the*

²⁷⁹ 18 C.F.R. § 157.21(f)(9) and (g)(2).

²⁸⁰ See 40 C.F.R. § 1501.7 (1978) and 40 C.F.R. § 1501.9 (2020).

²⁸¹ 18 C.F.R. § 157.21(e). Also see 18 C.F.R. § 157.21(a)(2)(i). Historically, it has taken much longer than six months for projects to complete the pre-filing process and progress into the application stage.

same time as it files its FERC application.²⁸² This includes applications for permits and certifications needed under the Clean Water Act section 401, Coastal Zone Management Act consistency reviews, and the Clean Air Act. If the applicant has not requested these authorizations by the time it files its FERC application, it must explain why. For terminals (i.e., Section 3 applications), information regarding other pending applications, including the submittal date and anticipated approval date, can be found in Exhibit H.²⁸³

Once FERC accepts the application as complete, FERC issues a public Notice of Application within ten business days of the filing of the complete application.²⁸⁴ A notice of a schedule for the environmental review will be issued within 90 days of the notice of the application. Both notices will be published in the Federal Register and in the project's docket. The project will be issued a new docket number with the preface "CP."²⁸⁵ All subsequent information about the project will be filed in this docket, so advocates should ensure that they subscribe to this new docket (although anyone who was originally subscribed to the PF docket should automatically be subscribed to the CP docket). It is also a good time (and the first time) to file a notice of intervention. For more on that process, see Sections 4.D.6 - 4.D.7.

What happens during the application process?

During the application process, FERC does three main things:

- **Prepares NEPA documents.** This involves preparing the necessary environmental decision-making documents; either an EIS (both draft and final) or an EA and an EIS (both draft and final EIS). If an EIS is required, FERC will also prepare a "preliminary draft" in addition to the draft EIS—the preliminary draft is circulated to the cooperating agencies before the actual draft is released for public comment (see Section 4.C.12).
- **Responds to comments.** In the final EIS and in its certificate order, FERC must respond to all substantive comments made, either individually or by grouping similar comments together.
- **Continues coordinating with consulting agencies and other permitting entities.** FERC must continue to work with and coordinate with consulting agencies to ensure that its NEPA documentation is sufficient for the other agencies to rely on. FERC must also respond to concerns that other agencies may raise about the project. To do so, FERC prepares a preliminary draft EIS which is issued to agencies for comment even before the public has access to the document.

During the application process, an advocate will want to:

- Formally intervene as soon as possible (see Sections 4.D.6 - 4.D.7)
- File comments during the comment periods for the draft EIS and final EIS (see Section 4.E for example topics and comments)
- Participate in any public meetings

²⁸² FERC, E-Learning, "Module 2 – Overview of the FERC Process for Reviewing Proposed Natural Gas Projects," 14:22, https://www.ferc.gov/sites/default/files/2020-06/module_2_0.mp4.

²⁸³ For pipelines (i.e., Section 7 applications), this information is found in Exhibit J.

²⁸⁴ 18 C.F.R. § 157.9(a).

²⁸⁵ Publicly available documents can be found on FERC's e-Library using the project's docket number. FERC's eLibrary is accessible here: <https://elibrary.ferc.gov/eLibrary/search>.

Do cooperating agencies review a preliminary version of the draft EIS before it is released for public comment?

Yes. Before the draft EIS is released for public comment, FERC circulates a “preliminary draft EIS” to the cooperating agencies. Each cooperating agency reviews this document and must submit comments back to FERC within the allotted time frame, typically 30 days.

At least some of this interagency dialogue about the project will be published on FERC’s docket. Other correspondence may be discoverable by filing a FOIA request: for example, FERC’s regulations make discoverable under the Freedom of Information Act interagency memoranda that “transmit comments of Federal agencies on the environmental impact of the proposed action.”²⁸⁶

Because once the draft EIS issues for public comment, cooperating agencies have already had many opportunities to raise concerns about the project, it is important to have been in contact with these cooperating agencies early—during the pre-filing process if possible.

Will there be an opportunity to comment on the draft EIS once it is published?

Yes. The draft EIS comment period can be thought of as the second major deadline for public comment, after the scoping comment period. Once FERC has received comments from cooperating agencies and addressed any issues that arose, it then releases the draft EIS for public comment. The Notice of Availability of the draft EIS is filed in the docket and the Federal Register. The Notice will briefly describe the project and consulting agencies’ roles and will announce the deadline for comments and the dates of the public comment sessions. An example notice (from the Rio Grande LNG project) can be found here: <https://www.govinfo.gov/content/pkg/FR-2018-10-18/pdf/2018-22727.pdf>.

The comment period typically lasts 45 days but may be longer or shorter—consult the notice for each project to be sure of the proper timeframe. Advocates (or any other party or agency) may request an extension of the comment period, but do not assume it will be granted. The comment period for the draft EIS is also the last period in which an advocate may timely intervene (the “second window” of intervention, described in more detail in Section 4.D.6). Interventions outside of this time frame will be allowed at the discretion of FERC if the would-be intervenor can show extraordinary circumstances or good cause.²⁸⁷ Advocates should avoid intervening out of time if at all possible. For the mechanics on how to intervene, see Section 4.D.7.

What does an EIS look like?

Although the regulations are a good source of information on what an EIS must contain, one of the best ways to familiarize oneself with an EIS is to review an already published one. A few examples—namely the final EIS documents in the Jordan Cove project—can be found on FERC’s website and are found in this guide’s appendix:

Part 1: https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_1.pdf (App. 3a)

Part 2: https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_2.pdf (App. 3b)

²⁸⁶ 18 C.F.R. 380.9(b).

²⁸⁷ 18 C.F.R. § 157.10. See also 18 C.F.R. § 380.10(a) (“Any person who files a motion to intervene on the basis of a draft environmental impact statement will be deemed to have filed a timely motion, in accordance with § 385.214, as long as the motion is filed within the comment period for the draft environmental impact statement.”).

Part 3: https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf (App. 3c)

CEQ’s 2020 regulations at 40 C.F.R. § 1502.10 direct agencies like FERC to include the following sections in each environmental impact statement: (1) Cover; (2) Summary; (3) Table of contents; (4) Purpose of and need for action; (5) Alternatives including the proposed action (sections 102(2)(C)(iii) and 102(2)(E) of NEPA); (6) Affected environment and environmental consequences (especially sections 102(2)(C)(i), (ii), (iv), and (v) of NEPA); (7) Submitted alternatives, information, and analyses; and (8) List of preparers.²⁸⁸ More details on the contents of each of these eight items is provided in the 2020 CEQ regulations that follow, namely 40 C.F.R. §§ 1502.11 – 1502.18.

FERC’s regulations at 18 C.F.R. § 380.7 also require two additional sections. First, a section on literature cited in the EIS. Second, a staff conclusions section at the end—these include the recommended conditions that FERC staff proposes to the Commissioners, who may accept, deny, or modify any of these in the final Order. Specifically, the staff conclusion section includes summaries of:

- (a) The significant environmental impacts of the proposed action;
- (b) Any alternative to the proposed action that would have a less severe environmental impact or impacts and the action preferred by the staff;
- (c) Any mitigation measures proposed by the applicant, as well as additional mitigation measures that might be more effective;
- (d) Any significant environmental impacts of the proposed action that cannot be mitigated; and
- (e) References to any pending, completed, or recommended studies that might provide baseline data or additional data on the proposed action.²⁸⁹

The Jordan Cove example cited above has five main sections: (1) Introduction; (2) Description of the Proposed Action; (3) Alternatives; (4) Environmental Analysis; and (5) Conclusions. The fourth section is most detailed, with subsections for each resource impacted, as well as a final section addressing cumulative impacts. As discussed in Section 4.B.4, the resources impacted are:

- geological resources;
- soils and sediments;
- water resources and wetlands,
- vegetation;²⁹⁰
- wildlife and aquatic resources;
- threatened, endangered and other special status species;
- land use;
- recreation and visual resources;
- socioeconomics;
- transportation (not always in an EIS as a separate section);
- cultural resources;
- air quality and noise;
- reliability and safety;

²⁸⁸ Item (7) was added in the 2020 regulations; it omitted the recommendation to include an index and a list of agencies, organizations, and persons to whom copies of EIS are sent. See 40 C.F.R. § 1502.10 (1978).

²⁸⁹ 18 C.F.R. § 380.7.

²⁹⁰ The Jordan Cove EIS focuses on “upland” vegetation; this category is more often just styled “vegetation.”

The final EIS will take a similar format as the draft EIS, and most of the text will be the same as the draft EIS. Lines that have been changed or added from the draft EIS will be highlighted by a vertical line running along the left-hand margin.

What should I expect at draft EIS public meetings?

For LNG projects, FERC often will hold at least one public meeting for any interested party to attend and provide comments on the draft EIS. These hearings may be combined with the hearings hosted by other agencies. A court reporter is typically present to record all of the comments made; those comments become part of the public record that FERC must address in the final EIS.

Notice of a public meeting will be published on FERC's docket and in the Federal Register. An example of a public notice for meetings that were held to discuss the draft EIS for the Alaska LNG facility can be found here: <https://www.energy.gov/sites/default/files/2019/08/f66/ferc-deis-meetings-eis-0512-alaska-lng-2019-08-02.pdf>. The notice of availability of a draft EIS may also set dates for public meetings as well. Additional information on the format of the public meeting for each specific project should be available on the project's docket; while the Federal Register may be a source for the notice, it may not contain all of the information on how the meetings will be conducted.

Like any public meeting, this is an opportunity to mobilize support and bring attention to the project and the impacts it will have. Meetings are a good focal point for political and news coverage. It is a good idea to work with experienced community organizers to maximize the benefit that can be gained from these meetings.

What is involved in the drafting of a final EIS and its publication?

FERC will prepare a final EIS once comments have been received on the draft EIS. FERC must consider substantive comments timely submitted on the draft EIS when preparing the final EIS.²⁹¹ FERC may address comments individually or as a group if the comments are related. FERC's possible responses to comments include:

- Modifying alternatives including the proposed action;
- Developing and evaluating alternatives not previously given serious consideration by FERC;
- Supplementing, improving, or modifying its analyses;
- Making factual corrections; or
- Explaining why the comments do not warrant further agency response, citing the sources, authorities, or reasons that support FERC's position and, if appropriate, indicate those circumstances that would trigger agency reappraisal or further response.²⁹²

Once the final EIS is complete, FERC must provide public notice of the final EIS.²⁹³ Recall that the final EIS is not FERC's final decision on the project; rather, the final EIS is the document prepared by the third-party contractor and FERC staff that the FERC commissioners will use when making a final decision on whether to approve the project (via Certificate order). The public and any participating

²⁹¹ 40 C.F.R. § 1503.4(a) (2020). The 1978 version did not include this language that the comments to be addressed were only the timely and substantive ones. Id. (1978).

²⁹² 40 C.F.R. § 1503.4(a)(1)-(5) (1978). The 2020 regulations included all five possible responses, except the fifth response was rewritten to allow agencies to simply: "Explain[] why the comments do not warrant further agency response, recognizing that agencies are not required to respond to each comment." 40 C.F.R. § 1503.4(a)(5) (2020).

²⁹³ 40 C.F.R. § 1506.6(b) (the 1978 and 2020 regulations are substantively similar on this point).

agency may still comment on the final EIS—and advocates should if there are still problems with the project and FERC’s analysis! FERC’s failure to prepare a proper final EIS and make a non-arbitrary, reasoned decision in the commissioner’s Certificate Order can be grounds for overthrowing the certification in court, so any possible grounds that could be raised should be. And any issues not raised in comments run the risk of being ignored by a reviewing court (under the legal principle of exhaustion).

Might FERC decide that a supplemental environmental document (an EA or EIS) is needed?

A supplement to an EA or a draft or final EIS is required when any of the following occurs:²⁹⁴

- An agency makes substantial changes to the proposed action that are relevant to its environmental concerns.
- There are significant new circumstances or information relevant to the environmental concerns that have bearing on the proposed action or its impacts.

If an agency decides to supplement its EIS, it prepares, publishes, and files the supplemental EIS in the same fashion as a draft or final EIS. Public comments are normally solicited. Sometimes, the supplement will be an EA only, as with one of the proposed amendments to the Golden Pass LNG facility after it was first certified.²⁹⁵ The decision to supplement may happen at any point in the application process, after an initial environmental document has been published. It may even be required by court order after certification if a reviewing court finds that FERC should have conducted one or has otherwise erred in its NEPA analysis.

It can be hard to predict when FERC will require a supplemental assessment. Changes to a project that would increase its design capacity without any additional construction have caused FERC to prepare supplemental environmental documents.²⁹⁶ But a design change that went from six trains to five while increasing the capacity of the remaining trains by roughly 20% did not strike a majority of FERC Commissioners as something that should be reanalyzed with a supplemental environmental assessment.²⁹⁷ Despite this uncertainty, advocates should not be discouraged from arguing that a supplemental assessment should be conducted if new information comes to light or the applicant proposes substantial changes to its design. As Commissioners retire and are replaced, FERC’s attitude toward supplemental assessments may change.

When will FERC decide on the application and what will that Order look like?

Historically, FERC has no timeline by which it must respond to an application and can take as long as it needs.²⁹⁸ The final decision need not be agreed to by all commissioners, just a majority. This final

²⁹⁴ EPA, “National Environmental Policy Act Review Process,” <https://www.epa.gov/nepa/national-environmental-policy-act-review-process>; see also 40 C.F.R. § 1502.9(d) (2020) and 40 C.F.R. § 1502.9(e) (1978). Typically, there is no new scoping period. 40 C.F.R. § 1502.9(d)(3) (2020) and 40 C.F.R. § 1502.9(e)(4) (1978).

²⁹⁵ A supplemental EA was issued in Golden Pass LNG. FERC, “Order Amending Section 3 Authorization,” 174 FERC ¶ 61,053, ¶¶ 10-13, Docket No. CP20-459-000 https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjy1p_XuMvzAhVnn-AKHd7QA6gQFnoECACQAQ&url=https%3A%2F%2Fwww.ferc.gov%2Fsites%2Fdefault%2Ffiles%2F2021-01%2FCP20-459-000.docx&usg=AOvVaw2jyKJRFkyInbuKwOX9DBmn.

²⁹⁶ As was the case in an application by Golden Pass LNG. See *Id.*

²⁹⁷ “Order Addressing Arguments Raised On Rehearing,” 174 FERC ¶ 61,048 (Docket No. CP16-454-002) (Glick, dissenting) at ¶¶ 1-2 <https://www.ferc.gov/sites/default/files/2021-01/C-7-CP16-454-002.pdf>.

²⁹⁸ In the past, the average time from *FEIS* to *certificate order* has been around eight months, but FERC has taken much longer, and the review process from *application* to *order* typically lasts years. The 2020 regulations imposed a two-year time limit for drafting environmental impact statements, but these rules are in the process of being rewritten and this timetable is not expected to impact LNG projects. See 40 C.F.R. § 1501.10(b)(2).

decision is memorialized in a certificate order (or authorization order, if the project proposes only a terminal, with no pipeline). If the FERC commissioners approve a project, the applicant must officially accept the order and its conditions within 30 days. Note that the order does not give the applicant official permission to begin construction—that is a separate process that may be put on hold if an advocate requests rehearing of the order.

The Order explains FERC’s decision and includes conditions on the project. It may also include concurring or dissenting opinions. These opinions do not change the outcome of the certification but can show what individual Commissioners believe is important about a project or the NEPA process. It is important to read the decision and any concurrences or dissents on any order (the Certificate Order or Order on Rehearing) carefully and fully, because the dissenting or concurring opinions may be more persuasive to a reviewing court than if the same point therein is made solely by an advocate. For example, the dissent on the Rio Grande LNG certificate order strongly disagreed with the majority’s treatment of greenhouse gas impacts, echoing the concerns of advocates.²⁹⁹ The D.C. Circuit agreed that the majority’s approach was wrong, and now FERC must actually grapple with greenhouse gas impacts going forward. Whether or not the D.C. Circuit was ultimately persuaded to adopt this position because of the dissenting opinion, if advocates challenge a FERC Order in court, it is useful to be able to argue to a court that some of the Commissioners supported their position.

What steps should an advocate take if FERC certifies a project?

After FERC certifies a project, the next step an advocate must take to continue challenging the certification is to file an application for rehearing within thirty days after the issuance of the certificate order.³⁰⁰ FERC then has thirty additional days on which to act on the application—if FERC fails to act within that time, the application is deemed denied, and an advocate may proceed with litigation in either the D.C. Circuit or the Circuit where the applicant has its principal place of business.³⁰¹ Although the word “rehearing” might imply that there will be a court-type hearing and oral argument, FERC almost never solicits oral argument and instead always simply reviews the paper request. The rehearing request is a litigation-type document that must include the facts and legal argument to explain why FERC was wrong to issue its certificate order. See Section 4.F for sample requests for rehearing.

During the rehearing process, FERC considers whether to modify its Order. Do not expect FERC to alter its Order much, if at all. FERC has thirty days to act on the rehearing request before it is deemed denied as a matter of law. It may however modify the Order after that deadline, as long as it does so before the record for appeal is filed in the federal circuit court.³⁰² An example of FERC’s order on a rehearing request can be found here: <https://www.ferc.gov/sites/default/files/2021-01/C-7-CP16-454-002.pdf>.

²⁹⁹ See “Commissioner Richard Glick Dissent Regarding Rio Grande LNG, LLC.” FERC. (Nov. 21, 2019) <https://www.ferc.gov/news-events/news/commissioner-richard-glick-dissent-regarding-rio-grande-lng-llc>. Two Commissioners also dissented from FERC’s Order on Rehearing in the Rio Grande LNG project, agreeing with advocates that a supplemental EIS should have been issued given the late-breaking design changes that the applicant made to the facility. See “Order Addressing Arguments Raised On Rehearing,” 174 FERC ¶ 61,048 (Docket No. CP16-454-002) (Glick, dissenting) at ¶¶ 1-7 <https://www.ferc.gov/sites/default/files/2021-01/C-7-CP16-454-002.pdf>. Although the reviewing court did not address this issue, it shows the importance of paying attention to dissents to understand where FERC may be headed as the composition of FERC changes.

³⁰⁰ 15 U.S.C. § 717r(a).

³⁰¹ *Id.* at (a) & (b).

³⁰² “Recent Changes in Commission Rehearing Practice - Item A-3.” FERC Staff presentation. (Sept. 17, 2020) <https://www.ferc.gov/news-events/news/recent-changes-commission-rehearing-practice-item-3>.

After rehearing is concluded, FERC may authorize the applicant to proceed with construction while an appeal in federal court is pending.³⁰³ If there is a potential that construction may move forward while an appeal is pending, advocates should consult experienced litigation attorneys to determine if a court order halting construction is necessary.

Where do I litigate after FERC issues its order on rehearing?

Appeals can be brought in the local Circuit Court of Appeals (which is likely the Fifth Circuit for Louisiana and Texas facilities if the applicant has its principal place of business in those states) or in the D.C. Circuit.³⁰⁴ It is imperative that an advocate seek the advice of experienced litigation counsel after the rehearing order issues, because when and where (either the D.C. Circuit or the regional federal circuit court) is best to file an appeal will vary based on the project. This process and decision are specific to each project and is beyond the scope of this guide.

What issues should I raise on appeal and what is the court's role?

Understanding which issues to litigate requires a knowledge of judicial precedent—what previous courts have said about FERC and the environmental review process—and a careful examination of the facts raised in the specific project being challenged. If you are at this stage and have not done so yet you should consult with an advocate experienced in litigating FERC certifications for LNG terminals. Remember, litigation decisions made for one terminal can impact all future terminals.

There are two main standards of review to keep in mind, depending if your argument is based on a flaw in the NEPA analysis or with the NGA's public interest review. (Other laws also may be relevant—consult with an experienced attorney to not miss issues for the particular project!)

In August 2021, the D.C. Circuit described its role in reviewing an agency's execution of NEPA as:

*We review an agency's NEPA analysis under the arbitrary and capricious standard of the APA [the Administrative Procedures Act]. Nevada v. Dep't of Energy, 457 F.3d 78, 87 (D.C. Cir. 2006). Our mandate is not to "flyspeck" an agency's environmental analysis," id. at 93, but "simply to ensure that the agency has adequately considered and disclosed the environmental impact of its actions," WildEarth Guardians v. Jewell, 738 F.3d 298, 308 (D.C. Cir. 2013) (quoting City of Olmsted Falls v. FAA, 292 F.3d 261, 269 (D.C. Cir. 2002)). "Accordingly, we ask whether the agency examined the relevant data and articulated a satisfactory explanation for its action, including a rational connection between the facts found and the choice made." Birkhead v. FERC, 925 F.3d 510, 515 (D.C. Cir. 2019) (per curiam) (internal quotation marks and alterations omitted) (quoting Motor Vehicle Mfrs. Ass'n, Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)). We also ask whether the agency addressed "opposing viewpoints." Nevada, 457 F.3d at 93; cf. 40 C.F.R. § 1502.9(c) ("At appropriate points in the final statement, the agency shall discuss any responsible opposing view that was not adequately discussed in the draft statement and shall indicate the agency's response to the issues raised.").*³⁰⁵

³⁰³ 18 C.F.R. 157.23(2).

³⁰⁴ 15 U.S.C. § 717r(a).

³⁰⁵ *Vecinos para el Bienstar de la Comunidad Costera v. FERC*, No. 20-10453 ("Rio Grande Op.") at 9 (Aug. 3, 2021) [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf) (citing the 2020 CEQ subsection, which was substantively identical to the 1978 version). Attached as App. 2.

This standard of review is slightly different when it comes to a review under the NGA. For example, the “flyspecking” prohibition is NEPA-specific. Under the NGA a court will not supplant its opinion for that of FERC’s, but the court does need to ensure that the public interest review is rational—FERC still may not act in an arbitrary and capricious manner.³⁰⁶ In reviewing a challenge under the NGA’s public interest standard, the D.C. Circuit considers whether FERC acted arbitrarily and capriciously and has described its role and the NGA as follows:

The NGA requires the Commission to determine whether a proposed project comports with the public interest. The NGA’s requirements differ depending on whether the proposed project is an LNG facility or pipeline. The Commission must authorize the construction and operation of a proposed LNG facility unless it determines that the facility “will not be consistent with the public interest.” 15 U.S.C. § 717b(a). By contrast, the Commission may not authorize the construction and operation of a proposed interstate LNG pipeline unless it determines that the pipeline “is or will be required by the present or future public convenience and necessity.” Id. § 717f(e).^[307]

...

*We review the Commission’s orders approving LNG facilities and pipelines [under Sections 3 and 7 of the NGA], like its NEPA analyses, under the arbitrary and capricious standard of the APA. *Minisink Residents for Env’t Pres. & Safety v. FERC*, 762 F.3d 97, 105–106 (D.C. Cir. 2014); *Midcoast Interstate Transmission, Inc. v. FERC*, 198 F.3d 960, 967 (D.C. Cir. 2000). Where the Commission rests a decision, at least in part, on an infirm ground, we will find the decision arbitrary and capricious. *Williams Gas Processing-Gulf Coast Co. v. FERC*, 475 F.3d 319, 330 (D.C. Cir. 2006).³⁰⁸*

Note that the court reviews agency action under the arbitrary-and-capricious standard of the federal Administrative Procedures Act: this applies to action under NEPA and the NGA. As NRDC explained the arbitrary-and-capricious standard.³⁰⁹

When reviewing a Commission action, the relevant inquiry [that a court will make] is whether the Commission has “articulate[d] a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’”³¹⁰ The Commission’s decisions will be reversed where such action is “arbitrary, capricious, an abuse of discretion, or otherwise not

³⁰⁶ The NGA states that “The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive,” which courts recognize as simply another way of stating that review is under the arbitrary-and-capricious standard. See e.g., *Board of W.L. S. Fund v. F.E.R.C.*, 294 F.3d 1317, 1329 (11th Cir. 2002). In 2015 opinion, the D.C. Circuit basically agreed, stating:

“We have previously reviewed the Commission’s interpretation of its authority to issue such a certificate [of public convenience and necessity] by applying the two-step analytical framework of *Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984). See *Okla. Natural Gas Co. v. FERC*, 28 F.3d 1281, 1283-84 (D.C.Cir. 1994); *N. Natural Gas Co. v. FERC*, 827 F.2d 779, 784 (D.C.Cir.1987).

The *Chevron* case describes this arbitrary-and-capricious standard.

³⁰⁷ As the Jordan Cove challengers further explain, “[t]hese analyses require the Commission to balance the public benefits of a project against the adverse consequences, and, with respect to Section 7, to analyze whether the project is ‘needed.’” App. 8 (NRDC Request for Rehearing on the Jordan Cove Energy Project) at 8.

³⁰⁸ *Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1326 (D.C. Cir. 2021).

³⁰⁹ App. 8 (NRDC Request for Rehearing on the Jordan Cove Energy Project) at 2.

³¹⁰ *Motor Vehicle Mfrs. Ass’n, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962)).

in accordance with law.”³¹¹ Agency action is arbitrary and capricious if, for example, the agency “entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.”³¹²

Advocates should not be intimidated by these standards when framing comments—it can be helpful to include these standards **but it is not required for comments** and so should never be a barrier to commenting on environmental documents. However, it is imperative that advocates seeking rehearing or contemplating litigation seek the advice of experienced attorneys so that arguments can be properly presented through these standards of review. The legal landscape changes with every court decision, and thus in-depth litigation advice is beyond the scope of this guide.

Will any of the administrative process be in Spanish (or other non-English language)?

FERC and applicants have historically been resistant to translating any of the major project documents—like Environmental Impact Statements—into any language other than English. Thus far, only minor summary documents or handouts have been translated; translation services are usually available at open houses and public meetings (although sometimes only on request). Sustained activism will be needed to push agencies and applicants to translate substantive decision documents. In the Rio Grande LNG project, for example, FERC justified its decision to not translate EIS documents by the following:

*[I]n an effort to include Spanish language speakers in the NEPA process, Spanish language Project materials were made available to the public during the scoping meeting and public comment meeting held in Port Isabel as described in section 1.3.1 of the final EIS. In addition, a translator was available to assist Spanish language speakers. During the public scoping meeting, very few of the Spanish language materials that were made available were utilized by attendees. **As such, we determined that translation of the draft EIS into Spanish was not necessary.**³¹³*

In other words, FERC has indicated that its policy as to whether it will require EIS documents to be translated is based on the number of Spanish-speaking individuals attending the scoping meeting. This attitude, plus FERC’s new focus on environmental justice issues, indicates that it may finally be possible to build toward a future in which translation of substantive decision documents becomes standard—but it will likely require significant up-front advocacy and a demonstrated need for the services.

What are the opportunities for public engagement during the certification process, and how should I participate?

FERC’s rules and the governing statutes allow for advocate involvement in three main stages—the pre-filing comment period, the application comment period, and the appeal, if the project is certified.³¹⁴ Participation in the comment periods and intervention in the process before certification is a necessary prerequisite to any appeal. Issues to be appealed must have been raised at the right

³¹¹ 5 U.S.C. § 706(2)(A); 15 U.S.C. § 717r (providing for judicial review of Commission orders).

³¹² E.g., *Motor Vehicle Mfrs. Ass’n*, 463 U.S. 29 at 43 (quoting *Burlington*, 371 U.S. at 168).

³¹³ Rio Grande LNG Project: Final Environmental Impact Statement: Volume III, Part 3 at 3.

<https://www.ferc.gov/sites/default/files/2020-05/FEIS-volume-III-part-3.pdf> (emphasis added).

³¹⁴ See FERC Flowchart above at Section 4.C.1 (light green “Public Input Opportunities”); also available at “Pre-Filing Environmental Review Process.” FERC. (May 29, 2020) <https://www.ferc.gov/media/pre-filing-environmental-review-process>.

time during the comment period—otherwise, they may not be argued in court!³¹⁵ The following addresses some of the questions advocates may have about the mechanics of participating in the FERC certification process. Advocates may also find FERC’s online how-to-guides helpful for these and other questions: <https://www.ferc.gov/how-guides>.

Does FERC have an online portal for the projects it is reviewing?

Yes. FERC has created a single entry point for all of its electronic access applications, which it calls “FERC Online”: <https://ferconline.ferc.gov/FERCOOnline.aspx>.

From this site, advocates can subscribe to (i.e., get email alerts for) dockets, file html comments and pdf comments, and search FERC’s eLibrary. Note that FERC’s online interface may not work as well on certain browsers, like Firefox.

How do I find the FERC docket for a specific LNG facility?

The direct online portal to FERC’s docketing system is found here: <https://elibrary.ferc.gov/eLibrary/search>. As with FERC Online, advocates should take the time early on to become familiar with this eLibrary system as it is the main portal for staying up-to-date with FERC’s process on each project.

Searches of FERC’s docketing system can be conducted in a variety of ways; using the docket number is typically easiest. If you don’t know the docket number, input the facility name into the “Keyword Search”; that should pull up documents filed for that facility.

All publicly available documents related to the proposed terminal should be available on the docket for the specific project, including EIS documents and even sometimes notices or permits issued by other federal agencies. In addition to the docket for each facility, FERC also publishes its environmental documents (draft and final EIS, EAs) here: <https://www.ferc.gov/industries-data/natural-gas/environmental-overview/environmental-documents-2021>. It can be helpful to use this site to find the environmental documents filed for other facilities—sometimes useful comparisons can be made across projects.

Why can’t I access all of the documents on the docket?

FERC requests that applicants minimize the amount of information that is not publicly available,³¹⁶ but some documents may not be publicly accessible because they contain *privileged*³¹⁷ or *Critical Energy/Electric Infrastructure Information* (CEII).³¹⁸

Privileged information may be found in documents that contain a manufacturers’ proprietary or business confidential design information.³¹⁹ Reports describing and locating cultural resources near the facility also may be privileged pursuant to the National Historic Preservation Act.

CEII is specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure that (1) relates details about the production, generation, transmission, or distribution of energy, (2) could be useful to a person planning an attack on critical infrastructure; (3)

³¹⁵ In other words, there is an exhaustion requirement.

³¹⁶ “CEII Filing Guide.” FERC. (Aug. 7, 2020) <https://www.ferc.gov/ceii-filing-guide>.

³¹⁷ 18 C.F.R. § 388.112 (governs privileged treatment of documents submitted to FERC).

³¹⁸ 18 C.F.R § 388.113 (governs CEII treatment of documents submitted to FERC).

³¹⁹ See “Filing Natural Gas Pipeline Flow Diagrams and Associated Information.” FERC. (Aug. 7, 2020). <https://www.ferc.gov/filing-natural-gas-pipeline-flow-diagrams-and-associated-information>.

is exempt from mandatory disclosure under the Freedom of Information Act; and (4) gives strategic information beyond the location of the critical infrastructure. CEII may include specific engineering details of a project. FERC's examples of CEII for LNG facilities includes: "detailed piping and instrumentation diagrams, equipment and tank detail drawings, detailed hazard detection and control location specifics, and some sections of Emergency Response Plans."³²⁰ Some CEII information may be made available to the public or advocates that have intervened in the FERC process if they sign FERC's non-disclosure agreement and follow the steps outlined in 18 C.F.R. 388.113(g)(4).³²¹ However, this may set off a lengthy administrative and judicial appeals process.³²² Advocates should review all publicly available documents as they are filed to see if information appears to be missing or if CEII information would be useful so that a request for this information can be made early in the application and certification process with sufficient time for an appeal.

Note that in FERC's opinion: "design assumptions, engineering and operating philosophies, most design specifications of equipment and pipelines, and narrative descriptions of pipeline operations should be publicly available,"³²³ as well as general descriptions of hazard detection and control.³²⁴ All in all, the applicant and FERC should provide sufficient information to the public such that FERC's certification of the project and compliance with all environmental laws can be reviewed.

How do I receive automatic notifications of filings for the project?

Advocates challenging a facility should sign up to receive automatic email notifications any time a new document is filed with FERC. Subscribing to electronic notifications can be done here: <https://ferconline.ferc.gov/eSubscription.aspx>.

Note that subscribing is a passive action different from intervening or filing a comment. Advocates that want to challenge a project must intervene in the case.

How do I learn about open houses and stakeholder meetings during pre-filing?

The best way to learn about open houses and stakeholder meetings is to subscribe to the project's pre-filing docket. Because these sessions are applicant-led, there is no standard format for them. However, FERC publishes guidelines for applicants on best practices for engaging with the public, which can be helpful in understanding what will be discussed and what good outreach should look like. FERC's July 2015 brochure, "Suggested Best Practices for Industry Outreach Programs to Stakeholders," was developed in response to the lack of good stakeholder outreach programs from the many applicants.³²⁵ This document states FERC's position on the type, quantity, and tenor of outreach that applicants for LNG facilities should be doing at each stage of the FERC process. Advocates confronted with reticent applicants can use this document to motivate applicants to be more open and flexible regarding community outreach. Note that it's possible that as the Office of Public Participation becomes more established this guidance will be updated.

³²⁰ "CEII Filing Guide for Resource Reports 1, 11 and 13." FERC. (Aug. 7, 2020) <https://www.ferc.gov/ceii-filing-guide-resource-reports-1-11-and-13>.

³²¹ 18 C.F.R. 388.113(g)(4) (describing how intervenors may request access to CEII).

³²² See 18 C.F.R. 388.113(g)(4) (allowing any person to object to disclosure); 18 C.F.R. 388.113(j) (describing how to appeal CEII designations to FERC and a federal court, including time limits).

³²³ "Filing Natural Gas Pipeline Flow Diagrams and Associated Information." FERC. (Aug. 7, 2020) <https://www.ferc.gov/filing-natural-gas-pipeline-flow-diagrams-and-associated-information>.

³²⁴ "CEII Filing Guide for Resource Reports 1, 11 and 13." FERC. (Aug. 7, 2020) <https://www.ferc.gov/ceii-filing-guide-resource-reports-1-11-and-13>.

³²⁵ "Suggested Best Practices for Industry Outreach Programs to Stakeholders." FERC. at 4. (July 2015) <https://www.ferc.gov/sites/default/files/2020-04/stakeholder-brochure.pdf>.

When and why should I intervene in FERC proceedings?

Intervention is the formal process for becoming a participant in FERC proceedings—it will allow you to receive updates and documents and is a necessary prerequisite to legally challenge the FERC proceeding. Intervening is simultaneously the most basic threshold step in challenging an LNG project and the step with the biggest potential pitfall—even though the actual paperwork needed to intervene is quite simple! That pitfall is making sure your intervention will not be ruled untimely.³²⁶

Specifically, for all projects, there is an **initial window** in which advocates can timely intervene. This initial window is set in FERC’s public notice of the application, which will set the deadline for filing comments and motions to intervene.³²⁷ (Intervention is not possible during the pre-filing process, because there has been no official application for the project yet.) After the deadline in the notice of application passes, this initial window closes. Subsequent motions-to-intervene will be treated as untimely—unless they are filed within the *second window* for intervention that may open.

A **second window** for timely intervention opens if a DEIS issues for the project. The deadline for when this second window closes will be stated in FERC’s notice of the DEIS’s availability.³²⁸ Any motion to intervene filed after that second deadline closes will be untimely, and FERC has complete discretion whether to grant the latecomer intervenor status—or not. Note that not all LNG applications will require DEIS documents—although all large projects should. For example, it might be that an expansion of a terminal is minor enough that FERC decides that it only merits an EA. There is no second window for intervention for EA-only projects. Therefore, if at all possible, intervene as soon as you learn of the project—and during the initial window if it is still open. If it is not, do not wait for a second window to file; if one opens, simply refile your intervention motion. For an example intervention motion

filed by NRDC during the second window created when the Jordan Cove DEIS issued, see Appendix 4 (pages 1-4 are the motion to intervene; the remainder of the filing are comments on the DEIS).

BEWARE THE INTERVENTION “DONUT HOLE”!

If you miss the initial intervention window created by the Notice of Application, then your intervention request is considered **untimely** and at risk of being denied—until a DEIS issues, during which a motion would be **timely** once again. If you decide to file a motion for untimely intervention in the donut hole, you should also file a renewed motion for timely intervention during the DEIS comment period.

Advocates are working on persuading FERC to remove this barrier to public participation, but until FERC changes its policies, advocates will need to pay close attention to the deadlines to avoid forfeiting all of their legal rights!

³²⁶ See Giannetti, Gillian. “FERC May Stifle Public Voice on New Gas Pipelines.” NRDC. (March 26, 2018)

<https://www.nrdc.org/experts/gillian-giannetti/ferc-may-stifle-public-voice-new-gas-pipelines> (describing the barriers to public participation created by FERC’s current rules on timely intervention).

³²⁷ Advocates should adhere to the deadlines set in any such public notice instead of following the general rule-of-thumbs stated in this guide.

³²⁸ The intervention deadline should coincide with the comment deadline, as 18 C.F.R. § 380.10(a)(1) states that “Any person who files a motion to intervene on the basis of a draft environmental impact statement will be deemed to have filed a timely motion, in accordance with § 385.214 [FERC’s general rules on intervention, found at 18 C.F.R. §385.214], as long as the motion is filed within the comment period for the draft environmental impact statement.”

To reiterate, motions-to-intervene that are filed **after** the initial window closes, but **before** the second window opens—i.e., those that fall within the “donut hole”—will be treated as **untimely**.³²⁹ FERC has complete discretion to deny such an untimely request to intervene, which robs the would-be-intervenor of the right to appeal its decision. Advocates that have filed a motion to intervene in the “donut hole” should file a renewed motion to intervene as soon as the second window reopens.

As for the **benefits** of intervention, intervention allows individuals and organizations to become participants in a proceeding and have the right to request rehearing of FERC’s orders and seek relief from FERC’s final agency actions in the U.S. Circuit Courts of Appeals. Intervention is essential in preserving your legal right to challenge a project. It also is required for landowners to challenge a taking of their property—recall that unlike terminal projects, pipeline projects allow developers to use eminent domain.³³⁰ Thus advocates who do not timely intervene during the period specified by FERC may lose the right to request rehearing, appeal the project’s certification, and stop a taking.³³¹

If no one opposes a **timely** motion to intervene within 15 days after the intervention motion is filed, the would-be intervenor automatically becomes an intervenor unless FERC finds the motion defective for not including the information required by 18 C.F.R. § 385.214(b) (see Section 4.D.7). **Untimely** interventions are subject **entirely** to FERC’s discretion, and the unfortunate untimely would-be intervenor may not learn that their intervention was unsuccessful until the FERC order issues!

EVEN LANDOWNERS MUST INTERVENE TO PROTECT THEIR RIGHTS

Simply being an affected landowner **does not** grant party status—and to challenge a taking, you must be a party to the FERC action. So make sure to timely intervene! This is often more relevant in the context of a pipeline challenge, but the premise that landowners are not automatically made parties is true for terminals as well.

Intervenors also are added to the “Service List.” Intervenors on the Service List will receive the applicant’s filings, FERC documents related to the case, and materials filed by other interested parties. Note that non-intervenors may still file comments on the proposed project and subscribe to receive automatic notices of new filings in the FERC docket, but they do not have the right to request rehearing or to appeal certifications.

Also note that as a practical matter, the FERC docketing system occasionally experiences technical difficulties. While FERC has the discretion to consider untimely motions to intervene, an advocate

³²⁹ FERC has discretion to allow untimely interventions—and may be becoming more forgiving under Chairman Glick’s leadership—but advocates should never rely on FERC’s discretion to preserve their rights. Wilson, Miranda & Vasquez, Christian. “FERC meeting: Gas fights, EJ shifts and a ‘legal weapon.’” E&E News. (Jan. 21, 2022) <https://www.eenews.net/articles/ferc-meeting-gas-fights-ej-shifts-and-a-legal-weapon/>.

³³⁰ Giannetti, *Stifle Public Voice*, *supra* note 326; See 15 U.S.C. § 717f(h) (“When any holder of a certificate of public convenience and necessity cannot acquire by contract, or is unable to agree with the owner of property to the compensation to be paid for, the necessary right-of-way to construct, operate, and maintain a pipe line or pipe lines for the transportation of natural gas, and the necessary land or other property, in addition to right-of-way, for the location of compressor stations, pressure apparatus, or other stations or equipment necessary to the proper operation of such pipe line or pipe lines, **it may acquire the same by the exercise of the right of eminent domain.**”) (emphasis added). There are calls to make landowners automatic parties, but as of January 2022, that is not yet the case.

³³¹ FERC allows out-of-time motions to intervene, but these will not be granted unless good cause can be shown why the untimely intervention motion should be granted. See 18 C.F.R. § 385.214(b)(3).

should file a motion to intervene well before it is due, if possible. This avoids wasting resources fighting over procedural issues and ensures that an advocate’s intervention rights are preserved.³³² Do not wait until the last possible moment to intervene!

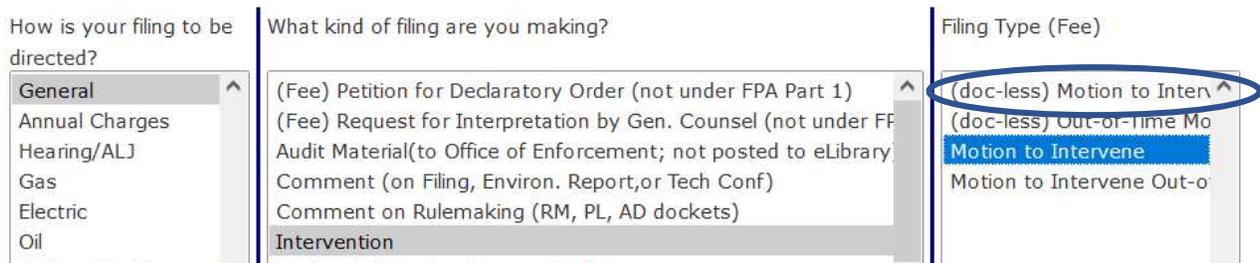
How do I intervene in the proceedings?

Intervention in a proceeding is fairly straightforward. FERC publishes a step-by-step guide with screenshots and detailed instructions on the mechanics of intervention here: <https://www.ferc.gov/how-intervene>. Though the steps are summarized below, please be aware that the procedures may change after this guide’s publication.

An intervention motion may be sent to FERC via the U.S. Postal Service, but FERC strongly suggests that such motion be filed through its online system. In general, once a would-be-intervenor has registered for FERC’s online system (eRegister here: <https://ferconline.ferc.gov/eRegistration.aspx>), a motion to intervene can be filled electronically through FERC’s eFiling system here: <https://ferconline.ferc.gov/eFiling.aspx>.

An intervention motion may be filed as “doc-less” or as a pdf by selecting the filing type below (the pdf option for a timely motion is highlighted below; for a doc-less timely motion the circled option should be selected).

Filing Type



Note that a doc-less motion does not allow you to include comments, attachments, or other requests—those can be filed separately. If you want to include comments or attachments, choose the pdf option highlighted above. A doc-less motion is the easiest (and therefore recommended) option for intervening because you do not need to prepare a separate document; you simply fill out a text box during the filing process with sufficient information to show intervenor status as required by FERC’s rules (see below).

The required contents of an intervention motion are specified at 18 C.F.R. § 385.214. A timely would-be-intervenor must state their position on the proceedings, identify why they have a right to participate, describe the interest that will be affected if the project is certified, and describe how their participation is in the public interest.³³³ The intervention motion need not present arguments or identify problems with the project or NEPA documents like one might include in comments—indeed, a simpler motion is often better, as the effort to create a detailed document could be better saved for the comments document. FERC’s guide to filing a doc-less intervention motion suggests

³³² Even if the overdue filing is the fault of FERC’s docketing system being offline, and not the advocate’s fault, it may be difficult to have overdue filings accepted. Out-of-time motions to intervene are sometimes accepted, but an advocate should avoid having to file out-of-time by filing as soon as the application is submitted.

³³³ 18 C.F.R. § 385.214(b).

including the following information (untimely motions will also need to show good cause under 18 C.F.R. § 385.214(b)(3) and (d)(1)).³³⁴

Document-less Intervention Description

Type in this box the reason you filing to intervene in a proceeding. It should include:

- Your status (for example are you a landowner, organization, party)
- Describe how the project has a direct or substantial interest to you or your organization and that the determination of the project may have an affect on you or your organization.
- Describe how filing for intervention will not allow you or your party to be represented adequately unless allowed to participate fully in the proceedings.
- Cite to the Commission’s regulations pursuant to Section 214, C.F.R. 385.214 to motion to intervene.
- Write full name or organization and contact information (address, email, phone number) that you are comfortable having in the public record.

Characters remaining:

For any issues regarding FERC Online, please contact [FERC Online Support](#) or call Local: 202-502-6652 | Toll-free: 866-208-3676. Please include a current mail address, telephone number, and e-mail address.

An example of a doc-less motion to intervene that was filled in the Jordan Cove challenge by the Center for Biological Diversity is attached in Appendix 5. A sample pdf intervention motion is provided in Appendix 6 (WELC’s pdf motion to intervene in the Jordan Cove case); it need not be a lengthy document (see also Appendix 7 (Sierra Club’s pdf motion to intervene in the Jordan Cove case)). An example of a pdf Jordan Cove intervention motion that was combined with comments is found in Appendix 4 (NRDC’s motion and comments during the DEIS comment period).

An intervention motion must be served on the applicant(s) and subsequent submissions by an intervenor must be served on all parties to the proceeding.³³⁵ “Service” means sending a copy of any document that you file to all other parties on the service list. For parties that have provided email addresses in FERC’s online system, service can be achieved by simply forwarding the “Acceptance for Filing” to each party’s email address. Alternatively, and for parties for which an email address is not provided, service can be achieved by mailing a copy of the filing to the party via first class mail. All filings must include a certificate of service, the format of which can be found in Rule 2010, 18 C.F.R. § 385.2010 (e). The Office of Public Participation may be a resource for any questions, otherwise consult with a legal practitioner to ensure that all proper steps in service have been made. Several “how-to” intervene questions are also answered on FERC’s FAQ page: <https://www.ferc.gov/frequently-asked-questions-faqs>.

³³⁴ “How to Intervene.” FERC. (Aug. 13, 2021). <https://www.ferc.gov/how-intervene>.

³³⁵ Contact information for parties can be downloaded from the service list at the eService link on FERC Online: <https://www.ferc.gov/docs-filing/ferconline.asp>.

When and why should I file comments?

If an issue wasn't raised by an advocate in the comment periods, usually it can't be raised in litigation.³³⁶ This "exhaustion" of issues requirement means that it is imperative that advocates raise all issues that might be future grounds for litigation in a timely manner during the comment periods, either as written comments or at official public comment meetings held by FERC.

NEPA regulations also establish certain requirements for the form and substance of comments. To ensure that FERC will respond to comments, an advocate should adhere as closely as possible to these requirements. In particular, comments on an environmental impact statement or on a proposed action should:³³⁷

- be specific;
- address either the adequacy of the statement or the merits of the alternatives discussed or both;
- provide as much detail as necessary to meaningfully and fully inform the agency of the commenter's position;
- explain why the issues raised are important to the consideration of potential environmental impacts and alternatives to the proposed action, as well as economic and employment impacts and other impacts affecting the quality of the human environment;
- reference the corresponding section or page number of the draft environmental impact statement, propose specific changes to those parts of the statement, where possible, and include or describe the data sources and methodologies supporting the proposed changes.

FERC accepts both scoping comments³³⁸ and "regular" comments³³⁹ during the pre-filing period. There is no requirement to file such "regular" comments during pre-filing. But an advocate might do so if the information the applicant has been providing to FERC in response to FERC's information requests is incorrect or incomplete. Any of these "regular" comments made during the pre-filing period that are not addressed by the applicant or FERC should be filed again once the application is filed; this demonstrates that the concerns raised during pre-filing remain. Comments and objections on the draft EIS should be raised within the comment period on the draft EIS provided by the agency, consistent with the 2020 version of 40 C.F.R. § 1506.11.³⁴⁰ The length of this comment period will be published in the docket once the draft EIS is available. If FERC also requests comments on the final EIS before the final decision (consistent with 40 C.F.R. § 1503.1(b) (2020)³⁴¹), comments and objections should be raised within the comment period provided by the agency. Even if FERC does

³³⁶ 40 C.F.R. § 1500.3(b); see also *id.* § 1503.3(a) ("Comments and objections of any kind not provided within the comment period(s) shall be considered unexhausted and forfeited, consistent with § 1500.3(b) of this chapter.") It **may** be possible to raise an issue in litigation that was only raised by someone else during the comment period, but you must have personally raised that issue during your rehearing request. Consult an experienced attorney to be sure.

³³⁷ 40 C.F.R. § 1503.3(a) (2020) (the bulleted list is almost verbatim from this section of CEQ's regulations). 40 C.F.R. § 1503.3 (1978) provided less specificity. On this topic, advocates are encouraged to follow the 2020 regulations until they are replaced.

³³⁸ *I.e.*, comments identifying issues that the environmental review should explore without necessarily taking a position on whether the proposed action is good or bad (see Section 4.C.9).

³³⁹ *I.e.*, comments that take a position on the proposed action or identifying substantive flaws in an environmental document, which are the vast majority of comments filed in any challenge covered in this guide. The qualifier "regular" is used in this section of the guide just for clarity.

³⁴⁰ In the 1978 regulations, timing was discussed in 40 C.F.R. § 1506.10 (1978) and is largely similar.

³⁴¹ The 1978 regulations are similar, see 40 C.F.R. § 1503.1 (1978); but does not include the requirement that comments can be submitted electronically "with reasonable measures to ensure the comment process is accessible to affected persons." 40 C.F.R. § 1503.1(c) (2020).

not request comments on the final EIS, an advocate should point out any issues that the final EIS has not resolved. Note that you are not limited to commenting on an EIS and its sufficiency under NEPA—you can and should challenge anything that is concerning about the project, even if it falls outside NEPA’s bounds.

If you miss the comment deadline, or additional information comes to light after the comment deadline, it is important to file those comments anyway. FERC has in the past exercised its discretion to consider some overdue comments and informs applicants that it does its best to consider all comments submitted, so an advocate that inadvertently misses a deadline for comment should file as soon as possible.

How do I file comments?

There are four possible ways to file comments. For lengthy comments, the second method is recommended.

1. You can file your comments electronically using the eComment feature on FERC’s website (www.ferc.gov) under the link to Documents and Filings. The eComment system can also be found at FERC Online through this link: <https://ferconline.ferc.gov/QuickComment.aspx>. This is an easy method for submitting brief, text-only comments on the Project. This system cannot accept comments in pdf format or with graphics, however.
2. For comments that are not simply text, you can file your comments electronically using the eFiling feature on the Commission’s website (www.ferc.gov) under the link to Documents and Filings. The eFiling system can also be found at FERC Online through this link: <https://ferconline.ferc.gov/eFiling.aspx>. With eFiling, you can provide comments in a variety of formats by attaching them as a file with your submission. New eFiling users must first create an account by clicking on eRegister on FERC Online. Once you are registered and begin the eFiling process, make the following selections so that your comment is properly received:

Filing Type

How is your filing to be directed?	What kind of filing are you making?	Filing Type (Fee)
<ul style="list-style-type: none"> General Annual Charges Hearing/ALJ Gas Electric Oil 	<ul style="list-style-type: none"> (Fee) Petition for Declaratory Order (not under FPA Part 1) (Fee) Request for Interpretation by Gen. Counsel (not under FP Audit Material(to Office of Enforcement; not posted to eLibrary) Comment (on Filing, Environ. Report, or Tech Conf) Comment on Rulemaking (RM, PL, AD dockets) Intervention 	<ul style="list-style-type: none"> Comment

3. You can file a paper copy of your comments by mailing. Be sure to reference the Project docket number and then send to: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Room 1A, Washington, DC 20426.
4. You can attend a public meeting and give oral comments, which will be transcribed by a court reporter and made part of the official record.

Note that FERC encourages commentors who are having difficulty with filing to reach out to FERC staff at (866) 208-3676 or FercOnlineSupport@ferc.gov. The Office of Public Participation may also be able to provide help if it is not too close to the filing deadline for comments.

How do I file a request for rehearing?

Filing a request for rehearing is done through the same online eFiling portal as filing a motion to intervene or a comment. As discussed in Section 4.C.19, a request for rehearing must be filed before

Filing Type

How is your filing to be directed?	What kind of filing are you making?	Filing Type (Fee)
<ul style="list-style-type: none"> General Annual Charges Hearing/ALJ Gas Electric 	<ul style="list-style-type: none"> Motion (other than Intervention) Petition for Declaratory Order under FPA Part 1 Protest Request for Interpretation by Gen. Counsel under FPA Part 1 Request for Rehearing 	<ul style="list-style-type: none"> Request for Rehearing

an advocate can file a lawsuit challenging the certification—and an advocate must have timely intervened in order to request rehearing (see Section 4.D.6). A request for rehearing can be filed electronically through FERC’s eFiling system here: <https://ferconline.ferc.gov/eFiling.aspx> and by selecting the filing types as follows:

What major issues should I look for and raise in comments?

Although each facility is different and there is no substitute for a thorough investigation of the project and a deep-dive reading of the filings and environmental documents, there are many similar issues that recur across projects. The following section highlights some of these issues, as well as some of logistical and substantive point to keep in mind when commenting.

First, NEPA requires that FERC take a “**hard look**” at the impacts of a project.³⁴² This is more than a cursory recitation of the impacts. If it seems that FERC has not really analyzed the impacts of a project, including the best available science, point this out in comments as FERC failing in its duties to take a “hard look” at the project. When commenting, it makes sense to raise every issue that an agency should have considered but didn’t; however, keep in mind that NEPA regulations state that “minor, non-substantive errors that have no effect on agency decision making shall be considered harmless and shall not invalidate an agency action.”³⁴³ This rule comes into play more during litigation, but is a good reminder that advocates should focus on the biggest and most obvious flaws in FERC’s analysis.

The typical way the NGA can be leveraged in comments is through its requirement that the project (both the terminal and pipeline) be in the **public interest** and be **needed** (for the pipeline). Question whether FERC can find that a project be in the public interest without considering the environmental harms of a project. If FERC does not clearly consider these harms before making its public-interest finding under NGA, point this out. Arguments about whether a pipeline is needed is beyond the scope

³⁴² The purpose of the EIS is to “force[] the agency to take a ‘hard look’ at the environmental consequences of its actions, including alternatives to its proposed course,” and to “ensure[] that these environmental consequences, and the agency’s consideration of them, are disclosed to the public.” *Sierra Club v. FERC*, 867 F.3d 1357, 1367 (D.C. Cir. 2017).

³⁴³ 40 C.F.R. 1500.3(d).

of this guide but can be found in challenges brought on rehearing against Jordan Cove (App. 8), Rio Grande LNG (App. 9), and any other project involving a pipeline.

Don't forget that you can raise issues beyond NEPA and the NGA. Is there some other federal law that might be violated, especially one another agency is responsible for? Raise those issues too.

Also, anywhere FERC relies on a plan, report or study that has not been publicly released, that is a place to highlight FERC's failure to allow meaningful public participation (a requirement under NEPA) and evidence that FERC has not conducted a fulsome review of the public interest (a requirement under the NGA). FERC should disclose which reports and studies have not been released prior to its Certificate order; if not mentioned elsewhere, this should at least be clear from the "Environmental Conditions" appendix to the Order.

As for **logistical matters**, all evidence and studies must be attached as exhibits to the comments. Do not rely on a URL citation; that link may be defunct by the time FERC and a review court examines the documents. When possible, mimic the font and styling that FERC and the applicant use in submitting comments (typically Times New Roman, 12 pt). Do not underestimate the subliminal forces at play when agencies and courts decide how much weight to accord advocate arguments.

Advocates will need to rely heavily on the draft and final environmental documents when commenting. But that should not be the only place advocates look to understand the project's potential impacts. Talk to community members and organizers to identify issues. Research online to see what the applicant has said about the project. Look at statements the applicant makes to investors. Check what the applicant has said in filings with other agencies. Investigate all the actors. Who is receiving the gas? What have they been told? Where is the gas coming from? Does FERC know about that? Independent and in-depth research at the beginning can help formulate solid scoping comments for FERC to request more information from the applicant and can help illuminate flaws in the assumptions underlying the agency's environmental impact assessment.

Some of the **substantive issues** to raise in comments fall into the categories set out in the resource reports and in the EIS documents (see Sections 4.B.4 and 4.C.6), but some are overarching issues that might be more easily addressed in their own section. The following sections address all of these:

- project purpose;
- reasonable alternatives;
- mitigation measures;
- public interest;
- geological resources;
- soils and sediments;
- water resources and wetlands;
- vegetation;
- wildlife and aquatic resources;
- threatened, endangered and other special status species;
- land use;
- recreation and visual resources;
- socioeconomics;
- environmental justice;
- transportation;
- cultural resources;
- air quality and noise;
- climate change;
- reliability and safety;
- new and changed circumstances

In addition, in each of the following sections, experts are suggested when appropriate.

PRACTICE TIP: EXPERTS FOR THE FERC CHALLENGE

Experts can be very helpful in drafting and supporting comments. In particular, consider identifying and retaining the help of these experts for your FERC challenge as soon as possible:

- Economics expert to review the socioeconomic sections of environmental documents (including industry’s effects on job creation and real property values); ideally this person will have experience as an ecological economist, to quantify the lost value from replacing wetlands and other natural areas with industry;
- Air quality expert with experience in air modeling, especially in modelling coastal regions, as the ocean often impacts the air flow and currents that disperse pollutants in a different manner than if the project was located inland.

If funds permit, also consider:

- An industrial safety expert knowledgeable in reliability and safety issues related to vessels as well as terrestrial industrial sites;
- A wetlands delineation expert that can help identify wetlands on site and impacts to those ecological systems. This expert would also be useful in challenging Corps permits.

Project purpose

An EIS must “briefly specify the underlying purpose and need for the proposed action.”³⁴⁴ When authorizing a project like an LNG terminal, CEQ’s 2020 regulations directed agencies to “base the purpose and need on the goals of the applicant and the agency’s authority”—a rigid requirement that should be removed in the rewrite of regulations.³⁴⁵ Getting the purpose and need statement right is critical to ensuring a legally sufficient environmental analysis under NEPA, as the purpose and need statement dictates the range of “reasonable” alternatives that an agency must consider.³⁴⁶

The project purpose should be recited in the introductory sections of the DEIS, EIS, and Certificate Order. Other agencies typically defer to FERC’s interpretation of a project’s purpose, which in turn defers to the applicant. If that appears to be the case, scrutinize the project purpose. If FERC has not done its own assessment of the project purpose (which it historically has not done), that can be an error for failing to take a “hard look” at this aspect of NEPA. If FERC defines (or accepts) a project definition that is so narrow as to render the project a foregone conclusion under NEPA, that also is an

³⁴⁴ 40 C.F.R. § 1502.13 (2020). The 1978 regulations clarified that defining the purpose was for the alternatives analysis—the 2020 regulations omitted this language. See 40 C.F.R. § 1502.13 (1978).

³⁴⁵ 40 C.F.R. § 1502.13. The 2020 regulations directed agencies to base the purpose and need on the applicant’s goals and agency’s authority; this directive is omitted from the 1978 regulations, which left more discretion to the agency to define purpose. 40 C.F.R. § 1502.13 (1978). The Biden Administration has indicated that it will return to the 1978 version and not hamper agencies in defining a project’s purpose. “CEQ Proposes to Restore Basic Community Safeguards during Federal Environmental Reviews.” White House Press Release. (Oct. 6, 2021) <https://www.whitehouse.gov/ceq/news-updates/2021/10/06/ceq-proposes-to-restore-basic-community-safeguards-during-federal-environmental-reviews/>.

³⁴⁶ *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991).

error. A too-narrow definition transforms the alternatives analysis into a “check the box” exercise, instead of a thoughtful and meaningful review as NEPA requires.

There is a lot of caselaw about project purpose under NEPA. For advocates who are submitting comments and are not yet in litigation, it can be helpful to review the comments other advocates have made about project purpose, even if the facility is in a different part of the country (with a different circuit court).³⁴⁷ Arguments about project purpose made during litigation should be drafted in conjunction with an attorney experienced in litigating NEPA issues.

Reasonable alternatives (18 C.F.R. 380.12(l), Resource Report 10))

Identification of a project’s purpose is centrally relevant to the array of potential that FERC must consider in its reasonable alternatives analysis. Under CEQ’s 1978 regulations, NEPA requires agencies to “[r]igorously explore and objectively evaluate all reasonable alternatives,” including “the alternative of no action.”³⁴⁸ CEQ’s 1978 regulations stated that the alternatives analysis “is the heart” of an EIS, and “should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.”³⁴⁹ This language is omitted in the 2020 version, which allows for a less rigorous alternatives analysis, but the Biden Administration has indicated that it plans on restoring NEPA’s alternatives analysis to what it was in the 1978 regulations.³⁵⁰ Unless an attorney informs them otherwise, advocates should be on solid legal ground using the 1978 language until revised regulations are released.

NEPA requires a “detailed statement” of “alternatives to the proposed action.”³⁵¹ The purpose of this section is “to insist that no major federal project should be undertaken without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means.”³⁵² Even if an alternative wouldn’t fall within FERC’s jurisdiction, under the 1978 regulations it may need to be considered if it is reasonable.³⁵³

In the past, FERC has used three criteria to guide its alternatives analysis: (1) whether an alternative meets the stated purpose of the project; (2) whether an alternative is technically and economically feasible and practical; and (3) whether an alternative offers a “significant environmental advantage” over the proposed action.³⁵⁴ If FERC has improperly defined the project purpose, it will necessarily have not conducted a reasonable alternatives analysis.

³⁴⁷ E.g., see App. 8 (Jordan Cove Rehearing Request) at 46-48 (describing project purpose).

³⁴⁸ 40 C.F.R. § 1502.14 (1978).

³⁴⁹ 40 C.F.R. § 1502.14 (1978).

³⁵⁰ “CEQ Proposes to Restore Basic Community Safeguards during Federal Environmental Reviews.” White House Press Release. (Oct. 6, 2021) <https://www.whitehouse.gov/ceq/news-updates/2021/10/06/ceq-proposes-to-restore-basic-community-safeguards-during-federal-environmental-reviews/>.

³⁵¹ 42 U.S.C. § 4332(2)(c).

³⁵² *Env’tl. Def. Fund v. U.S. Corps of Eng’rs*, 492 F.2d 1123, 1135 (5th Cir. 1974); see also *Calvert Cliffs’ Coordinating Comm., Inc. v. U.S. Atomic Energy Comm’n*, 449 F.2d 1109, 1114 (D.C. Cir. 1971) (the alternatives requirement “seeks to ensure that each agency decision maker has before him and takes into proper account all possible approaches to a particular project (including total abandonment of the project) which would alter the environmental impact”).

³⁵³ 40 C.F.R. § 1502.14(c) (1978). The 2020 regulations omitted this requirement, but it could be reincorporated in the rewrite.

³⁵⁴ This three-factor evaluation criteria is recited in FERC’s EIS documents as guiding the alternatives analysis. See, e.g., Gulf LNG Liquefaction Project FEIS, 3-1 (April 2019) <https://www.energy.gov/sites/prod/files/2019/04/f62/final-eis-0504-gulf-lng-2019-04-chps-3-5.pdf>.

Another issue that may arise related to project purpose and reasonable alternatives is when the applicant changes the proposed project in a way that conflicts with its previous definition of the project's purpose. This was an issue with the Rio Grande LNG project, which had defined its purpose to include exporting a specific quantity of LNG. Right before the project was certified, the applicant revealed that it could build a smaller facility and still fulfill that purpose.³⁵⁵ Advocates argued that this late change showed that FERC should have considered the option of building a smaller facility in its reasonable alternatives analysis, just as advocates had previously argued.

Also consider whether there are alternatives that FERC has not considered; at the macro level: e.g., to project location, size, type of project; or at the micro-level: different mitigation options, construction and operation methods, or electricity sources that could minimize adverse effects. Alternatives should be discussed and considered in each section of the environmental documents discussing impacts to resources—if not, that is a valid issue to raise in comments.

Also examine whether FERC has compared the project to a true “no-action” alternative. A no-action alternative “allows policymakers and the public to compare the environmental consequences of the **status quo** to the consequences of the proposed action.”³⁵⁶ When an agency evaluates a proposal, “‘no action’ . . . mean[s] the proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward.”³⁵⁷ If instead FERC assumes that in the no-action alternative some other company would build an export terminal to export the gas—an assumption FERC has historically made as a matter of course—that is contrary to NEPA and something an advocate should point out.

For an example of robust comments on reasonable alternatives, see Appendix 8b (Alaska LNG Rehearing Request) at 30-42; Appendix 8 (Jordan Cove Rehearing Request) at 46-56.

Mitigation measures

If the environmental documents do not discuss the necessary and appropriate mitigation measures for the impacts expected on each resource, that is an issue that should be raised in comments. CEQ's NEPA guidance requires an EIS to consider mitigation for all project impacts:

The mitigation measures discussed in an EIS must cover the range of impacts of the proposal. The measures must include such things as design alternatives that would decrease pollution emissions, construction impacts, esthetic intrusion, as well as relocation assistance, possible land use controls that could be enacted, and other possible efforts. Mitigation measures must be considered even for impacts that by themselves would not be considered “significant.” Once the proposal itself is considered as a whole to have significant effects, all of its specific effects on the environment (whether or not “significant”) must be considered, and mitigation measures must be developed where it is feasible to do so.³⁵⁸

³⁵⁵ See App. 9 (Rio Grande LNG Rehearing Request) at 11-13.

³⁵⁶ *Ctr. for Biological Diversity v. U.S. Dep't of the Interior*, 623 F.3d 633, 642 (9th Cir. 2010).

³⁵⁷ 46 Fed. Reg. 18,026, 18,027 (Mar. 23, 1981). (available at <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>).

³⁵⁸ 46 Fed. Reg. 18,026, 18,031 (Mar. 23, 1981) (emphasis added) (available online at <https://www.energy.gov/sites/prod/files/2018/06/f53/G-CEQ-40Questions.pdf>).

FERC also has an obligation to consider mitigation under the Natural Gas Act. The NGA authorizes the Commission to approve applications for LNG terminals “in whole or part, with such modifications and upon such terms and conditions as the Commission find necessary or appropriate.”³⁵⁹

Mitigation measures that can be proposed in an EIS will depend on the resource impacted but could include protecting habitat and wetlands in another location to compensate for permanent damage to resources at the project site. They could include using construction and operation methods to reduce harm to local wildlife populations, including scheduling construction around nesting season, installing sound barriers, and reducing light pollution at night. They could also involve lowering the speed limit for vessels in the channel, to reduce potential collisions with other vessels and animals. Mitigation could also be financial assistance to local communities and businesses that would be impacted. Advocates are encouraged to be creative when thinking about the range of potential mitigation measures and the inadequacy of mitigation measures proposed by the applicant or FERC.

Keep mitigation in mind when reviewing each impact described in the environmental documents. Are there potential mitigation measures not considered? Which community groups and experts should have been consulted about mitigation and its feasibility but weren't? Are some of those considered or required infeasible or otherwise flawed, perhaps based on site-specific conditions? Has FERC acted arbitrarily and capriciously in requiring mitigation in some circumstances but not others, either as compared to other similar projects, or by providing less or no analysis in rejecting some mitigation measures for the project but not other measures? All of these points can and should be raised in comments.

Note that in late 2021 and into 2022, FERC has been examining how it can both quantify the direct and indirect greenhouse gas emissions resulting from a project proposed under section 3 or 7 of the Natural Gas Act and identify the appropriate level of mitigation for such emissions. On November 19, 2021, FERC held a technical conference to explore methods, approaches, and legal authority for incorporating climate mitigation requirements into orders authorizing LNG projects.³⁶⁰

PIPELINES MUST BE IN THE PUBLIC INTEREST, TOO!

Under Section 3 of the NGA, FERC is supposed to authorize a terminal unless it finds that the terminal “will not be consistent with the public interest.” Under Section 7 of the NGA, FERC is supposed to only authorize a pipeline if it finds that the pipeline is “required by the present or future public convenience **and** necessity; otherwise such application shall be denied.” Both analyses require FERC to balance the public benefits of a project against the adverse consequences; with respect to Section 7, FERC must **additionally** analyze whether the project is “needed.” So don't leave out public-interest arguments about the pipeline!

³⁵⁹ 15 U.S.C. § 717b(e)(3)(A).

³⁶⁰ “*Technical Conference on Greenhouse Gas Mitigation: Natural Gas Act Sections 3 and 7 Authorizations; Notice Inviting Technical Conference Comments.*” 86 FR 66,293 (Nov. 22, 2021) <https://www.federalregister.gov/documents/2021/11/22/2021-25403/technical-conference-on-greenhouse-gas-mitigation-natural-gas-act-sections-3-and-7-authorizations> (seeking comments after the conference). Filings related to this topic can be found under Docket PL21-3-000.

Public interest (NGA argument)

Another issue that may be relevant comes from FERC’s obligations under the Natural Gas Act, not NEPA. Section 3 of the NGA requires that FERC conduct a public interest analysis of a proposed export terminal. (A similar review is required for pipelines, but under Section 7 of the NGA, which has slightly different requirements, as described in Section 4.B.1.) FERC often fails to weigh environmental effects in its public interest review (especially when it comes to a project’s climate effects). This responsibility to weigh environmental and climate impacts is separate and apart from FERC’s NEPA obligations; as NRDC and other advocates explained in the rehearing request for the Jordan Cove terminal and related pipeline:

FERC’s obligation to review an LNG export terminal project’s consistency with the public interest necessarily requires a consideration of “all factors bearing on the public interest”³⁶¹ that “reasonably relate to the purposes for which FERC was given certificate authority,”³⁶² i.e., public interest factors that relate to the building and operation of an LNG terminal.³⁶³ Just as with a pipeline, environmental effects related to an LNG terminal’s construction and operation are unquestionably within that review.

Review the section of the Certificate Order that discusses whether the project is in the public interest. If FERC’s analysis does not include the project impacts that it identified in the EIS documents (e.g., effects on wildlife, aquatic resources, climate), this is an issue that could be raised.³⁶⁴

Geological resources (18 C.F.R. 380.12(h), Resource Report 6);

The EIS should include a summary of the geotechnical investigations, soil conditions, and proposed foundation design as well as impacts related to geological resources. Impacts to geological resources can take the form of: impacts to mineral resources and aquifers; changing topographical contours from leveling the aboveground site and dredging; impacts from hurricanes, tornados, and storm surges; earthquake and tectonics; geomagnetic disturbances; and any other site-specific impacts.

Because they are largely aboveground, LNG terminals are unlikely to have impacts on underground mineral resources. Depending on the porosity of the soils, connectivity to surface waters, and depth of the aquifer, a terminal conceivably could have impacts to an aquifer (e.g., in the case of spills)—this could be a good scoping question if it is not clear where the aquifers are. Changing contours of the landscape conceivably also could have impacts to the local watershed or create a landslide danger.

PRACTICE TIP: SOILS AND PIPELINES

Soil and sediment impacts may be a bigger concern for the pipeline portion of the project, as more excavation may be taking place. Soils may be disturbed at water crossings and by access roads built to access remote pipeline locations. The construction and placement of pipelines can also damage shallow aquifers, destroy valuable farmland, and erode soils.

³⁶¹ *Atl. Refining Co. v. Pub. Serv. Comm’n of N.Y.*, 360 U.S. 378, 391 (1959).

³⁶² *Office of Consumers’ Council v. FERC*, 655 F.2d 1132, 1147 (D.C. Circ. 1980).

³⁶³ App. 8 (Jordan Cove Rehearing Request) at 38-39.

³⁶⁴ See App. 8 (Jordan Cove Rehearing Request) at 38-43 (demonstrating how such an argument might be phrased).

But the biggest geological concern for terminals located on the Gulf Coast is likely hurricanes and storm surges. Most applicants will recognize this and have mitigation proposals in the environmental documents. However, it can be useful to ask for information on and examine the assumptions that an applicant has used to predict hurricane frequency and maximum wind strength and storm surges. The facility must be designed with climate change in mind; predictions based on the historical record run the risk of dramatically underestimating dangers from storms. Here, it can be useful to cite hurricane and storm damage that other industrial facilities have sustained in the area. Hurricanes and associated winds or wind-borne debris can damage or destroy aboveground structures or dislodge LNG tankers from their docking berths, causing LNG spills.³⁶⁵ Often, the facility must follow specific design assumptions as described in the Pipeline and Hazardous Materials Safety Administration's regulations (see 49 C.F.R. Part 193 et seq.). In other words, comments related to geological resources may also apply to comments on safety and reliability.

Soils and sediments (18 C.F.R. 380.12(i), Resource Report 7);

Though LNG challengers have not previously expressed many comments or concerns regarding impacts on soils and sediments, it is possible that a specific project may have such impacts. For example, advocates challenging Alaska LNG raised the concern that FERC had not taken a sufficiently "hard look" at how soil disturbance and the accumulation of dust from construction activities and road construction on the permafrost could alter its freeze-thaw cycles, permanently changing the hydrology and geomorphology near the project.³⁶⁶ Other soils may be more vulnerable to wind or water erosion or compaction, or have differing revegetation potential. Each site is different.

In general, soils and sediments can be affected during the construction and operation of an LNG terminal. Without proper shore stabilization, runoff can increase, potentially affecting the ability of coastal areas to withstand storms and hold nutrients. Runoff can also degrade water quality by increasing turbidity and decreasing dissolved oxygen (see Section 4.E.7). Fill dirt may be needed for construction as well; is it clear where the fill will come from, if and how the fill will be tested for contaminants, how the fill will be stored and how the potential for runoff will be reduced? Also consider whether the soil onsite might be difficult to excavate; for the Alaska LNG project, FERC recognized that blasting may be needed for site development, which could deposit flyrock outside of the excavated area, accumulating to "create a layer of fill on top of wetlands, crush vegetation, cover existing soils, and diminish water storage capacity."³⁶⁷

To better understand the potential soil impacts, make sure to include this issue in scoping comments. Filing scoping comments can spur FERC to seek more information from the applicant, which can illuminate some of the potential concerns. The EIS documents should summarize the geotechnical investigations on site, which will include details as to soil type and foundation design.³⁶⁸ Another way to investigate potential soil and sediment impacts is to talk to a geologist with expertise in the local conditions and research the soil impacts that other nearby industrial and commercial

³⁶⁵ Texas LNG FEIS (March 2019) at 4-206 <https://www.energy.gov/sites/prod/files/2019/03/f60/final-eis-0520-texas-Ing-2019-03-volume-1.pdf> (describing an incident in which severe winds dislodged an LNG carrier from its berth, damaging the carrier, loading arms, and shore piping, and causing a LNG spill that fractured other equipment). See also *id.* at 4-237 - 4-245 (describing the hurricane analysis and other natural hazards)

³⁶⁶ See App. 8 (Center for Biological Diversity's Request for Rehearing in Alaska LNG), at 100-01, 106-07.

³⁶⁷ App. 8 (Center for Biological Diversity's Request for Rehearing in Alaska LNG), at 106 (quoting the FEIS).

³⁶⁸ See e.g., Texas LNG FEIS (Mar. 2019) at 4-234 - 4-238. <https://www.energy.gov/sites/prod/files/2019/03/f60/final-eis-0520-texas-Ing-2019-03-volume-1.pdf>.

facilities have been asked to address and any adverse soil impacts from the operation of those facilities.

Water resources and wetlands (18 C.F.R. 380.12(d), Resource Report 2)

Although the Army Corps of Engineers is the federal agency that issues permits to applicants for impacts to water resources and wetlands, FERC has an independent duty to analyze and present for public comment the impacts to waters and wetlands from the proposed project and its alternatives. Advocates commenting on these resources are encouraged to review Chapter 6 Section B.9, which identifies issues to raise on water and wetlands impacts. Recommended experts are identified in Section 6.B.10. This section here simply recaps some important points to consider and be aware of:

- Is there sufficient support in the NEPA documents for the Corps permits?

FERC’s NEPA analysis of water resources and wetlands is tied to the permits that the Corps issues. The Corps is responsible for issuing permits for the activities that involve impacts to navigable waters (section 10), waters of the United States (from dredge and fill activities, section 404), the ocean (from dumping of dredge and fill, section 103) and other pre-existing Corps projects (section 408). (See Chapter 6). As part of its own permitting process, the Corps must ensure that NEPA is complied with—it either may issue its own EIS/EA documents or, more typically, relies on FERC’s environmental review documents (the DEIS and FEIS) to satisfy its own requirements.

If the Corps relies on FERC’s NEPA review instead of conducting its own, FERC’s NEPA analysis must provide sufficient analysis and factual support to support the Corps permits—in other words, it must be able to support the analyses required by the Corps’ own guidelines, such as the Corps’ public interest review (which applies to section 404, section 10, and section 103 permits) and compliance with the 404(b)(1) Guidelines (for a 404 permit). The EIS must show how impacts to the aquatic ecosystem have been avoided, minimized, and compensated for. The EIS must assess the practicability of the proposed action and alternatives, otherwise the Corps must conduct an independent analysis. It must show that the activities permitted by the Corps do not impermissibly impact water quality and endangered species. The EIS or the Corps’ own analysis must satisfy the following, that: “[t]he Corps’ responsibility under NEPA to consider the environmental consequences of a permit extends even to environmental effects with no impact on jurisdictional waters at all.”³⁶⁹ And it must address the public interest factors as required by the Corps’ public interest review.

LNG-SPECIFIC ACTIVITIES TO SCRUTINIZE

Pile-driving—a process by which the LNG terminal’s deep foundations are installed—and dredging are two activities that damage water resources (as well as wildlife). Both dislodge a lot of dirt and sediment, increasing the turbidity and lowering the dissolved oxygen content in the water. The decreased water quality can kill aquatic species and disrupt their life cycles. A lot of research is available online as to these impacts and appropriate mitigation—research that can be brought to FERC’s attention by attaching the studies to comments.

³⁶⁹ *Save our Sonoran v. Flowers*, 408 F.3d 1113, 1122 (9th Cir. 2005).

- Are there discrepancies between the documents the applicant publishes with FERC and the Corps? Advocates challenging Alaska LNG noticed that FERC and the Corps were told that different quantities of wetlands would be impacted—by at least 1,300 acres. No apparent reason was given for this discrepancy, leaving open an arbitrary-and-capricious argument for advocates.³⁷⁰
- Have all of the mitigation plans been made public before certification? (Often this simply does not happen). If plans are available, is the mitigation proposed actually mitigation of not-already-protected wetlands? For the Rio Grande project, the applicant had proposed “preserving” land already within an ecological preserve—some of which was not even wetlands.³⁷¹

This is an area in which two birds may be addressed with one stone—analysis and experts used to address this section of the FERC challenge may also be used in the challenge with the Corps. For examples of comments about FERC’s analysis of wetland impacts, see Appendix 8b (Alaska LNG Rehearing Request) at 101-07; Appendix 10 (Rio Grande DEIS Comments) at 60-63;

Vegetation (18 C.F.R. 380.12(e), Resource Report 3)

Vegetation information that the environmental documents should discuss include the acreage of vegetation cover types that would be affected, including unique ecosystems or communities such as remnant prairie or old-growth forest, or significant individual plants, such as old-growth specimen trees.³⁷² Impacts to biodiversity of vegetation should also be explored, as well as aboveground and underwater vegetation.

This is an area in which consulting agencies play a large role—and FERC is required to provide copies of its correspondence with these agencies to the public as well as the applicant’s responses to the agencies’ recommendations.³⁷³ Review all agency opinions and correspondence—it may be that disagreements exist between agencies, which would be persuasive if highlighted for a reviewing court. Impacts to vegetation outside of wetlands have not been as closely scrutinized by advocates as impacts in other areas. Impacts to non-wetlands vegetation also can also be greater with pipeline projects than with the terminal itself. Don’t forget that plants can be endangered or protected species as well—if so, the Endangered Species Act would apply.³⁷⁴ In addition, if unique vegetation exists on site that would be difficult or impossible to replace once destroyed (or provides critical habitat to wildlife), that may be support for a court to issue a preliminary injunction that would prohibit any construction to take place pending an appeal.³⁷⁵

Wildlife and aquatic resources (18 C.F.R. 380.12(e), Resource Report 3)

FERC must also take a hard look at impacts to wildlife and aquatic resources (impacts to endangered or threatened species are addressed in Section 4.E.10). Consulting agencies for wildlife impacts may include the Fish and Wildlife Service, the National Marine Fisheries Service, the Forest Service, the Bureau of Land Management, and state wildlife agencies.

³⁷⁰ App. 8 (Alaska LNG Rehearing Request) at 104-07.

³⁷¹ App. 9 (Rio Grande DEIS Comments) at 61-63.

³⁷² 18 C.F.R. 380.12(e)(3).

³⁷³ 18 C.F.R. 380.12(e)(5) & (8).

³⁷⁴ U.S. Forest Service, “Laws and Regulations to Protect Endangered Plants,”

https://www.fs.fed.us/wildflowers/Rare_Plants/conservation/lawsandregulations.shtml (last visited 3/31/22).

³⁷⁵ See *Idaho Sporting Cong. Inc. v. Alexander*, 222 F.3d 562, 569 (9th Cir. 2000) (finding injunctive relief appropriate where “old growth forests plaintiffs seek to protect would, if cut, take hundreds of years to reproduce”).

As a first step, identify species in the area that would be sensitive to the construction and operation of a large industrial facility and associated boat traffic to see if FERC and the consulting agencies have overlooked any. Consider what species may be impacted by construction, elimination or alteration of habitat, pollution (air, water, and soil), light, noise (aboveground and underwater), and vessel / vehicle strikes (from tankers and supporting vessels, like tugboats, and increased truck and employee traffic). If the facility will bring increased human presence or traffic to the area, are there species that will be threatened by increased interactions with humans (e.g., humans feeling endangered by big cats or bears, and thus proactively killing more of them)? Construction—vibrations from pile driving, habitat destruction—can affect both terrestrial and aquatic species, as can night lighting.

Identifying species can be done by talking to conservation organizations, scientists, and community members and other familiar with wildlife the area (such as birders, whale-watchers, outdoor enthusiasts, hunters, fishermen, shrimpers). State and federal wildlife agencies should compile lists of species in or that migrate through the area, including those that are threatened, endangered, or have some other special status. If there is a wildlife refuge nearby (either terrestrial or marine) there should be documentation online about the species the refuge is designed to protect—or reach out to the stewards of these areas and interview them directly. If there is a local natural history museum in the area, that could be a good resource as well, especially for insects, amphibians, and macroinvertebrates³⁷⁶ that might go unnoticed by recreational and commercial users of the area. Indicator species like these can also be crucial because they may form the backbone of an ecosystem.

Don't forget to consider the flora as well—coastal and marine areas host a variety of sensitive plants that the entire ecosystem depends on. The Corps' districts' websites should have detailed information about the type of sensitive aquatic resources that are found in the area.³⁷⁷ But don't rely on the Corps' information to identify aquatic species and flora in the area that are likely to experience harm—use all the resources described above to go beyond the Corps' databases. Some plant species that may be overlooked include lichen, which is very sensitive to air pollution,³⁷⁸ as well as Spanish moss. Disturbed soils also can provide breeding grounds for invasive species to outcompete native species,³⁷⁹ and any herbicide or pesticide use associated with the proposed project can permanently

³⁷⁶ Benthic macroinvertebrates are organisms that live underwater, lack a backbone, and can be seen by the naked eye. Semi-aquatic or aquatic species like these will be the ones that show the first negative effects from water pollution because of their porous skins and immersion in potentially contaminated water. E.g., crayfish are very sensitive to changes in water acidity. Daly, N. "These animals offer key clues for environmental change." National Geographic. (Sept. 17, 2021) <https://www.nationalgeographic.com/animals/article/these-animals-offer-key-clues-for-environmental-change>. Mollusks and pteropods (small sea snails and slugs) are also very vulnerable to ocean acidification. N. Bednaršek *et al.*, *Pteropods on the Edge: Cumulative Effects of Ocean Acidification, Warming, and Deoxygenation*, 145 PROGRESS IN OCEANOGRAPHY 1 (2016).

³⁷⁷ See, e.g., "Wetland Delineation Manual and Regional Supplement." Galveston District. <https://www.swg.usace.army.mil/Missions/Regulatory/Wetlands/Delineation-Manuals/>; see also the New Orleans District's wetlands materials: <https://www.mvn.usace.army.mil/Missions/Regulatory/Jurisdiction-Wetlands/> See also the Headquarters' Technical and Biological Information links: <https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/techbio/>.

³⁷⁸ "Lichen Bio-Monitoring Proposed." Sierra Club (Brandt Mannchen) Aug. 2, 2019. <https://www.sierraclub.org/texas/houston/blog/2019/08/lichen-bio-monitoring-proposed>. See also "Canaries in a Coal Mine: Using Lichens to Measure Nitrogen Pollution." Science Findings, USDA. March 2011. <https://www.fs.fed.us/pnw/science/scifi131.pdf>.

³⁷⁹ Invasive species may be naturally present, or hitch rides on construction equipment that is not sufficiently cleaned between sites.

affect both vegetation and wildlife. Habitat fragmentation is also a concern, although potentially more of an issue with pipelines.

There is no question that LNG terminals **will** harm wildlife—and documented evidence of impacts from terminals should be incorporated into advocate comments. For example, in 2013, over 7,500 migratory songbirds were killed when they flew too close to a flare at Canaport LNG, Canada’s first LNG terminal.³⁸⁰ To avoid this particular type of tragedy in the future, FERC’s certification should—at a minimum—require that the operator build a facility that minimizes flaring as much as possible, actively monitor bird-migration projections, plan maintenance activities during times that avoid peak migration and adverse weather conditions, use an auditory deterrent, and consider using enclosed ground flares as an alternative.³⁸¹ FERC’s responsibilities to assess impacts to migratory birds stems from the Migratory Bird Treaty Act—advocates challenging projects that impact birds are encouraged to do further research into FERC and FWS’s obligations to comply with that law.³⁸²

The analysis of cumulative impacts to wildlife and aquatic resources is also often inadequate. Look at FERC’s analysis of cumulative impacts and consider whether it has properly considered all likely sources of impacts to wildlife. It can be helpful to review both EIS documents and advocate comments filed in other terminal challenges to better understand the possible impacts to wildlife from LNG terminals.³⁸³

Threatened, endangered and other special status species

FERC’s regulations require that it ensure compliance with the Endangered Species Act.³⁸⁴ This means that FERC must consult with the federal agencies with expertise on endangered species—the Fish and Wildlife Service for terrestrial species and the National Marine Fisheries Service for marine species.³⁸⁵

- Biological Assessments

Typically, the consultation proceeds informally first: to determine whether there are listed species and critical habitat that may be affected by the proposed project. The result of the informal consultation is typically a biological assessment, which describes the listed species and critical habitat that may be affected, reports the results of the site surveys that were conducted to identify the species and habitat, analyzes the effects of the proposed project and the project alternatives on these species and habitat, and proposes mitigation that would eliminate or minimize these potential impacts.³⁸⁶ If it appears that listed species or critical habitat is likely to be adversely affected, then the agencies conduct formal consultation and the consulted agency must provide FERC a biological

³⁸⁰ Smith, Connell. “Canaport LNG pleads guilty in bird kill case.” CBC News (Nov. 5, 2015) <https://www.cbc.ca/news/canada/new-brunswick/irving-canaport-bird-kill-plea-1.3305351>. For more of the gruesome details, see Cave, Rachel. “‘You could see the carnage everywhere’: First responder remembers 2013 bird die-off” CBC News (Nov. 12, 2015) <https://www.cbc.ca/news/canada/new-brunswick/bird-kill-canaport-Ing-saint-john-2013-1.5353502>.

³⁸¹ See “‘You could see the carnage everywhere’: First responder remembers 2013 bird die-off” Rachel Cave, CBC News (Nov. 12, 2015) <https://www.cbc.ca/news/canada/new-brunswick/bird-kill-canaport-Ing-saint-john-2013-1.5353502> (describing the retrofits and changes to the facility’s operating procedures after the slaughter).

³⁸² See e.g., *Memorandum of Understanding Between the Federal Energy Regulatory Commission and the U.S. Department of the Interior United States Fish and Wildlife Service Regarding Implementation of Executive Order 13186, “Responsibilities of Federal Agencies to Protect Migratory Birds”* (March 30, 2011) <https://cms.ferc.gov/sites/default/files/2021-04/mou-fws.pdf>.

³⁸³ For example, the Jordan Cove LNG EIS documents (App. 3b (FEIS Part 2, 4-185 – 4-316)). See also App. 8 (Jordan Cove Rehearing Request), 75-87.

³⁸⁴ 18 C.F.R. 380.13.

³⁸⁵ 18 C.F.R. 380.13(b) & (d).

³⁸⁶ 18 C.F.R. 380.13(b)(5)(ii); see also 50 C.F.R. 402.12(f) (ESA regulation describing the contents of what a Biological Assessment may contain).

opinion within 45 days of the close of formal consultation.³⁸⁷ If a biological opinion is issued, an advocate should be sure to scrutinize it because that means even FERC and the consulting agency believe that listed species will be harmed by the proposed project.

- Biological Opinions

Flaws in the EIS's treatment of wildlife and aquatic resources may originate in the consulting agencies' "biological opinions"—official statements that the agencies must submit when the proposed project is likely to adversely impact a threatened, endangered or other special status species or if that species' critical habitat is threatened. Biological opinions may not be available until after FERC issues a certificate order, so substantive comments on these opinions may need to be made at the last minute, in the rehearing request, as advocates challenging Alaska LNG were forced to do.³⁸⁸ Before these opinions become available, advocates can comment generally about what these opinions should be based on and should find, as well as point out how meaningful public participation is impossible without these opinions being available early in the EIS process. And if FERC relies on a flawed biological opinion to certify, a court may find that it has violated the ESA in doing so and overturn the certificate order.³⁸⁹

Biological opinions must consider certain factors and be based on the "best available science."³⁹⁰ Read the opinion and research whether the agency has issued other reports or recovery / conservation plans on the same topic that contradict its opinion for this project. For example, in Alaska LNG, NMFS's recovery plan for beluga whales prioritized tugboat noise as among the most important "anthropogenic noise sources that could potentially interfere with recovery . . . based on signal characteristics and the spatio-temporal (space and time) acoustic footprint."³⁹¹ Advocates challenging that LNG facility looked to the academic literature and found additional studies not cited by NMFS showing how whales are even more adversely affected by noise than the agency's opinion represented.³⁹²

The biological opinion must also conduct a jeopardy analysis and, if relevant, a proper incidental take statement. The ESA requires the agency to aggregate the cumulative effects, environmental baseline, and proposed action in light of the status of the species to determine whether they collectively jeopardize the species' continued existence.³⁹³ Moreover, in conducting a jeopardy analysis, FWS and NMFS must consider the impacts of an action on both a species' survival **and**

³⁸⁷ 18 C.F.R. 380.13(d)(4).

³⁸⁸ See App. 8b, Center for Biological Diversity's Request for Rehearing for Alaska LNG, at 122.

³⁸⁹ See *Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 698 F.3d 1101, 1127-28 (9th Cir. 2012) ("an agency cannot meet its section 7 obligations by relying on a biological opinion that is legally flawed or by failing to discuss information that would undercut the opinion's conclusions"). Note that for most terminals, the Ninth Circuit is not controlling case law—the Fifth Circuit or D.C. Circuit will be, depending on where the case is brought. Thus, advocates in Texas and Louisiana filing a lawsuit in the Fifth Circuit would want to support their legal arguments with citations from the Fifth Circuit. (And vice versa for filing a lawsuit in the D.C. Circuit.)

³⁹⁰ The ESA requires the consultation process and the resulting biological opinion be based on "the best scientific and commercial data available." 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(g)(8).

³⁹¹ See App. 8b, Center for Biological Diversity Request for Rehearing in Alaska LNG, at 123 (quoting NMFS, Cook Inlet Beluga Whale Recovery Plan at III-11). See also *id.* at 132-33 (identifying factors and scientific information not considered in FWS's biological opinion on sea otters and polar bears, such as the FWS's stock assessment and other academic studies).

³⁹² See *id.* at 124.

³⁹³ See 50 C.F.R. §§ 402.02, 402.14(g)(4).

recovery.³⁹⁴ For an example of arguments related to this issue, see Appendix 8b, the Center for Biological Diversity and other advocate’s rehearing request in the Alaska LNG challenge.³⁹⁵

As for incidental take, the ESA requires that, if the agency’s biological opinion concludes that the action (or the implementation of reasonable and prudent alternatives) will not cause jeopardy, but that it is reasonably likely to result in the take³⁹⁶ of an endangered species, a FWS or NMFS biological opinion must include an incidental take statement (ITS). The ITS must specify the impact—*i.e.*, the amount or extent—of incidental taking that may occur.³⁹⁷ An ITS must also include “reasonable and prudent measures . . . necessary . . . to minimize such impact,”³⁹⁸ and must specify the permissible level of taking, “thus . . . serv[ing] as a check on the agency’s original decision that the incidental take of listed species resulting from the proposed action will not [jeopardize the continued existence of the species].”³⁹⁹ In the biological opinion drafted for Rio Grande LNG’s impacts on ocelots and jaguarundi, advocates argued in rehearing that the opinion failed to set a clear limit on how many animals could be taken—anywhere from one in total to one every twelve months!⁴⁰⁰

In addition, when the endangered species to be taken are marine mammals, the take must first be authorized pursuant to the Marine Mammal Protection Act (MMPA) and the ITS must include any additional measures necessary to comply with the MMPA take authorization.⁴⁰¹ For examples of how other advocates addressed flawed incidental take analyses, see Appendix 8b, Center for Biological Diversity and other advocate’s rehearing request in the Alaska LNG terminal.⁴⁰²

Land use (18 C.F.R. 380.12(j), Resource Report 8))

Land use is typically a larger issue for pipelines as opposed to export terminals, simply because of the difference in project footprint. A few land-use issues that can arise for terminals include:

- Coastal land use. Export terminals are typically sited in coastal zones, which require the state coastal agency to issue a “coastal consistency statement” (sometimes called a “coastal use permit”) verifying that the project does not conflict with the state’s Coastal Zone Management Plan. This consistency statement may not be issued until after FERC certifies the project. If that is the case, this would make FERC unable to fully weigh coastal impacts in its public interest analysis, which is required by the Natural Gas Act, and would mean that the public would not be fully informed as to the project’s impacts before a certification decision is made, contrary to NEPA. (Whether FERC or a reviewing court agrees that these are reasons to overturn a permit

³⁹⁴ See 50 C.F.R. § 402.02 (defining jeopardy); see also *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 524 F.3d 917, 931 (9th Cir. 2008) (confirming that “the jeopardy regulation requires NMFS to consider both recovery and survival impacts”).

³⁹⁵ See App. 8b, Center for Biological Diversity Request for Rehearing in Alaska LNG, at 127-31 (dissecting NMFS’s jeopardy analysis); *id.* at 133-35 (dissecting FWS’s jeopardy analysis).

³⁹⁶ Note that under the ESA, the word “take” means not only to kill wildlife, but to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect.” 16 U.S.C. §1532(19).

³⁹⁷ 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i)(1)(i).

³⁹⁸ 16 U.S.C. § 1536(b)(4).

³⁹⁹ 16 U.S.C. § 1536(b)(4); *Center for Biological Diversity v. Salazar*, 695 F.3d 893, 911 (9th Cir. 2012).

⁴⁰⁰ App. 9 (Rio Grande Rehearing Request) at 42-43. For the advocates’ other arguments related to the Endangered Species Act for this facility see *id.* at 40-44 (pointing out (1) the biological opinion does not specify the conservation measures that reduces impacts to ocelots and jaguarundi and (2) how FERC erred for failing to require compliance with, or even refer to the conservation measures that the biological opinion assumes will be included and relies on in reaching its no-jeopardy conclusion).

⁴⁰¹ 50 C.F.R. § 402.14(i)(1)(iii).

⁴⁰² See App. 8b, Center for Biological Diversity Request for Rehearing in Alaska LNG, at 131-32 (dissecting NMFS’s incidental take analysis); *id.* at 135-37 (dissecting FWS’s incidental take analysis).

may be uncertain, but it is still important to raise all possible issues in comments to preserve them for litigation.)

- Greenfield projects. Some export terminals are proposed on sites that have never before been industrialized. This is referred to as a “greenfield” site, as opposed to a “brownfield” site. Impacts to land use are greater for greenfield sites. It can be helpful to enlist the opinion of an ecological economist to help quantify the change in value from taking a pristine site to industrial; this cost information should be made part of the overall cost-benefit analysis of the project.

Work with local community groups and organizers to see if there are any concerning land-use issues for a proposed project that should be addressed in scoping comments or that have not been addressed in environmental documents.

Recreation and visual resources (18 C.F.R. 380.12(j), Resource Report 8))

This is another area in which working closely with local communities is absolutely essential to understanding what impact the terminal will have on recreation and the visual landscape.

- Recreation

Identify the official and unofficial recreational areas near the proposed project site. This will require talking to locals, reading local government tourism guides, and exploring online maps and tourism websites—and nothing compares to spending significant time in the area. Look out for state, federal, local, and neighborhood parks, bike routes, trails, equestrian sites, overlooks, waterbodies, golf courses, roads frequented by recreational drivers, forests, beaches, wildlife refuges, fishing piers, swimming areas, boating, amusement parks, hotels, star-gazing spots, airports, campgrounds, ballparks, or even stretches of vacant land, to name just a few areas. Keep in mind that different areas may be in use at different times of the day, week, month, or year. Infrequent use does not necessarily mean less important use. Are there annual festivals or gatherings that draw out-of-town visitors and tourist dollars? All of this can be harmed by the construction and operation of an LNG terminal.

The harm can be complete destruction of a recreational site or its removal from public access. LNG activities may limit the time it is actually enjoyable to use. It can become so polluted, noisy or visually unpleasant that it is no longer a desirable place to spend time. Recreation can also be an activity, such as fishing or birding, that depends on the health of the nearby ecosystem. For example, even though the fishing pier may still be accessible, fish populations may have plummeted because of impacts from dredging on their hatcheries such that fishing is no longer possible from that location.

Noise during construction can be particularly harmful to recreational areas. For one terminal, construction pile-driving was “expected to last 20 hours a day for 2 years,” with the loudest noises at nighttime.⁴⁰³ Recreational areas that are businesses will unlikely be able to withstand such disturbance and may shutter. As part of the NEPA process, FERC must take a hard look at these sorts of impacts, which also overlap with socioeconomics.

Although the proposed project may do many harms to recreation, it may also increase certain recreational activities in a way that harms the environment. For example, if the terminal or pipeline is

⁴⁰³ App. 3c Jordan Cove FEIS (Part 3) at 4-558.

to be located in a previously undeveloped area, the new access roads may entice hunters or more people with off-roading equipment.

FERC's environmental review should also include mitigation measures that would actually mitigate impacts for the given area. This is again another area in which it is invaluable to work closely and early with local communities and organizers.

- Visual resources

Identifying recreational areas can help determine the vantage points from which the terminal will have visual impacts. Do not forget to assess visual impacts from people's homes as well, especially for environmental justice communities. Property values can be depressed when an industrial facility is visible from a home or even the entrance to a neighborhood, no matter how "clean" the facility might be.⁴⁰⁴ Industrial flares like those at LNG facilities can be a particularly significant visible blight. Visual harms can also come from the destruction of nearby topography or vegetative cover, leaving scars on the landscape, or making other previously hidden buildings visible. Large LNG vessels and increased vehicle traffic can cause visual impacts, even if the facility is not visible from the same vantage point. If the local economy is based largely on tourism (e.g., bringing in tourist dollars by touting its natural beauty and environment) an LNG terminal that is visible at any point from the airport to a tourist destination can deter visitors, even if it is not in view from a hotel window. And it isn't just seeing the facility itself that can impact visual resources.

Nighttime visual impacts may be greater during construction if large floodlights are used to complete activities or protect equipment at night. Operational LNG terminals also emit light at night—many areas will likely be lit around the clock for the security of the facility and its personnel, and bright flares may be frequent as well. This can obstruct the view of stars and confuse migratory birds or even turtles, which can wreak havoc on their reproductive cycles.⁴⁰⁵

Impact to visual resources is also an excellent issue to highlight in scoping comments; it is probably much easier for an applicant to create the photographic simulations of its project from different viewpoints than commenters, and it is likely much more difficult for out-of-town FERC employees and applicants to identify the important viewpoints in the area. Specifically request that the terminal, channel, and impacted landscape be visualized from specific vantage points throughout the community. These visualizations will also help community members, politicians, and the press conceptualize the impact of the project.

⁴⁰⁴ See App. 10 (Rio Grande DEIS Comments), 18-19 (citing studies showing the impact of industrial facilities on property values).

⁴⁰⁵ "Information About Sea Turtles: Threats from Artificial Lighting." Sea Turtle Conservatory. <https://conserveturtles.org/information-sea-turtles-threats-artificial-lighting/>.

Socioeconomics (18 C.F.R. 380.12(g), Resource Report 5)

For socioeconomics, the NEPA analysis must identify and quantify the impacts of constructing and operating the proposed project on towns and counties in the vicinity of the project.⁴⁰⁶ This includes identifying the socioeconomic impact area, “evaluat[ing] the impact of any substantial immigration of people on governmental facilities and services and [identifying] plans to reduce the impact on the local infrastructure.” It should describe the on-site manpower requirements and payroll during construction and operation, including the number of local construction workers and daily commuters or temporarily relocating workers from outside the impact area. It should explore whether there is sufficient housing in the impact area, and how many and what type of residences will be displaced, including how the properties will be acquired and the type and amount of relocation assistance that will be paid out. In this section, there should also be a fiscal analysis evaluating incremental local government expenditures in relation to incremental local government revenues that would result from construction of the project.

Incremental expenditures include, but are not limited to, school operating costs, road maintenance and repair, healthcare services, public safety, and public utility costs. This can be a good place to link the tax implications of the project (see Chapter 9 on Tax Abatements).

FERC typically includes its discussion of environmental justice impacts in this section as well (see Section 4.E.14 of this guide for the environmental justice issues).

The details of FERC’s socioeconomics analysis are usually most convincingly refuted with an expert opinion. That opinion should be informed by information from the community, community organizers, business owners, local governments—any stakeholder in the regional economy. Consulting with these stakeholders and an economics expert early on can be helpful because it allows potential issues that FERC should press the applicant to explore to be raised in the scoping comments.

Environmental justice

FERC historically has failed to adequately address environmental justice issues. But there are now hints that FERC’s attitude is changing. In 2020, FERC created a new position of senior counsel for environmental justice and equity, which was filled by a long-time environmental-justice advocate. In addition, the D.C. Circuit’s August 2021 opinion in the Texas LNG and Rio Grande LNG cases

PRACTICE TIP: ECONOMIC EXPERTS

Experts can make your arguments more persuasive by providing “expert opinions,” which FERC and a reviewing court may value more than advocate arguments. To support arguments about socioeconomic impacts, consider if there are funds to hire experts in economics to assess the impacts of a proposed project. An ecological economist—i.e., one with knowledge of the economic benefit of the natural area and the ultimate economic harm to local economies—can also be very helpful, as well as a more traditional economist. Batker Consulting, LLC is one firm of ecological economists that has worked with environmental advocates on economic impacts of projects.

⁴⁰⁶ 18 C.F.R. 380.12(g).

remanded FERC's orders, in part to redo its environmental-justice analysis. There may be hope that FERC will become more responsive to environmental justice concerns.

Many federal agencies are bound to consider environmental justice when making decisions because of Executive Order 12898, which was signed in 1994.⁴⁰⁷ Because FERC is an independent agency, FERC considers itself exempt from Executive Order 12898. Nonetheless, there are strong arguments that an environmental-justice review is required by NEPA and the NGA, and FERC includes environmental-justice analyses in its environmental documents.⁴⁰⁸ Once FERC includes an analysis in its NEPA documents—as it does with environmental justice—it may not conduct that analysis in an arbitrary-and-capricious manner.⁴⁰⁹

Strong environmental-justice arguments will compare FERC's analysis in any given EIS to the methods and tools FERC has historically used, the methods and tools other agencies use, and court decisions on the topic. FERC's environmental documents should first identify both the marginalized/minority and low-income populations in the vicinity of the project. NEPA guidance documents state that **Minority populations** are generally defined using a “No Threshold” analysis **or** both a “Fifty Percent” and “Meaningfully Greater” analyses together in concert.⁴¹⁰

In the Jordan Cove and Rio Grande LNG environmental reviews, FERC used the “Fifty Percent” and “Meaningfully Greater” methods to define the minority populations near the project site that may be adversely impacted—not the “No Threshold” analysis. The “Fifty Percent” test is designed to highlight areas of majority-minority populations that may be affected by the project (i.e., areas where minority groups comprise more than 50 percent of the total population). The “Meaningfully Greater test” highlights populations of minorities when they exist in a greater proportion in the affected population when compared to the proportion of minorities in appropriate benchmark (reference).⁴¹¹

⁴⁰⁷ A copy of Executive Order 12898 can be found here: <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>. The D.C. Circuit recently summarized the order's requirements in Rio Grande LNG case as follows: Executive Order 12,898, § 1-101, 59 Fed. Reg. 7,629 (Feb. 11, 1994), requires that, “[t]o the greatest extent practicable and permitted by law,” federal agencies “shall make achieving environmental justice part of [their] mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of [their] programs, policies, and activities on minority populations and low-income populations.” *Id.* To that end, the Order requires federal agencies to conduct “environmental justice” analyses by “collect[ing], maintain[ing], and analyz[ing] information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations.” *Id.* § 3-302(b).

Vecinos para el Bienstar de la Comunidad Costera v. FERC, No. 20-10453 (“Rio Grande Op.”) at 6 (Aug. 3, 2021), [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf). Attached as App. 2.

⁴⁰⁸ For example, in the Jordan Cove FEIS, FERC stated: “Although the FERC is an independent regulatory agency and not part of the Executive Branch, **we carry out our programs in the spirit of EO 12898** and this EIS addresses the potential environmental justice impacts of the Project.” App. 3c, (Jordan Cove FEIS, Part 3) at 4-622.

⁴⁰⁹ See *Communities Against Runway Exp. v. FAA*, 355 F.3d 678, 689 (D.C. Cir. 2004) (“The FAA [another independent agency] exercised its discretion to include the environmental justice analysis in its NEPA evaluation, and that analysis therefore is properly subject to ‘arbitrary and capricious’ review under the APA.”).

⁴¹⁰ “Promising Practices for EJ Methodologies in NEPA Reviews.” Federal Interagency Working Group on Environmental Justice & NEPA Committee, 2016 Report at 21-23 https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf. See also CEQ 1997, p. 25-26. https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf For an example of FERC's application of this guidance, see App. 3c, Jordan Cove FEIS Part 3 at 4-622-4-627. https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf.

⁴¹¹ The benchmark region used for comparison is also referred to as the “reference community” See “Promising Practices for EJ Methodologies in NEPA Reviews.” Federal Interagency Working Group on Environmental Justice & NEPA Committee, 2016 Report at 21-23 https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf. “Meaningfully greater” requires use of a reasonable,

Minority populations may consist of a group of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals who experience common conditions of environmental effect (such as migrant workers or Native Americans). Further, a minority population exists if there is “more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds [Fifty Percent or Meaningfully Greater].”⁴¹² These are not necessarily intuitive analyses—reading the guidance documents is a good place to start but if you can speak to a person familiar with environmental-justice analyses, that can be very helpful! Note that the upshot is that under CEQ’s guidance, impacts to a handful of individuals from a minority population may not be enough to trigger an actionable NEPA environmental justice issue—unless CEQ or FERC changes its policies, Congress passes new laws, the president updates its executive orders, or a court revises its understanding of agencies’ environmental-justice responsibilities.

Low-income populations are defined by the annual statistical poverty thresholds set by the U.S. Census Bureau. A low-income population exists when: (1) the percent of the population in households where the household income is less than or equal to twice the federal poverty level is greater than the percent in the reference community; or (2) if the area meets the Census Bureau’s definition of a poverty area.⁴¹³

FERC must also identify **Tribal communities**. In addition to statutory requirements for consultation with Indigenous tribes, Indigenous populations must be considered in an environmental justice analysis. FERC’s historical analytical methods have failed to consider the impacts to Tribal communities. For example, in its analysis of environmental justice impacts for the Atlantic Coast Pipeline, FERC failed to analyze the effects on American Indians despite the fact that 25% of North Carolina’s American Indians lived along the proposed pipeline route—instead of considering the unique health and environmental risks for this population, FERC lumped the American Indian populations together with all other “minority” communities.⁴¹⁴

How far from the project boundaries FERC goes in identifying communities to analyze must be “reasonable and adequately” explained⁴¹⁵—and be related to the radius of effects from the project. For example, in the Rio Grande LNG challenge, the D.C. Circuit rejected as arbitrary FERC’s unjustified use of a two-mile radius to identify environmental-justice populations when air impacts were expected to stretch 31 miles.⁴¹⁶

After the populations are identified, FERC must identify whether impacts on human health or the environment would be **disproportionately high and adverse** for marginalized and low-income

subjective threshold (e.g., ten or twenty percent greater than the reference community).” *Id.* at 25. FERC has used 20% in the past (e.g., for the Jordan Cove project).

⁴¹² CEQ 1997, p. 26 https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf.

⁴¹³ “Promising Practices for EJ Methodologies in NEPA Reviews.” Federal Interagency Working Group on Environmental Justice & NEPA Committee, 2016 Report at 26-28 https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

⁴¹⁴ See Montana, Cole. “Pipeline Case Brief: FERC Enables Environmental Injustice.” NRDC. (April 15, 2019) <https://www.nrdc.org/experts/montina-cole/pipeline-case-brief-ferc-enables-environmental-injustice> (discussing FERC’s misguided use of census tract data which masks communities of color; failure to assess adverse, disproportionate impacts on communities of color; and suggesting how FERC could improve its analysis).

⁴¹⁵ *Communities Against Runway Expansion, Inc. v. FAA*, 355 F.3d 678, 689 (D.C. Cir. 2004).

⁴¹⁶ *Vecinos para el Bienstar de la Comunidad Costera v. FERC*, No. 20-10453 (“Rio Grande Op.”) at 15 (Aug. 3, 2021), [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf). Attached as App. 2.

populations and appreciably exceed impacts on the general population or other comparison group. FERC should be referencing its resource-specific environmental analyses to identify significant impacts that might have disproportionately high and adverse effects on environmental-justice communities.

FERC primarily uses EPA’s environmental justice screening and mapping tool (EJSCREEN) to identify communities.⁴¹⁷ Advocates are encouraged to become familiar with it and check FERC’s work. But some environmental-justice communities will not appear on this tool; community organizations and community organizers can help identify populations that are overlooked. Also check whether FERC has covered all of the impacts to environmental justice communities; are there special characteristics about these communities that make them even more vulnerable to impacts? For example, are these communities already suffering from higher incidents of asthma, which would make them even more sensitive to ozone and other air pollutants that the facility is emitting? Are the communities disproportionately dependent on industries that will be harmed by the terminal, such as fishing, ecotourism, or the hospitality industry? For additional examples of advocates raising environmental justice issues, see Appendix 9 (Rio Grande Rehearing Request) 31-38; Appendix 8 (Jordan Cove Rehearing Request) 87-99, 107-115; Appendix 8b (Alaska LNG) 116-19.

Transportation

Not all project environmental documents will address transportation concerns in a separate section—for example, there is no requirement for a resource report solely devoted to transportation issues. Instead, the facts and impacts may be incorporated into other sections. All terminals will have transportation issues; an advocate submitting scoping comments or reviewing a DEIS that does not have a separate transportation section may want to ask FERC to summarize the potential impacts to transportation in a dedicated section, instead of scattered throughout the environmental documents.

Some transportation issues to consider are the effects from increased:

- *Marine transportation.* During construction and maintenance, this will include dredging vessels and barges that deliver equipment and supplies to the facility. During operation, this includes LNG tanker traffic as well as increased support vessel traffic, like tugboats. Some facilities are designed to produce so much LNG that vessel transit may be almost daily. Both tankers and tugboats can be noisy, and the higher their allowed speed, the more likely they will hit, kill or maim aquatic life. LNG tankers will also likely mean that the channel will need to be dredged deeper and more frequently even after initial construction, which can kill aquatic life, disrupt ecosystems, and harm the reproductive lifecycle of organisms that other animals feed on. In addition, LNG marine traffic can reduce the ability of other vessels to access the channel and waterways, either because of the size of the channel or because of safety concerns related to the risk of explosions. If others use the channel for their livelihood (e.g., commercial shippers, shrimpers, fishers, tour companies), LNG traffic may create economic harms that the EIS must discuss. An even greater impact to local quality of life may happen when the terminal is one of the first industrial facilities on a channel that was previously used only recreationally or for light commercial use.

⁴¹⁷ “EJSCREEN: Environmental Justice Screening and Mapping Tool.” EPA. <https://www.epa.gov/ejscreen>.

- Motor vehicle traffic. Increased motor vehicle traffic is tied to increased pollution, traffic accidents, congestion, noise, and wildlife deaths. Operation of an LNG terminal may increase traffic at non-traditional times, creating a nuisance whereas previously there was none (e.g., increased night noise in neighborhoods). It will almost certainly increase the volume of hazardous materials transported through nearby communities (e.g., fuel, nitrogen, waste). It may also require new construction, either adding lanes to existing infrastructure or new roads altogether. Who pays the cost for this construction and maintenance should be explored during the environmental review—it may diminish the “benefits” to the local economy if taxpayers and not the developers are expected to foot the bill. These harms must be weighed against any benefits to the local economy (e.g., if more local goods and services are purchased). If traffic is expected to be a concern for the project, the state transportation agency may require the applicant to conduct a *Traffic Impact Analysis* for the project—advocates can and should request during scoping that one be conducted.
- Heavier vehicles on local roads. Consider whether there will be increased traffic on pre-existing roads, especially heavier loads than the roads may be designed for. Roads are engineered to support specific loads: for example, the thickness of the pavement and amount and size of rebar in the pavement will be less on local roads that were not designed for large truck traffic as opposed to larger feeder roads or highways. When larger, heavier trucks than the road is designed for drive on local roads, the road is damaged.⁴¹⁸ This slows down all traffic, increases the danger of accidents or damage to resident vehicles, becomes an eyesore, and greatly increases the burden on local governments for repair and maintenance. If the road is damaged enough (or is simply gravel to begin with), it may increase particulate emissions locally, hurting humans, wildlife, and vegetation alike. As with all increased motor traffic, who bears the cost of construction and maintenance should be addressed as part of FERC’s review before the project is certified.
- Railroad traffic. Review the proposed project; will there be increased railroad traffic during construction or operation? Some industrial facilities will have railroad spurs incorporated into the facility to ship out product or receive materials, operating fuel, or catalysts. Others will use existing spurs and transport the materials the remaining distance by road. Rail traffic increases the likelihood of accidents, wildlife strikes, pollution, and noise.
- Air traffic. There are at least two aspects of air traffic that relate to LNG terminals. First, local airports will see increased traffic from increased numbers of employees and contractors servicing the facility. Contrary to what some applicants may argue, many of the people servicing the facility will not be local to the area, especially if the area is new to industrial or LNG development. Second, LNG terminals and airports may pose safety concerns to each other. The FAA is a consulting agency when air traffic issues may arise and has in the past presumed that LNG marine vessels (at multiple locations during transit), LNG storage tanks, amine regenerator columns,⁴¹⁹ and thermal oxidizer stacks are obstructions to air traffic and hazards to air navigation.⁴²⁰ FERC found that for Jordan Cove, takeoffs, landings, and runway operations could

⁴¹⁸ This concern is especially true on the production side of oil and gas, with all of the tanker trucks needed to transport water, proppant, chemicals, and waste to remote locations, but can apply similarly to servicing any industrial facility. See Samuels, Alex. “Texas is making billions from oil and gas drilling, but counties say rural roads are being destroyed.” The Texas Tribune. (Apr. 12, 2018). <https://www.texastribune.org/2018/04/12/texas-oil-gas-drilling-rural-roads-damages/>.

⁴¹⁹ Used to remove carbon dioxide and hydrogen sulfide from the gas stream before the gas is liquefied.

⁴²⁰ App. 3b, Jordan Cove FEIS Part 2 at 4-657.

be affected (*i.e.*, delayed) by operation of the terminal and that airport operations could be significantly impacted.⁴²¹ Thermal plumes from the facility were also a concern, and one that FERC likely would not have considered without commentors raising the issue during the DEIS review.⁴²²

- ***Off-highway vehicles.*** Depending on where a project is located, the construction of new roads may allow the public access into previously undeveloped areas, attracting users of off-road vehicles that can significantly damage wild ecosystems. Has that been considered in the EIS or raised in scoping comments? In addition, off-highway vehicles are used in construction and are typically permitted to use fuel that emits more pollutants (including sulfur) than on-road vehicles.⁴²³ Increased idle times (with concurrent increased emissions) increase air pollution that may not be captured in FERC's analysis. Off-highway vehicles driving on unpaved roads increase road dust—mitigation measures should be required to avoid these emissions (e.g., regular road watering), which can affect local human populations as well as ecosystems.

Other transportation-related issues to consider depending on the project are the construction of additional access roads (for facilities remote from existing roads), whether federal lands will be impacted, and the need for helicopter traffic. Every project is different; this is one area in which sustained collaboration with local communities will unearth potential impacts that would be invisible to an outside organization drafting comments from afar.

Cultural resources (18 C.F.R. 380.12(f), Resource Report 4)

FERC publishes its own “Guidelines for Reporting on Cultural Resources Investigations for Natural Gas Projects,” a short summary of its procedures, which an advocate should read before filing comments about cultural resources.⁴²⁴ While not binding law, and drafted with applicants in mind as the audience, it summarizes the regulations and laws the FERC adheres to when analyzing impacts to cultural resources. It also includes a glossary of terms in Appendix A.

⁴²¹ *Supra.*

⁴²² *Supra.*

⁴²³ See e.g., C. Kassir and P. Spitler, *Fuel to Burn*, Center for Biological Diversity & Clean Air Initiative (May 2008) https://www.biologicaldiversity.org/publications/papers/Fuel_to_Burn_for_Web.pdf.

⁴²⁴ “Guidelines for Reporting on Cultural Resources Investigations for Natural Gas Projects.” FERC Office of Energy Projects (July 2017) <https://www.ferc.gov/sites/default/files/2020-04/cultural-guidelines-final.pdf>. Keep in mind that FERC may update its guidance; check FERC's website before relying on this document.

A FEW DEFINITIONS

Area of potential effects (APE)

“means the geographic area within which the project may cause direct and/or indirect effects (including physical, visual, vibratory, or audible effects) to the character or use of historic properties. This includes all areas of construction, such as rights-of-way, compressor stations, meter stations, staging areas, extra work spaces, storage yards, communication sites, access roads, and other ancillary facilities.”

Cultural resources “are any prehistoric or historic site, district, object, cultural feature, building or structure, cultural landscape, or traditional cultural property (including artifacts, records, and related material remains). *The project sponsor identifies all cultural resources in the APE, and agencies and consulting parties consult to determine if any qualify as historic properties.*” (emphasis added)

One important term to understand when commenting on cultural resources is the proposed project's defined "**area of potential effects**" or "APE." "[T]he same project may have one APE (direct) for archaeological sites and a different APE (indirect) for aboveground resources subject to visual, audible, vibratory, or atmospheric effects."⁴²⁵ Scrutinize both APEs—how did the applicant arrive at these distances for the direct impacts to archeological sites (usually belowground) and indirect impacts to historical/cultural sites? For example, in Jordan Cove, FERC defined the terminal's direct APE as the footprint of all potential ground-disturbing activities; the indirect APE was defined identically to the direct APE (after the EIS found that no historical properties had a view of the facility, and that no odors, noise, or other atmospheric effects would impact such properties).⁴²⁶ For the Texas LNG terminal, advocates were able to show that the indirect APE was set to a distance that the National Park Service specifically said would be insufficient.⁴²⁷

FERC generally relies on the applicant to identify **cultural resources** within this area—which can obviously be problematic as the applicant will not know the area as well as local communities and the applicant is not incentivized to uncover all possible cultural resources.

This is also a topic in which FERC will be receiving written comments and opinions from agencies and entities such as: the state historic preservation officer; tribal historic preservation officers; and land-management agencies. Their comments should be publicly available and may conflict with FERC's ultimate decision on the project. (The correspondence between the consulting agencies and the applicant may not be publicly available, however.⁴²⁸) Make sure to review these documents and when relevant cite them in comments—remember that reviewing courts are more likely to value official agency opinion more than advocate arguments.

FERC will often certify a project before all of the cultural resources are studied and cultural resource reports are available. This runs afoul of Section 106 of the National Historic Preservation Act, which requires that: "the head of any Federal department or independent agency having authority to license any undertaking" to consider the undertaking's effect "on any historic property"⁴²⁹ before "issuance of any license."⁴³⁰ If that's the case for a proposed project, raise that issue as a failure to allow for meaningful public participation and evidence that FERC failed to take a hard look at (under NEPA) or fully weigh the public interest of (under the NGA) cultural impacts before certifying.

For examples of comments on cultural resource impacts, see Appendix 8b (Alaska LNG Rehearing Request) at 16-17; Appendix 11 (Texas LNG Rehearing Request) at 22-25.

⁴²⁵ *Id.* at 13. "Indirect effects are those effects on historic properties, which are removed in time and/or space from their proximate causes (e.g., increased access to an archaeological site resulting in an increased potential for vandalism of that site)." *Id.* at 28.

⁴²⁶ Jordan Cove LNG FEIS at 4-676 – 4-677 https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf.

⁴²⁷ See App. 11 (Texas LNG Rehearing Request) at 24-25 & 25 n.98 (quoting a National Park Service letter to FERC). This was admitted in the DEIS and then removed without explanation in the FEIS. *Id.*

⁴²⁸ "Guidelines for Reporting on Cultural Resources Investigations for Natural Gas Projects." FERC Office of Energy Projects (July 2017) at 2-3 ("Off-the-Record Communications") <https://www.ferc.gov/sites/default/files/2020-04/cultural-guidelines-final.pdf>.

⁴²⁹ A historic property is "any prehistoric or historic district, site building, structure, or object included on, or eligible for inclusion on, the National Register." 54 U.S.C. § 300308.

⁴³⁰ 54 U.S.C. § 306108. See also 18 C.F.R. § 380.14 (FERC's regulations as to how it must comply with the National Historic Preservation Act).

Air quality and noise (18 C.F.R. 380.12(k), Resource Report 9))

- Air quality

There are many ways FERC's analysis of the air quality impacts may fail to satisfy NEPA. Note that a discussion of greenhouse gas impacts is in Section 4.E.18.

The amount and impact of air pollution emitted by the proposed project is an area that FERC may not sufficiently explore in its environmental analysis. Look at FERC's **air quality** analysis. If significant impacts to air quality are expected, look to see if FERC has fully explored the ramifications to sensitive ecosystems and sensitive populations (e.g., elderly, sick, young, or pregnant populations). Sometimes FERC will admit that more analysis or more information is necessary but not follow up. Point that out!⁴³¹

If FERC has concluded that air impacts are insignificant, see whether FERC has actually supported its conclusion. Conclusory statements unsupported by facts and analysis do not meet the "hard look" standard that NEPA requires. This applies equally to FERC's analysis of cumulative impacts of air pollution. Look at how FERC estimates the cumulative impacts from the pre-existing air sources. If it is conclusory, unsupported, or simply flawed (e.g., ignores certain sources or foreseeable increases) highlight that as well.⁴³²

In addition, several courts have held that NEPA requires FERC to disclose and examine in its environmental documents the effects of air pollution even if that air pollution would not violate other laws, like the Clean Air Act. EPA's assessments show that some air pollution that does not violate air quality standards may still cause human health impacts.⁴³³ Thus, if the environmental documents do not take a hard look at pollution, regardless of its quantitative level or status as a pollutant regulated under the Clean Air Act, an advocate could highlight that in comments.⁴³⁴

Another air-related issue is **pollution control equipment**. Pollution control technology is equipment that is attached to pollution-emitting parts of the facility like compression turbines or boil-off gas units to reduce the pollution that would otherwise be emitted. Although FERC will largely defer to what the state decides is the proper air pollution control equipment required under the Clean Air Act (see Chapter 8 for more information), NEPA and the Natural Gas Act require that FERC take its own independent "hard look" and public interest analysis (respectively). Therefore, it is fair game to raise the same concerns with FERC as with the state air quality agency. For example, is there a control technology that the state and FERC have overlooked (or dismissed) that has a higher pollution-reduction efficiency than studies show, other terminals have estimated, or will be required by the actual air permit? For example, LNG terminals across the country have estimated very different

⁴³¹ For an example of advocates doing just that, see the discussion of sulfur deposition in the Center for Biological Diversity's Rehearing Request on the Alaska LNG Project. See App. 8b (Alaska LNG Rehearing Request), 96-100.

⁴³² For an example of advocates disputing FERC's analysis of cumulative ozone emissions, see Sierra Club's Rehearing Request on the Rio Grande LNG Project. See App. 9 (Rio Grande Rehearing Request), 29-30.

⁴³³ For an example of advocates supporting their concerns that the ozone, nitrogen dioxide, and carbon monoxide have health effects at levels below certain air quality thresholds (specifically, the NAAQS) with EPA data, see the discussion in Sierra Club's Rehearing Request on the Rio Grande LNG Project. See App. 9 (Rio Grande Rehearing Request), 30-31.

⁴³⁴ For an example of advocates doing just that, see the discussion of black carbon in the Center for Biological Diversity's Rehearing Request on the Alaska LNG Project. See App. 8b (Alaska LNG Rehearing Request), 93-95 (citing cases in support of its assertion that: "Agencies are required to consider in their NEPA documents impacts at levels below regulatory limits and also must consider impacts of actions even if those actions do not violate a substantive state or federal law.").

particulate matter emissions rates from flares, even though the technology used is largely the same.⁴³⁵

Many export terminals also have inadequate **air monitoring**. Advocates should push hard for FERC to require the applicant to install air quality monitors for the pollutants expected from the facility (e.g., particulate matter, carbon monoxide, nitrogen oxides (“NO_x”), sulfur dioxides (“SO_x”), volatile organic compounds (“VOCs”), and hazardous air pollutants (“HAPs”). Biomonitoring of these pollutants in plants and other indicator species could also be a cost-effective way to get more granular data of the impacts on neighboring communities. Lichen is already monitored as part of United States Forest Service programs to track air quality⁴³⁶ and other species like moss have been used around industrial facilities, at least in academic settings, for decades.⁴³⁷ Spanish moss, ubiquitous in the Gulf Coast region, has also been studied as a biological indicator for metal air pollution and environmental equity.⁴³⁸ If biomonitoring makes sense given the unique facts of a specific project, there are a number of scientific studies that support the fact that this can be a low-cost, high-resolution⁴³⁹ method of monitoring pollution, particularly in comparison with more traditional monitoring stations and portable devices.⁴⁴⁰ The scientific literature praises biomonitoring for how helpful it could be in environmental justice studies of pollution.⁴⁴¹

Spending funds to hire an **air quality expert** can be particularly worthwhile, especially because FERC’s analysis will likely be based on air models that can be difficult to understand without prior experience with them. The air quality expert that is retained should have previous experience with the models that are used. The expert should be comfortable with what the proper baseline assumptions for the region should be—the wrong assumptions can falsely make a dirty facility look much cleaner. Experts can also help identify better pollution control technology and air monitoring equipment that the terminal should have considered implementing.

- Noise

LNG terminals can be noisy for many reasons. Impacts can be temporary, such as during construction, or permeant, such as during operation. At either point the noise could be continuous or

⁴³⁵ The advocates challenging the Rio Grande LNG terminal made similar arguments, relying in part on arguments advanced in the fight against the state air permit. See App. 9 (Rio Grande Rehearing Request), 30.

⁴³⁶ United States Forest Service, *Lichen Monitoring in US National Forests and Parks Reports, Publications and Other Resources*, <https://gis.nacse.org/lichenair/?page=reports>.

⁴³⁷ See App. 12: J.A. Fernández, et al., *Use of native and transplanted mosses as complementary techniques for biomonitoring mercury around an industrial facility*, *The Science of the Total Environment* 256:151-61 (2000), 152.

<https://pubmed.ncbi.nlm.nih.gov/10902842/>. (“Mosses have been used as active and passive biomonitors to estimate the deposition of contaminants in the areas surrounding industrial installations such as: geothermal power plants (Bargagli et al., 1997), waste incinerators (Carpi et al., 1994), chlor-alkali plants (Calasans and Malm, 1997; Lodenius, 1998), etc.”).

⁴³⁸ See e.g., App. 12: Y. Abdullah, *The Use of Spanish Moss as a Biological Indicator to Examine Relationships Between Metal Air Pollution, Vegetation Cover, and Relationships Between Metal Air Pollution, Vegetation Cover, and Environmental Equity in Tampa, Florida Environmental Equity in Tampa, Florida* (Nov. 2020) Dissertation, 2 <https://digitalcommons.usf.edu/cgi/viewcontent.cgi?article=9702&context=etd>.

⁴³⁹ In other words, many more samples can be quickly, cheaply, and efficiently taken per area than with traditional methods that may require expensive or permanent equipment.

⁴⁴⁰ *Id.* (Sections 2.2 and 4.2 are literature reviews of Spanish moss as a pollution measurement method and environmental inequity, respectively. The References also include a wealth of resources.)

⁴⁴¹ *Id.* at 3 (“High-spatial-resolution sampling of bioindicators will create opportunities for researchers who examine the role of vegetation in air pollution mitigation to broaden their studies. This helps them measure different types of air pollutants with a higher spatial resolution and lower cost. Previous studies have examined the role of vegetation in mitigating pollutants such as NO₂, VOC, and particulate matter (e.g., Setala et al., 2013; Tong et al., 2016). However, metals have rarely been introduced in these studies. Spanish moss, as an air pollution bioindicator, makes this type of application flexible and achievable since it can provide data with high spatial resolution and high density at a low cost versus traditional air pollution measures (Harmens et al., 2010; Schrimppff, 1983; Wannaz et al., 2006).”).

just intermittent. FERC must take a hard look at these impacts and should propose mitigation methods or alternatives that would decrease noise impacts. If FERC doesn't, point that out.

An example of temporary, intermittent noise is the disturbance caused by **pile-driving**. Pile-driving is the process of installing piles—the deep vertical portion of the foundation that terminals need. (The depth is comparable that needed for a large building or skyscraper, as opposed to a shallow foundation for a house). Pile-driving can be very loud—even underwater—and the sound itself can kill or maim aquatic species. It can also disrupt marine mammals' abilities to communicate normally, which could affect their ability to mate or hunt.

There are ways to mitigate the impacts from pile-driving noise, which FERC should analyze in its environmental review. For example, certain pile-driving methods create less noise than others. FERC could also require noisy activities to take place outside of migration or breeding season.⁴⁴²

Dredging can also create noise during construction (and maintenance) that disturbs underwater life. And of course, aboveground dredging, pile-driving, and other construction noise may affect sensitive species and human populations as well.⁴⁴³ FERC must explain its analysis as to whether these impacts will be significant and whether they will disproportionately affect environmental justice communities.

Other sources of noise are permanent, such as the noise from everyday operation of the facility—from industrial equipment and vehicle traffic. Permanent intermittent noise includes vessel traffic in the channel going to and from the terminal. The tugboats that accompany LNG tankers in particular can be overlooked noise sources. For some aquatic species, exposure to ship noise can decrease the time spent hunting and potentially significantly impact populations.⁴⁴⁴ Consider if there are other foreseeable noise sources based on the unique design and location of the facility, as well as if there are wildlife or human populations nearby that would be adversely affected.

PRACTICE TIP: IS IT FERC'S ERROR OR ANOTHER AGENCY'S?

FERC's analysis of noise impacts to wildlife may be based on the biological opinion issued by the Fish & Wildlife Service or the National Marine Fisheries Service. When commenting, make sure to note if the biological opinion aligns with FERC's analysis. If so, it may be that the biological opinion is legally flawed (see Section 4.E.10). If not, and if the agency is more concerned about noise impacts to wildlife than FERC is, highlight this. Pointing to another agency's opinion can be more persuasive to a reviewing court that FERC failed in its duties than raising the same arguments by advocates alone.

⁴⁴² See App. 8b (Alaska LNG Rehearing Request), 35-36 & 73-75, 86-87, 11-12 (describing noise impacts to beluga whale populations and potential alternatives / mitigation measures that were not considered or methods that were considered but are not supported by scientific studies).

⁴⁴³ As was the case in the Jordan Cove project, for several environmental justice communities. See App. 8 (Jordan Cove Rehearing Request), 91.

⁴⁴⁴ See App. 8 (Jordan Cove Rehearing Request), 82-83 (describing the adverse impacts that scientific studies have shown that killer whales experience from low-frequency ship noise); App. 8b (Alaska LNG Rehearing Request), 35-36; 73-75 & 80 (describing noise impacts to beluga whale populations and potential alternatives / mitigation measures that were not considered).

And as with all impacts, if FERC only conducts a cursory analysis of noise, or fails to take a hard look at cumulative impacts, highlight that. Depending on these failures, this could be grounds for overturning the certificate order.

Climate Change

Under the 1978 CEQ regulations, the direct, indirect, and cumulative effects of climate change should be incorporated into NEPA documents.⁴⁴⁵ It is very clear that FERC has the responsibility for weighing the direct greenhouse gas emissions from a project (and cumulative emissions, under the 1978 CEQ regulations).⁴⁴⁶ As of January 2022, exactly which agency (FERC or DOE) is responsible for weighing a project's indirect greenhouse gas emissions is still in turmoil.⁴⁴⁷ However, with FERC as lead agency tasked with preparing NEPA documents, FERC should include the indirect emissions in its EIS (even if DOE is ultimately the one that relies on that analysis in authorizing the gas export). If FERC has not conducted a thorough and accurate assessment of a project's direct, cumulative, and indirect greenhouse gas emissions, that failure should be highlighted in comments.

FERC historically has failed to adequately address climate change, as the D.C. Circuit scolded in its August 2021 order remanding the Rio Grande LNG certification.⁴⁴⁸ FERC previously had argued that even though it was able to quantify the amount of greenhouse gases emitted, it was unable to determine the significance of a project's contribution to climate change.⁴⁴⁹ This is despite the fact that several methods for doing just that have been developed and are generally recognized as acceptable tools for calculating significance. One such tool, the "social cost of carbon" method, assigns a dollar value of harm per unit of greenhouse gases emitted.⁴⁵⁰

The D.C. Circuit has made clear that even if FERC continues to assert that it cannot estimate the significance of a project's impact on climate, FERC's own regulations require it to evaluate the impacts based on theoretical approaches or research methods that are generally accepted in the scientific community.⁴⁵¹ The court did not require FERC to begin using the social cost of carbon, but did require it to explain how its previous approach is consistent with its regulations—and if not, to remedy it by using some method to quantify the impact each proposed project will have on climate change.

FERC has taken some steps toward improving its climate-change analyses. As of the end of 2021, FERC is examining how it can determine the quantity of direct and indirect greenhouse gas

⁴⁴⁵ The 2020 regulations prohibited agencies from considering cumulative effects; the replacement regulations are expected to reincorporate the need to assess cumulative effects. See Section 4.B.3 for more on the changes to CEQ's regulations.

⁴⁴⁶ See *Venture Global Calcasieu Pass, LLC*, 166 FERC ¶ 61,144 (2019), at p. 2 (Comm'r LaFleur, concurring) (the Commission "has the clear responsibility to disclose and consider the direct and cumulative impacts of the proposed LNG export facility, in order to satisfy our obligations under NEPA and section 3 of the NGA.").

⁴⁴⁷ Giannetti, *Hot Potato*, *supra* note 143 ("The division of labor between FERC and DOE has allowed the two agencies to play a game of emissions hot potato, each disclaiming an obligation to incorporate an LNG project's upstream and downstream emissions (aka their 'indirect emissions') into their reviews.")

⁴⁴⁸ *Vecinos para el Bienstar de la Comunidad Costera v. FERC*, No. 20-10453 ("Rio Grande Op.") at 12-13 (Aug. 3, 2021), [https://www.cad.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cad.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf). Attached as App. 2.

⁴⁴⁹ *Id.* at 11.

⁴⁵⁰ See "D.C. Circuit Requires Further Consideration of Social Cost of Carbon in NEPA Analysis." (Aug. 17, 2021) <https://www.insideenergyandenvironment.com/2021/08/d-c-circuit-requires-further-consideration-of-social-cost-of-carbon-in-nepa-analysis/>. See also Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990. Interagency Working Group on Social Cost of Greenhouse Gases, United States Government (Feb. 2021) https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf?source=email.

⁴⁵¹ 40 C.F.R. § 1502.21(c) (2020) and 40 C.F.R. § 1502.22(b) (1978).

emissions resulting from a project proposed under section 3 or 7 of the Natural Gas Act and the appropriate level of mitigation for such emissions. On November 19, 2021, FERC held a technical conference to explore methods, approaches and legal authority for mitigation requirements into orders authorizing LNG projects.⁴⁵²

Advocates are encouraged to continue to push FERC to adopt methods that adequately quantify each proposed project's effects on climate change, including direct, indirect, and cumulative emissions—beyond simply reporting an estimate of the tons of greenhouse gases emitted, but also analyzing the severity of the impacts from those emissions. This will involve learning about the different methods that the scientific, regulatory, and international communities have developed, including the social cost of carbon, which may change as the science develops. Also consider whether FERC has overlooked or underestimated emissions associated with the project, perhaps by relying on flawed assumptions. Reviewing the state air permit can be helpful because the applicant has likely had to justify its emissions estimates in front of the state agency—and its estimates and the underlying assumptions supporting those estimates are likely memorialized in publicly available documents.

Reliability and safety (18 C.F.R. 380.12(m), Resource Report 11))

Environmental documents for an LNG terminal must address safety risks. FERC requires that the draft EIS discuss measures to protect the public from failure of the facility; the hazards and environmental impact that could reasonably ensue from such failure; design and operational measures to avoid or reduce risk; measures to keep the public away from hazardous areas' and measures to "minimize problems arising from malfunctions and accidents (with estimates of probability of occurrence)."⁴⁵³ For example, included in the EIS for the Puget Sound Energy's proposed Tacoma LNG facility was "Potential spill of LNG and impacts on human health and safety" and "Changes to emergency service needs at the Port of Tacoma manufacturing/industrial center."⁴⁵⁴

Commenting on reliability and safety can be involved because three different agencies—the USDOT PHMSA, the Coast Guard, and FERC—share oversight and responsibility for LNG terminal safety, and each has its own regulations. PHMSA and the Coast Guard are consulting agencies. All three agencies have entered into memoranda of understanding that govern their interaction.⁴⁵⁵ Advocates investigating reliability and safety issues are encouraged to read prior EIS documents, which summarize the interactions of these agencies and the topics they cover.⁴⁵⁶ An **expert** in industrial

⁴⁵² "Technical Conference on Greenhouse Gas Mitigation: Natural Gas Act Sections 3 and 7 Authorizations; Notice Inviting Technical Conference Comments." 86 FR 66,293 (Nov. 22, 2021) <https://www.federalregister.gov/documents/2021/11/22/2021-25403/technical-conference-on-greenhouse-gas-mitigation-natural-gas-act-sections-3-and-7-authorizations> (seeking comments after the conference). Filings related to this topic can be found under Docket PL21-3-000.

⁴⁵³ 18 C.F.R. 380.12(m) ("Resource Report 11").

⁴⁵⁴ "Summary of Final Environmental Impact Statement: Tacoma Liquefied Natural Gas Facility." City of Tacoma, Planning and Development Services. (May 5, 2016) at 2. [https://cms.cityoftacoma.org/planning/pse/Tacoma%20LNG%20FEIS%20Summary%20\(5-5-16\).pdf](https://cms.cityoftacoma.org/planning/pse/Tacoma%20LNG%20FEIS%20Summary%20(5-5-16).pdf).

⁴⁵⁵ See "PHMSA Inter-Agency Memoranda of Understanding." U.S. DOT PHMSA. <https://www.phmsa.dot.gov/pipeline/liquified-natural-gas/phmsa-inter-agency-memoranda-understanding>; "Interagency Agreement Among The Federal Energy Regulatory Commission United States Coast Guard And Research And Special Programs Administration For The Safety And Security Review Of Waterfront Import/Export Liquefied Natural Gas Facilities." <https://www.ferc.gov/sites/default/files/2020-07/2004-interagency.pdf>.

⁴⁵⁶ E.g., the Jordan Cove FEIS (Part 3) summarizes the agencies' interactions and responsibilities on FEIS 4-738 – 4-808. See App. 3c, Jordan Cove FEIS (Part 3) (also available at https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Part_3.pdf).

safety and reliability can also be helpful in navigating the issues here; in any event, community input will be invaluable and should be sought early on.

A few safety issues that may be valid to raise for proposed projects include:

- Weak regulatory oversight

Given FERC's regulation requiring the EIS to cover issues related to accidents and safety risks, it would likely be possible for an advocate to raise the issue of agencies' weak safety oversight or outdated safety rules. The Louisiana Legislative Auditor found that from FY2015- FY2019, the average time the state environmental agency took to identify a violation after it occurred was 2.2 years, and it took an additional 2.6 years on average to issue enforcement actions based on those violations.⁴⁵⁷ The U.S. Government Accountability Office (GAO) has warned Congress that all the technical standards in FERC and Coast Guard regulations are outdated, and most of PHMSA's are also outdated.⁴⁵⁸ Of particular concern, it noted that:

*PHMSA's regulations refer to a 2001 standard for LNG fire protection established by the National Fire Protection Association, which has updated this standard five times since 2001, most recently in 2019. The version of this standard incorporated in PHMSA's regulations requires LNG export companies to use a 1992 pressure-testing standard, which is 25 years out of date.*⁴⁵⁹

Similarly, it warned, the Coast Guard's regulations incorporate a 1994 standard for fire extinguishers that has been updated by the relevant standards-developing organization five times since then, including new standards for electronic monitoring.⁴⁶⁰ While FERC and PHMSA both reported that they would undertake GAO's recommended reviews, as of the end of 2021, the problems have not been resolved.⁴⁶¹ Even if the updates occur, it is not clear that the agencies will continue to update their technical safety standards in a timely manner.

- Emergency response plan

The NGA requires that the applicant develop an emergency response plan, which the Commission must approve before issuing final approval to begin construction. The Plan must be prepared in consultation with the Coast Guard and state and local agencies, and it must include a cost-sharing plan: namely the direct costs that the applicant will reimburse State and local agencies for safety and security at the LNG terminal and in proximity to the vessels that serve the facility.⁴⁶² This document and other safety-related documents may not be available before FERC certifies a project. Applicants may not even have met with local city planners or public safety directors to work on the Emergency

⁴⁵⁷ Louisiana Legislative Auditor. "Monitoring and Enforcement of Air Quality: Department of Environmental Quality." (Jan. 20, 2021) p. 13.

[http://app.lla.state.la.us/PublicReports.nsf/0/4F3372ABDDF0F271862586630067C25D/\\$FILE/00022660A.pdf?OpenElement&.7773098](http://app.lla.state.la.us/PublicReports.nsf/0/4F3372ABDDF0F271862586630067C25D/$FILE/00022660A.pdf?OpenElement&.7773098).

⁴⁵⁸ U.S. GAO. "Natural Gas Exports: Updated Guidance and Regulations Could Improve Facility Permitting Processes." GAO-20-619. (Aug. 2020) pp. 26-27 <https://www.gao.gov/assets/gao-20-619.pdf>. As of May 5, 2021, the GAO had not received any update from the agencies regarding any corrections of the problem. Electronic correspondence with Frank Rusco, Director of GAO's Natural Resources and Environment Division, May 5, 2021.

⁴⁵⁹ *Id.* at 29.

⁴⁶⁰ *Id.* at 31.

⁴⁶¹ Also see status updates on the GAO website: "Natural Gas Exports: Updated Guidance and Regulations Could Improve Facility Permitting Processes." <https://www.gao.gov/products/gao-20-619>.

⁴⁶² 15 U.S.C. § 717b-1(e).

Response Plan, or even just to discuss potential hazards.⁴⁶³ If so, an advocate could and should object on the grounds that FERC cannot properly examine or disclose the potential impacts of the project as NEPA requires without the plans, studies, and safety verifications being completed (and being made available for public review), nor can it properly determine whether the proposed project is in the public interest as the NGA requires.

Even without consulting an expert, many safety concerns will become obvious by looking at the proposed location and investigating the current emergency response capabilities of nearby areas.⁴⁶⁴ Don't forget to scrutinize FERC's treatment of cumulative impacts. Are there other industrial facilities nearby that create compounding hazards that should be addressed?⁴⁶⁵ This is another area in which collaborating with local organizations can be essential to identifying the flaws and oversights in FERC's NEPA analysis.

New or Changed Circumstances

Another situation that can arise is the revelation of new information or changed circumstances after an EIS has already been made final. If the agency is presented with substantial changes in the proposed action or new and significant circumstances or information relevant to environmental concerns, a "Supplemental EIS" may be required.⁴⁶⁶ This argument can be raised at any stage of the proceedings.



PRACTICE TIP: ATTACH ALL EVIDENCE BEFORE SUBMITTING COMMENTS!

Don't forget to include all outside information that supports your comments! If you do not include the evidentiary sources, photos, reports, etc. that support your arguments in comments, or attach them, it may irrevocably cripple any subsequent litigation. With only a few exceptions, litigators are limited to using what was included in comments in a lawsuit. Do not just provide a URL; it may be defunct by the time FERC reviews your comments.

Where can I find examples of comments filed with FERC against LNG terminals?

Reading previous comments can be an excellent way to identify common issues that might apply to the proposed project being challenged. These comments are included as part of the appendix and are by no means a comprehensive list of comments. Keep in mind that some of the issues raised here may no longer be the strongest arguments to raise in litigation—which why is once a certificate issues and litigation is contemplated it is so important to seek the advice of experienced legal counsel. Here are some excellent examples of comments and briefing on previous LNG projects:

⁴⁶³ As was the case in the certification of Rio Grande LNG. See App. 9 (Rio Grande Rehearing Request), 38-39.

⁴⁶⁴ For example, in the Rio Grande LNG challenge, advocates identified the lack of trained firefighters and the fact that evacuation routes would take residents directly next to the proposed terminal with few other direct options. See App. 10 (Rio Grande DEIS Comments), 16-18.

⁴⁶⁵ Perhaps even a rocket launch site. See App. 10 (Rio Grande DEIS Comments), 63-69 (describing the inadequacies of the analysis of the threat created by the SpaceX launch site). Additional safety concerns are raised in the following pages, see *id.* at 69-73.

⁴⁶⁶ See 40 C.F.R. § 1502.9(c)(1) (1978) and 40 C.F.R. § 1502.9(d)(1) (2020).

Alaska LNG, Kenai Peninsula, Alaska

- Appendix 8b: **Rehearing Request on the Certificate Order** by Center for Biological Diversity and others (June 22, 2020).

Annova LNG, Brownsville, Texas

- Appendix 13: **Rehearing Request on the Certificate Order** by Sierra Club and others (Dec. 23, 2019).

Cameron LNG, Cameron Parish, Louisiana⁴⁶⁷

- Appendix 14: **Comments on the DEIS** by Sierra Club and others (March 3, 2014): https://environmentalnewsstand.com/sites/environmentalnewsstand.com/files/documents/apr2014/epa2014_0622b.pdf.

Jordan Cove LNG, Coos Bay Oregon

- Appendix 15: **Comments on the DEIS** by the Western Environmental Law Center (Feb. 2015) <https://law.lclark.edu/live/files/19245-2015-03-group-comments-on-deis-for-jordan-cove-lng>.
- Appendix 16: **Supplemental Comments on the DEIS** by Oregon Shores Conservation Coalition (July 5, 2019).
- Appendix 8: **Rehearing Request on the Certificate Order** by NRDC (April 20, 2020).

Pointe LNG, Plaquemines Parish, Louisiana

- Appendix 17: **Scoping comments** by Sabin Center for Climate Change Law (March 7, 2019): [https://climate.law.columbia.edu/sites/default/files/content/docs/EIA-Comment-2019-03-Planned-Pointe-LNG-Project-EIS%20\(1\).pdf](https://climate.law.columbia.edu/sites/default/files/content/docs/EIA-Comment-2019-03-Planned-Pointe-LNG-Project-EIS%20(1).pdf).

Rio Grande LNG, Brownsville, TX

- Appendix 10: **Comments on the DEIS** by Sierra Club, Texas Rio Grande Legal Aid, et al (December 3, 2018): https://drive.google.com/file/d/1cqUfLVDddizYUkg_e1VYtQ-sb1e0UzGF/view.
- Appendix 9: **Rehearing Request on the Certificate Order** by Sierra Club and others (December 23, 2019).
- Appendix 2: **D.C. Circuit Opinion: Vecinos para el Bienstar de la Comunidad Costera v. FERC**, No. 20-10453 (“Rio Grande Op.”) at 12-13 (Aug. 3, 2021), [https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/\\$file/20-1045-1908759.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/1F97B59429C7D4F6852587260052CC71/$file/20-1045-1908759.pdf).

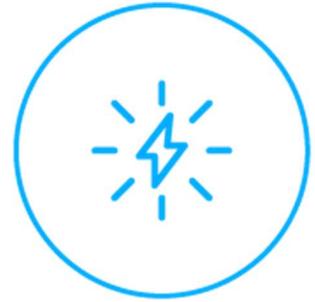
Sabine Pass LNG, Cameron Parish, Louisiana

⁴⁶⁷ The 2014 Cameron LNG rehearing request was rejected because it was filed 25 seconds after the deadline for requests. See *Cameron LNG, LLC*, 148 FERC ¶61,237 Dkt. No. CP13-25-002 (Sept. 26, 2014) (Accession No. 20140926-3039). Lesson learned: don't delay!

- Appendix 18: **D.C. Circuit Opinion** (June 28, 2016)
[https://www.cadc.uscourts.gov/internet/opinions.nsf/9E12F2D01393992385257FE000502CB2/\\$file/14-1249-1621989.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/9E12F2D01393992385257FE000502CB2/$file/14-1249-1621989.pdf).

Texas LNG, Brownsville, TX

- Appendix 19: **Scoping comments** by Sierra Club and others (May 21, 2015).
- Appendix 20: **Scoping comments** by Defenders of Wildlife (Sept. 3, 2015) (applies to the other Brownsville terminals as well: Rio Grande LNG & Annova LNG).
- Appendix 21: **Scoping comments** by Sierra Club and others (Sept. 4, 2015) (applies to the other Brownsville terminals as well: Rio Grande LNG & Annova LNG).
- Appendix 22: **Comments on the DEIS** by Sierra Club and others (Dec. 17, 2018).
- Appendix 11: **Rehearing Request on the Certificate Order** by Sierra Club and others (December 23, 2019).



Chapter 5

DOE APPROVAL

CHAPTER FIVE: FEDERAL DOE AUTHORIZATION

Background

What is DOE's role in authorizing the export of LNG?

As of January 2022, the U.S. Department of Energy (DOE)'s role in the LNG permitting process is largely one of a rubber stamp.⁴⁶⁸ DOE is responsible for authorizing the actual export or import of gas with the powers it has from the Natural Gas Act, 15 U.S.C. § 717 *et seq.*⁴⁶⁹ Note that this is different from the NGA powers of FERC, which has “the exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal” located onshore or in near-shore waters.⁴⁷⁰ Another way to think about it is that FERC approves the infrastructure, but DOE approves the export of the commodity.

In deciding whether to authorize the export of gas, DOE only has discretion when it comes to authorizing exports to countries that do not have a free-trade agreement with the United States requiring national treatment in gas (non-FTA countries).⁴⁷¹ For such non-FTA countries, DOE conducts a “public interest review” and authorizes the export unless the export would not be consistent with “the public interest,” a term not defined in the regulations. This is not a very substantive review in practice; DOE relies on studies and assumptions that make the authorization almost a foregone conclusion. Even NEPA provides little influence on DOE's analysis—in fact, under the Trump Administration, DOE concluded that most applications for export are categorically excluded from needing a NEPA analysis at all; it remains unclear whether this will change under the Biden Administration. For the other applications and for purposes of satisfying the public-interest review,

The first question to ask when challenging a DOE application is:

“WHERE IS THE GAS GOING?”

If it's going to a free-trade-agreement country: no public interest review; project is “deemed” to be in the public interest. Do not expect to gain traction here.

If it's not: public interest review required. This is the slightly more fertile ground for advocacy.

⁴⁶⁸ In 2013, DOE wrote a very candid series of answers assuaging Alaska Senator Lisa Murkowski's fears that DOE had a propensity to, or would, block applications to import or export gas or start modifying or rescinding authorizations once granted. Ltr. From Paula A. Gant (Deputy Assistant Secretary, Office of Oil and Natural Gas) to Senator Murkowski. (Oct. 17, 2013) <https://www.energy.senate.gov/services/files/9E99E412-CE05-449D-8893-DC8D64C32D02>. DOE reassured her that it had “no record of having vacated or rescinded an authorization to import or export natural gas over the objections of the authorization holder” and that it “would not rescind a previously granted authorization except in the event of extraordinary circumstances.” *Id.* at 1-3. Little appears to have changed at the DOE since.

⁴⁶⁹ The NGA can be confusing, because the powers it grants are to the now-defunct Federal Power Commission (FPC). Now, DOE and FERC split the NGA powers in the following manner: When the FPC was abolished, DOE inherited some of the FPC's NGA powers. DOE then delegated a portion of these powers to FERC (e.g., NGA section 3's responsibilities for permitting the infrastructure of export/import terminals) and a portion to an internal DOE office: the Assistant Secretary of Energy for Fossil Energy (FE) (e.g., NGA section 3's responsibilities for permitting the export/import of the commodity). See *Sierra Club v. Fed. Energy Regulatory Comm'n*, 827 F.3d 59, 63 (D.C. Cir. 2016) (citing Dep't of Energy, Redelegation Order No. 00-006.02, § 1.3(A) (Nov. 17, 2014)); See also Dep't of Energy, Delegation Order No. 00-004.00A, § 1.21(A) (May 16, 2006); 42 U.S.C. § 7172(f); Department of Energy Organization Act, §§ 301(b), 401(a), 402(a), Pub. L. No. 95-91, 91 Stat. 565, 578, 582-84 (codified at 42 U.S.C. §§ 7151(b), 7171(a), 7172(a)).

⁴⁷⁰ 15 U.S.C. § 717b(e)(1). DOE delegated to FERC the authority under Natural Gas Act § 3(e), 15 U.S.C. § 717b(e), to license LNG terminals. Also see 42 U.S.C. § 7172(e) and DOE Delegation Order No. 0204-112, 49 Fed. Reg. 6684, 6690 (Feb. 22, 1984).

⁴⁷¹ As of January 2022, there are less than two dozen countries with which the United States has free trade agreements that receive preferential treatment under the NGA: Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Korea, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, and Singapore. See <https://www.energy.gov/fecm/how-obtain-authorization-import-and-export-natural-gas-and-lng>. For all FTA countries, see <http://www.ustr.gov/trade-agreements/free-trade-agreements>.

DOE simply cites to FERC’s NEPA analysis, but it has little substantive effect on DOE’s ultimate decision—which invariably is to authorize export of the gas. (for more details on FERC’s NEPA review, see Chapter 4 Sections B.2–B.7). And for exports to countries with gas free-trade agreements with the United States (FTA countries), DOE must approve those applications “without modification or delay”—in other words, with no public-interest review at all.

Who is DOE and what are the relevant offices involved in authorizing LNG exports?

The Department of Energy is the vast federal agency concerned with energy and safety in handling nuclear material. Its mission is “is to ensure America’s security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions.”⁴⁷² DOE and its numerous offices are led by political appointees hired and fired by the current presidential administration; because of this, DOE is more responsive to the political desires of an administration than FERC, whose Commissioners cannot be fired at will.⁴⁷³



One of the many offices within the DOE is the newly renamed Office of The Assistant Secretary for Fossil Energy and Carbon Management (“FECM”), which oversees export and import authorizations of liquefied gas. The Assistant Secretary of this office has ultimate decision-making authority on the applications for export and import authorization.⁴⁷⁴

Within the FECM is the Office of Regulation, Analysis, and Engagement.⁴⁷⁵ The Division of Natural Gas Regulation, which is housed in the Office of Regulation, Analysis, and Engagement, contains the staff that is responsible for processing LNG export authorizations.⁴⁷⁶ The organizational chart for the FECM as of November 3, 2021 is shown here:⁴⁷⁷

TERMINOLOGY NOTE:

This guide refers to “DOE” as the entity authorizing exports and imports of gas (as opposed to “DOE/FE,” “FE” or “FECM”). This matches DOE’s usual terminology; however, some government documents and applications may not follow this convention. Don’t be intimidated by the different acronyms; it is the same process.

⁴⁷² “Mission.” DOE. <https://www.energy.gov/mission>.

⁴⁷³ Of course, FERC Commissioners are not completely immune to presidential influence or opinion. For example, in 2020, then-chairman Neil Chatterjee was abruptly demoted after supporting climate-friendly policies. Gearino, Dan. “Trump Demoted FERC Chairman Chatterjee After He Expressed Support for Carbon Pricing.” Inside Climate News. (Nov. 6, 2020). <https://insideclimatenews.org/news/06112020/trump-ferc-chairman-neil-chatterjee/>. Chatterjee continued as a commissioner and the other Republican appointee, James Danly, was prompted in his place. *Id.*

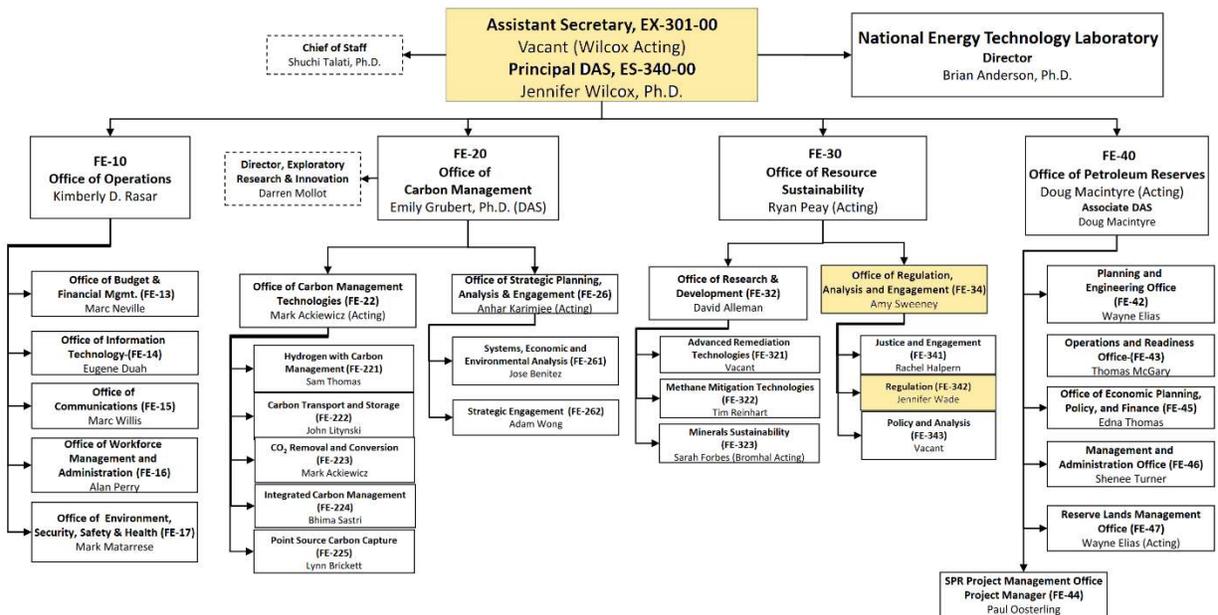
⁴⁷⁴ Unless a different employee is delegated this authority, for example when the position of assistant secretary is vacant. 10 C.F.R. § 590.102(a).

⁴⁷⁵ “Our Organization and Employees.” FECM. <https://www.energy.gov/fecm/our-organization-and-employees>.

⁴⁷⁶ Division of Natural Gas Regulation. FECM. <https://www.energy.gov/fecm/division-natural-gas-regulation>. For the staff contact information, see “Staff Listing - Office of Regulation, Analysis, and Engagement” <https://www.energy.gov/fecm/staff-listing-office-regulation-analysis-and-engagement>.

⁴⁷⁷ “Our Organization and Employees.” FECM. <https://www.energy.gov/fecm/our-organization-and-employees>. As of December 2021, the position of Assistant Secretary was still vacant; the Biden Administration’s nominee Brad Crabtree was still in the confirmation process. See “President Biden Announces Two Key Nominations.” The White House. (Sept. 2, 2021) <https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/02/president-biden-announces-two-key-nominations/>.

Office of the Assistant Secretary for Fossil Energy and Carbon Management



Note that until July 4, 2021, the FECM office was called simply “the Office of the Assistant Secretary for Fossil Energy” (“FE”).⁴⁷⁸ The docket numbers and many documents, including DOE’s regulations, still refer to the office by the old name and old acronym.⁴⁷⁹ It is unclear when, if at all, dockets and documents will be updated to refer to the new name—and how much the change heralds substantive improvements in the authorization process.

What must an applicant receive from DOE before proceeding with construction?

DOE must issue a **final order** for authorization to export LNG before the applicant can begin exporting gas.⁴⁸⁰ In the past, DOE has first issued a **conditional order** authorizing the export of LNG,⁴⁸¹ subject to FERC conducting a NEPA analysis and certifying the project, which are more-involved processes than DOE’s review (see Chapter 4 for details on the FERC certification process).⁴⁸² DOE has shifted away from granting conditional orders and now typically issues two final

⁴⁷⁸ “Our New Name is also a New Vision.” FECM. <https://www.energy.gov/fecm/articles/our-new-name-also-new-vision>.

⁴⁷⁹ See e.g., 10 C.F.R. § 590.102(f) (defining “FE” as the Office of The Assistant Secretary for Fossil Energy).

⁴⁸⁰ 10 C.F.R. § 590.404. (“The Assistant Secretary shall issue a final opinion and order and attach such conditions thereto as may be required by the public interest after completion and review of the record. The final opinion and order shall be based solely on the official record of the proceeding and include a statement of findings and conclusions, as well as the reasons or basis for them, and the appropriate order, condition, sanction, relief or denial.”)

⁴⁸¹ For the conditional order in the Jordan Cove project, which was issued on March 24, 2014, see https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2014/orders/ord3413.pdf. Around 2014, DOE stopped its practice of issuing conditional authorizations and instead typically waits until FERC’s NEPA review had concluded to conduct its public interest review for non-FTA applications. See “Procedures for Liquefied Natural Gas Export Decisions.” 79 FR 48,132 at 48,136

https://www.energy.gov/sites/prod/files/2014/08/f18/FR%20Procedures%20LNG%20Exports%2008_15_14.pdf (“DOE will suspend its practice of issuing conditional decisions on applications to export LNG to non-FTA countries from the lower-48 states. DOE will no longer act in the published order of precedence, but will act on applications in the order they become ready for final action. An application is ready for final action when DOE has completed the pertinent NEPA review process and when DOE has sufficient information on which to base a public interest determination.”).

⁴⁸² 10 C.F.R. § 590.402 (“The conditional order shall include the basis for not issuing a final opinion and order at that time and a statement of findings and conclusions. The findings and conclusions shall be based solely on the official record of the proceeding.”) For more information about the transition away from conditional orders in 2014 and its effect on the application process, see Brookings. “Natural Gas Issue Brief #4: An Assessment of U.S. Natural Gas Exports” (July 2015) pp. 2-5 https://www.brookings.edu/wp-content/uploads/2016/06/lng_markets.pdf.

orders, one relatively quickly for any requested authorization to export to FTA countries, and one after FERC's authorization issues if the applicant seeks to export to non-FTA countries. The final order(s) will almost certainly place additional terms and conditions on the applicant's export of LNG, including any conditions that FERC's order has recommended. Most LNG applicants will file for both FTA and non-FTA approval regardless of whether it has any intention to export to a FTA country, both because it provides other potential markets for gas and so it can state in marketing and advocacy that it has already been approved to export.

An example final opinion and order granting long-term authorization to export LNG to non-free trade agreement nations is attached as Appendix 23, the Jordan Cove Project Final Order (issued July 6, 2020).⁴⁸³ Texas LNG's authorization to export to non-FTA counties is attached as Appendix 24 (issued Feb. 10, 2020).⁴⁸⁴

Why should I participate in the DOE process?

Advocates should participate in the DOE process to: (1) push back on the rubber-stamp role DOE plays in authorizing gas exports; and (2) to preserve the right to challenge DOE's authorizations in case the law shifts to require DOE to take on a more rigorous oversight role, especially when it comes to greenhouse gas emissions.

Under the status quo, challenging DOE's applications will likely not be as fruitful on a case-by-case basis as challenging other approvals that a facility might need. However, the DOE process is subject to the changing political wills of a presidential administration—and it may be that the DOE becomes less willing to rubber stamp the import and export of gas under more-climate friendly presidential administrations. Indeed, two 2021 climate-change related executive orders⁴⁸⁵ have already spurred DOE to reconsider its authorization of the Alaska LNG project.⁴⁸⁶

In addition, the law is arguably in flux over which agency—DOE or FERC—has responsibility for weighing the importance of greenhouse gas emissions created upstream and downstream from the LNG terminal itself. DOE has traditionally argued that consideration of upstream and downstream emissions is within its exclusive authority (not FERC's), but, despite this, DOE has avoided including a case-by-case analyses of these greenhouse gas emissions in its analyses for each application, arguing that they are not reasonably foreseeable. And a 2021 DOE rule change, begun under the Trump Administration, excluded virtually all DOE export authorization applications from needing a NEPA environmental

PRACTICE TIP

It is important to *at a minimum* intervene in every possible proceeding to preserve your legal rights. Also, in terms of encouraging public and political scrutiny of the project, advocates should seek to intervene in every process. Sections 5.C.7 – 5.C.9 describes intervention with the DOE process in more detail.

⁴⁸³ The order is also available here: <https://www.energy.gov/sites/prod/files/2020/07/f76/3143a.pdf>.

⁴⁸⁴ *Id.*

⁴⁸⁵ Namely E.O. 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis,"¹⁴ and E.O. 14008, "Tackling the Climate Crisis at Home and Abroad." See Exec. Order 13990 of Jan. 20, 2021, 86 FR 7,037 (Jan. 25, 2021), available at: <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis> and Exec. Order No. 14008 of Jan. 27, 2021, Tackling the Climate Crisis at Home and Abroad, 86 FR 7619 (Feb. 1, 2021), available at: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

⁴⁸⁶ <https://www.energy.gov/sites/default/files/2021-04/ord3643b.pdf>.

review.⁴⁸⁷ (Note that for these projects, **FERC** must still perform a NEPA analysis for the project's **infrastructure**.) DOE's current positions may look bleak—but if they change advocates want to be at the table to help ensure all necessary reviews are carried out correctly.

What are the primary ways an advocate can be involved in the DOE process?

There are several ways an advocate can be involved in DOE's authorization process. Advocates can:

- Intervene – Once an application is filed and up until the close of the comment period, an advocate can and should intervene in the process. An intervening advocate becomes a party to the case, with the right to appeal the authorization in federal court. This is the best way to transform the process into a contested process and require that the applicant and DOE converse on-the-record about the merits of the application.⁴⁸⁸ It raises the profile of the project and can spur public and political scrutiny of the application. In the end, if no one intervenes, there is much less transparency in the whole process.
- File comments and protests – The notice of application will set a comment period during which anyone can raise issues or concerns about the application. DOE should address the comments and protests that are made, but is not required to go point by point by its regulations. Note that only intervenors will be able to raise the issues they commented on in litigation if the application is granted. For the difference between a comment and a protest, see Section C.6.
- Seek informal discovery and admissions of facts – DOE's regulations allow parties to request informal discovery (e.g., written interrogatories and requests for production of documents)⁴⁸⁹ and admission of facts without awaiting a DOE order allowing such procedures. Although it is unclear whether advocates have used this strategy before, it may be a tool that would allow information about the project to be uncovered that could be useful in other challenges, not just with the DOE.
- Apply for rehearing – Before an advocate may litigate a DOE authorization, the advocate must apply for the authorization's rehearing. It is highly unlikely DOE will undo or reconsider an authorization, but it has happened (e.g., advocates' request for rehearing of the Alaska LNG



WARNING: DOE'S FILING DEADLINE

for documents is typically 4:30 PM Eastern Time. This is earlier than many other agencies! Documents that are a *single second late* will be treated as if they were filed the next day. Meaning that if you filed on the last day of the comment or intervention period, DOE will almost certainly ignore your late submission.

Avoid issues by filing early!

⁴⁸⁷ Earley, Bud. "DOE Rule Sharply Limits Evaluation of Environmental Impacts of LNG Exports." (Dec. 10, 2020) <https://www.insideenergyandenvironment.com/2020/12/doe-rule-sharply-limits-evaluation-of-environmental-impacts-of-lng-exports/#more-7372> (explaining the new rule and DOE's position that upstream production impacts are not reasonably foreseeable and downstream emissions at the point of consumption are "too attenuated to be reasonably foreseeable and do not have a reasonably close causal relationship to the granting of an export authorization.") The final rule can be found here: "National Environmental Policy Act Implementing Procedures." 88 FR 78197-205. <https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26459.pdf>.

⁴⁸⁸ 10 C.F.R. § 590.108.

⁴⁸⁹ 10 C.F.R. § 590.305 (Informal discovery); 10 C.F.R. § 590.308 (Admissions of facts).

project was granted in part in 2021). Almost more importantly, it is a necessary step before asking a court to review the DOE's work. Legal counsel should be consulted by this stage in a DOE challenge because in litigation parties are limited to the issues they raised in rehearing.

- Litigate – Appeals of DOE authorizations go to the D.C. Circuit or the place where the applicant has its principal place of business, under the Natural Gas Act.⁴⁹⁰ It is imperative to seek experienced legal counsel when contemplating litigation, because the laws about what DOE must do can be quite complicated and is subject to change.
- Advocate for changes in public and political opinion - Unlike FERC, DOE is an organization run by political appointees that ultimately are hired (and fired) by each current administration. That means it can be more responsive than FERC to changing public and political opinion about which energy sources should be prioritized, especially in light of the increasing threat of climate change. If public and political opinion becomes more concerned about the footprint of gas, DOE may be persuaded to scrutinize gas applications more closely.
- Comment on foundational studies – DOE bases much of its public-interest review of a non-FTA application on economic and environmental studies it has commissioned on the costs and benefits of allowing gas export.⁴⁹¹ Every couple of years DOE updates these studies and seeks public comment. The findings in these documents largely determine whether additional exports will be authorized so it is important to comment as they are being drafted.

What are other resources on DOE's process permitting LNG facilities?

Advocates have focused on challenging other aspects of LNG permitting, so there is little advocate-produced guidance material yet on DOE challenges. The DOE publishes some information about its process that an advocate may find helpful:

- Division of Natural Gas Regulation homepage. This site is the splashpage for DOE's LNG export applications. <https://www.energy.gov/fecm/division-natural-gas-regulation>.
- DOE Applications Summary Table. DOE updates a list of all LNG export applications that it has granted and publishes it approximately monthly: See *Long Term Applications Received by DOE/FE to Export* <https://www.energy.gov/fecm/articles/summary-lng-export-applications-lower-48-states>. This is a good source for the latest status for every export application that DOE has approved with the docket numbers for FTA and non-FTA applications.

How is this chapter organized?

This first section is background information. Section 5.B describes the laws DOE must comply with: the Natural Gas Act, DOE regulations and two executive orders. A brief discussion of NEPA is included (an in-depth discussion of NEPA is in Chapter 4 Sections B.2-B.7). Section 5.C steps through the process of an application and identifies how and when advocates can be involved. Section 5.D

⁴⁹⁰ 15 U.S.C. § 717r(b) (“Any party to a proceeding under this chapter aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia.”) (emphasis added). Note that the reference to the “Commission” actually refers to the now-defunct Federal Power Commission. Since that agency was dissolved, DOE and FERC have stepped into its shoes for the purposes of implementing the different parts of the NGA and thus references to the Commission here apply to both FERC and DOE. This is why § 717r(b) governs judicial review, and not § 717r(d)(1) (providing for review of actions by federal agencies other than “the Commission”).

⁴⁹¹ <https://www.energy.gov/sites/default/files/2021-10/LNG%20Snapshot%20September%2030%202021.pdf> (“Foundational Studies for DOE's Public Interest Reviews of LNG Exports”).

identifies issues that an advocate can raise and highlights example motions and comments advocates have filed in previous challenges.

What laws must DOE comply with?

The Natural Gas Act is the statute that describes DOE’s responsibilities in handling applications to export or import gas. DOE has enacted regulations that it must follow in complying with the NGA, which are found at 10 C.F.R. part 590 et seq. (“Administrative Procedures With Respect To The Import And Export Of Natural Gas”). DOE must also make sure that the projects it authorizes comply with NEPA when the project is not categorical excluded from NEPA review (which as of January 2022 is the case for almost all export projects, thanks to a 2020 rule change). If DOE fails to follow the NGA, its regulations, or NEPA, it is vulnerable to litigation under the Administrative Procedure Act, 5 U.S.C. 551, et seq. (the APA).

Section 5.B.1 describes the Natural Gas Act and the responsibilities it places on DOE. Section 5.B.2 explores the public interest analysis that is required when the gas is exported to certain countries. Section 5.B.3 describes DOE’s NEPA obligations. Section 5.B.4 provides an overview of other regulations and orders that are relevant for advocates. Section 5.B.5 discusses the length of authorizations that may be sought.

What does the Natural Gas Act require of DOE when reviewing import and export applications?

Under the NGA, LNG applications are split into two categories: exports to countries with a free-trade agreement with the United States that require “national treatment for trade in natural gas”⁴⁹² (FTA countries) and those without such agreements (non-FTA countries). Approval for exporting to FTA countries is much easier than exporting to non-FTA countries:

The **exports to FTA countries** falls under NGA section 3(c) (15 U.S.C. § 717b(c)), which requires that FTA applications “shall be deemed to be consistent with the public interest” and granted “without modification or delay.” For these exports DOE **will not** conduct a public-interest review and “without modification or delay” authorizes the export or import requested, often within months of the application being filed. As of January 2022, there are less than two dozen countries with which the United States has free trade agreements that receive preferential treatment under the NGA: Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Korea, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, and Singapore.⁴⁹³

Exports to non-FTA countries do not get preferential treatment and are at least facially scrutinized. The non-FTA portion of an application falls under NGA section 3(a), 15 U.S.C. § 717b(a), which **does** require a DOE to ask whether the export is in the public interest (a “public-interest review”). For these exports, DOE/FE will issue a Federal Register Notice of application seeking comments, protests, and motions to intervene to make a public interest finding for these types of applications. Non-FTA applications are those that an advocate can intervene and comment on.

⁴⁹² This is a term of art used to clarify that not all countries with FTA with the US will fall in this category of getting preferential regulatory treatment for gas imports. For example, Israel and Costa Rica have free trade agreements with the United States that do not require national treatment for trade in natural gas. Thus, exports to these two countries would be exports to non-FTA countries. <https://www.energy.gov/fecm/how-obtain-authorization-import-and-or-export-natural-gas-and-lng>.

⁴⁹³ <https://www.energy.gov/fecm/how-obtain-authorization-import-and-or-export-natural-gas-and-lng>. For all FTA countries, see <http://www.ustr.gov/trade-agreements/free-trade-agreements>.

What does the public interest review required for non-FTA applications include?

The public interest review required for non-FTA applications is different from the public interest reviews required by permits issued by FERC or the Army Corps.

DOE interprets NGA section 3(a) (non-FTA applications) as creating a **rebuttable presumption** that a proposed export of gas is in the public interest.⁴⁹⁴ In doing so, DOE has relied on the D.C. Circuit court's statement that "there must be an affirmative showing of inconsistency with the public interest to deny the application" to export to non-FTA countries.⁴⁹⁵ This step is a difficult burden that advocates have not yet succeeded in surmounting.⁴⁹⁶

It is also difficult to pin DOE to list of what must be considered in the public interest review because "public interest" is not defined in the statute or regulations, nor is there a list of criteria that must be considered (in contrast, for example, to the public interest review of the Corps' 404 permitting process). In the past, DOE has included factors such as economic impacts, international impacts, security of gas supply, and environmental impact. Courts will tend to defer to the factors DOE identifies for consideration, only large inconsistencies would likely be enough to cause a court to question DOE's decision on any given application. In 2020, it was DOE's practice to focus on "(i) the domestic need for the gas proposed to be exported, (ii) whether the proposed exports pose a threat to the security of domestic gas supplies, (iii) whether the arrangement is consistent with DOE's policy of promoting market competition, and (iv) any other factors bearing on the public interest, as determined by DOE."⁴⁹⁷ In 2020 DOE also still was following guidance from 1984 policy guidelines established for the import of gas, namely that the federal government should "minimize [its] control and involvement in energy markets [while] promot[ing] a balanced and mixed energy resource system."⁴⁹⁸

DOE also relies on a number of economic and environmental studies that it has conducted on the export of gas in general.⁴⁹⁹ Its public-interest review of applications relies on these studies, which as of January 2022 include two types:

- Economic Studies. DOE has commissioned a series of economic studies that were submitted for public comment. Following studies in 2012 and 2014/2015, the most recent study was conducted

⁴⁹⁴ See 86 Fed. Reg. 2,243 n.6 (citing *Sierra Club v. U.S. Dep't of Energy*, 867 F.3d 189, 203 (D.C. Cir. 2017)) ("We have construed [NGA section 3(a)] as containing a 'general presumption favoring [export] authorization.'") (quoting *W. Va. Pub. Serv. Comm'n v. U.S. Dep't of Energy*, 681 F.2d 847, 856 (D.C. Cir. 1982)). Case can be found here: <https://www.leagle.com/decision/infco20170815296>.

⁴⁹⁵ *Sierra Club v. U.S. Dep't of Energy*, 867 F.3d 189, 203 (D.C. Cir. 2017) (quotations incorporated).

⁴⁹⁶ Advocates tried to in *Sierra Club v. U.S. Dep't of Energy*, 867 F.3d 189 (D.C. Cir. 2017). In that case, the court rejected Sierra Club's argument that environmental concerns—including impacts identified by the NEPA process as significant—could overcome the presumption in favor of exports. This case shows that simply arguing that environmental impacts can overcome this presumption is unlikely to sway the DOE or a court to deny an application.

⁴⁹⁷ App. 24, Texas LNG Order on Non-FTA Application, FE Docket No. 15-62-LNG (DOE/FE Order No. 4489), Feb. 10, 2020, 20-22, <https://www.energy.gov/sites/prod/files/2020/02/f71/ord4489.pdf>.

⁴⁹⁸ *Supra* (citing the Guidelines to say: "The market, not government, should determine the price and other contract terms of imported [or exported] natural gas The federal government's primary responsibility in authorizing imports [or exports] will be , evaluate the need for the gas and whether the import [or export] arrangement will provide the gas on a competitively priced basis for the duration of the contract while minimizing regulatory impediments to a freely operating market." (quoting U.S. Dep't of Energy, New Policy Guidelines and Delegations Order Relating to Regulation of Imported Natural Gas, 49 Fed. Reg. 6684 (Feb. 22, 1984))).

⁴⁹⁹ DOE, *Liquefied Natural Gas (LNG) Exports* (Sept. 2021), <https://www.energy.gov/sites/default/files/2021-10/LNG%20Snapshot%20September%2030%202021.pdf>.

in 2018.⁵⁰⁰ This 2018 study, “Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports” examined the probability and macroeconomic impact of various lower-48 sourced LNG export scenarios, with exports levels determined by market forces. It is not a case-by-case review of the economic effects for each authorization requested.

- Environmental Studies. DOE has commissioned multiple environmental studies on LNG that have been carried out by the National Energy Technology Laboratory. DOE uses them to underpin the environmental portion of its public interest review of lower-48 LNG exports. The “Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States” surveyed potential environmental impacts from unconventional gas production.⁵⁰¹ The “Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States”⁵⁰² and its 2019 update assessed the potential greenhouse gas (GHG) impacts of U.S. LNG exports vs. alternatives like coal (but notably not renewables).⁵⁰³ The life cycle studies focused only on the lower 48 states—but thanks to pressure by advocates challenging the Alaska LNG project, DOE is currently conducting two Alaska-specific environmental studies: (i) a life cycle analysis calculating the GHG emissions for LNG exported from Alaska and transported by vessel to markets in Asia and potentially in other regions, and (ii) an upstream study examining aspects of gas production on the North Slope of Alaska.⁵⁰⁴

Note that none of these studies involve a case-by-case analysis of the effects for an individual project. DOE considers such analyses beyond its capabilities and too speculative to be part of the public interest determination.⁵⁰⁵ Instead, it typically summarily concludes that LNG exports will not increase global greenhouse gas emissions in a “material or predictable way.” This failure to do a case-by-case analysis is something advocates should continue to challenge DOE on.

What are DOE’s NEPA responsibilities?

In addition to considering environmental impacts in its public-interest review required by the NGA, DOE may need to consider environmental impacts as part of its NEPA responsibilities.

An in-depth discussion of NEPA is found in Chapter 4, Sections B.2–B.7, but to summarize, every federal agency that grants a permit or authorization to a large project like an LNG export terminal or

⁵⁰⁰ Background information for these studies (including the studies themselves, comments, and responses) are found here: *LNG Export Studies*, <https://www.energy.gov/fecm/downloads/lng-export-studies> (with links to the 2012 study and background information: <https://www.energy.gov/fecm/services/natural-gas-regulation/lng-export-study>; the 2014/2015 study: <https://fossil.energy.gov/app/docketindex/docket/index/11>; and the 2018 study: <https://fossil.energy.gov/app/docketindex/docket/index/10>).

⁵⁰¹ 2014 environmental review study and background (79 FR 48132): <https://www.energy.gov/fecm/addendum-environmental-review-documents-concerning-exports-natural-gas-united-states>.

⁵⁰² 2014 greenhouse gas life cycle study and background (79 FR 32260): <https://www.energy.gov/fecm/life-cycle-greenhouse-gas-perspective-exporting-liquefied-natural-gas-united-states>.

⁵⁰³ S. Roman-White, S. Rai, J. Littlefield, G. Cooney, T. J. Skone, “Life Cycle Greenhouse Gas Perspective On Exporting Liquefied Natural Gas From The United States: 2019 Update.” NETL (dated Sept. 12, 2019) <https://www.energy.gov/sites/prod/files/2019/09/f66/2019%20NETL%20LCA-GHG%20Report.pdf>. This study was published in the Federal Register on Sept. 19, 2019 and 84 FR 49278.

⁵⁰⁴ App. 25, Alaska LNG Order on Rehearing. FE Docket No. 14-96-LNG (April 15, 2021) at 13-15 <https://www.energy.gov/sites/default/files/2021-04/ord3643b.pdf>.

⁵⁰⁵ See, e.g., App. 24, Texas LNG Brownsville LLC Order Granting non-FTA Exports, FE Docket No. 15-62-LNG at 42 (Feb. 10, 2020) <https://www.energy.gov/sites/prod/files/2020/02/f71/ord4489.pdf>. (“[T]o model the effect that U.S. LNG exports would have on net global GHG emissions would require projections of how each of these fuel sources would be affected in each LNG-importing nation. Such an analysis would not only have to consider market dynamics in each of these countries over the coming decades, but also the interventions of numerous foreign governments in those markets. Moreover, the uncertainty associated with estimating each of these factors would likely render such an analysis too speculative to inform the public interest determination in DOE’s non-FTA proceedings.”).

expansion must comply with NEPA (the National Environmental Policy Act) and must review the projects for their potential environmental impacts unless the activity being permitted is categorically excluded from NEPA review.

With FERC designated as “lead agency” responsible for conducting the main NEPA review for LNG export terminals, DOE has historically just participated in FERC’s process as a consulting agency, incorporating FERC’s final NEPA analysis and conclusions into its own orders authorizing the export of gas. DOE still has the responsibility to ensure that FERC’s NEPA analysis covers its own responsibilities under NEPA (and if not it must conduct its own environmental review). However recently DOE has vastly shrunk its responsibilities to conduct **any** NEPA review for applications to export LNG: in 2021 DOE rewrote its regulations to find that exports from terminals via ship are **categorically excluded** from NEPA review.⁵⁰⁶ Advocates have challenged many of the changes that the 2020 administration made to NEPA, but it does not appear that this exclusion has been challenged. Until this rule changes, DOE will still be a consulting agency for FERC’s NEPA review but may only need to rely on FERC’s review to support its public-interest determination. Despite this bleak outlook on DOE’s NEPA responsibilities, DOE still on its own may revise its regulations yet again—which is why it is so important for advocates to intervene in these applications to make sure their rights are preserved in case the legal landscape changes.

Other than the NGA and NEPA, what other orders or regulations are relevant for DOE’s review of LNG applications?

Advocates challenging DOE’s authorization process should read DOE’s most current regulations implementing NGA and NEPA. These can be found here: 10 C.F.R. Part 590 et seq. (NGA); and here: 10 C.F.R. Part 1021 et seq. (NEPA) (most relevant when DOE conducts its own NEPA analysis in addition to FERC’s) and 10 C.F.R. Part 1021, Subpart D, App. B (categorical exclusions from NEPA). DOE’s NEPA regulations may be changing in 2022, given that DOE has been directed to review them and align them with the current Administration’s concerns.⁵⁰⁷ Other regulations that could be of interest to an advocate are DOE’s FOIA request regulations: 10 C.F.R. Part 1004 et seq.⁵⁰⁸

Two of the Biden Administration’s executive orders have been directly relevant in DOE deciding to reconsider its authorization of some gas exports (specifically for the Alaska LNG project):

- [E.O. 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis](#). E.O. 13990 directs agencies to “immediately review” all regulations, orders, and

⁵⁰⁶ Specifically, categorical exclusion B5.7: “Export of natural gas and associated transportation by marine vessel” (categorically excluding from NEPA review any: “Approvals or disapprovals of new authorizations or amendments of existing authorizations to export natural gas under section 3 of the Natural Gas Act and any associated transportation of natural gas by marine vessel.”). 10 C.F.R. Part 1021, Subpart D, App. B. Prior to Jan. 4, 2021, the exclusion only applied to authorizations that involved minor operational changes. Authorizations that would require any new construction was not excluded, and DOE would need to do its own NEPA review or rely on FERC’s. See “Categorical Exclusion Determinations: B5.7” DOE’s Office of NEPA Policy and Compliance. The final rule can also be found here:

<https://www.federalregister.gov/documents/2020/12/04/2020-26459/national-environmental-policy-act-implementing-procedures>; see also

<https://www.energy.gov/nepa/listings/categorical-exclusion-determinations-b57> (describing the change).

⁵⁰⁷ See “Deadline for Agencies To Propose Updates to National Environmental Policy Act Procedures.”

86 FR 34154 (July 29, 2021) (extending the deadline for agencies to review their NEPA regulations to Sept. 14, 2023). <https://www.federalregister.gov/documents/2021/06/29/2021-13770/deadline-for-agencies-to-propose-updates-to-national-environmental-policy-act-procedures>.

⁵⁰⁸ For DOE’s web portal for FOIA requests, see <https://www.energy.gov/management/freedom-information-act>.

other actions issued after January 20, 2017, that may increase GHG emissions or have other impacts on climate change.⁵⁰⁹

- **E.O. 14008, Tackling the Climate Crisis at Home and Abroad.** E.O. 14008 sets forth additional policies to address climate change—specifically to “organize and deploy the full capacity of [Federal] agencies to combat the climate crisis”—and requires the “Federal Government [to] drive assessment, disclosure, and mitigation of climate pollution and climate-related risks in every sector” of the U.S. economy.⁵¹⁰

In part because of these orders the DOE is in the process of conducting additional studies of the lifecycle greenhouse gas emissions from exporting LNG from Alaska; as advocates challenging the Alaska LNG project pointed out, DOE’s current lifecycle studies are focused only on the lower 48 states and did not include Alaska. This outcome is a good example of why it is important for advocates to intervene in DOE proceedings and raise concerns even when the political climate is unfavorable—because it is impossible to predict when political winds might change. In the Alaska LNG project, the advocates requested rehearing on September 21, 2020, before the Biden Administration was elected and before the executive orders issued.⁵¹¹ Had advocates confined themselves to raising more conservative arguments (or had they not been involved at all), they might never have succeeded in having their rehearing request granted.

What length of authorization might an export facility seek?

As January 2022, most large-volume applicants building or expanding export terminals seek what is known as long-term authorizations for their FTA and non-FTA exports. For long-term applications the requested term can span decades, up to 2050. The process for applying for authorizations of different lengths could change if DOE reverts its regulations to previous procedures: up until January 2021, DOE had two separate tracks for approving applications relevant for large LNG export terminals, depending on whether the proposed import or export was longer or shorter than two years:

- **Short-term blanket authorization.** A blanket import and/or export authorization enables a company to import and/or export gas on a short-term or spot-market basis⁵¹² under agreements with terms of no longer than two years. Gas purchase and sales contracts are not filed as part of an application, but a start date is required. The first short-term authorization was requested by and granted to Sabine Pass Liquefaction LLC in 2015 and 2016, respectively. A more recent example of a short-term authorization request is the one made by Carib Energy, LLC, in 2021, to reexport LNG via container ship carriers from an existing LNG import terminal.⁵¹³ Only small exporters are expected to request blanket authorizations going forward given the 2021 rule change.
- **Long-term authorization.** DOE directs applicants to apply for long-term import or export authorization if they will sign a gas purchase and/or sales contract for a period of time longer than

⁵⁰⁹ Exec. Order 13990 of Jan. 20, 2021, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, 86 FR 7037 (Jan. 25, 2021), available at: <https://www.federalregister.gov/documents/2021/01/25/2021-01765/protecting-public-health-and-the-environment-and-restoring-science-to-tackle-the-climate-crisis>.

⁵¹⁰ Exec. Order No. 14008 of Jan. 27, 2021, Tackling the Climate Crisis at Home and Abroad, 86 FR 7619 (Feb. 1, 2021), available at: <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.

⁵¹¹ App. 28, Sierra Club Request for Rehearing, Alaska LNG, FE Docket No. 14-96-LNG (Sept. 21, 2020).

⁵¹² The spot market is a financial market in which commodities like gas are traded for immediate delivery, so the buyer is unknown at the time of DOE authorization. See “Spot Market.” Wikipedia.org https://en.wikipedia.org/wiki/Spot_market.

⁵¹³ Carib Energy Application. www.energy.gov/sites/default/files/2021-09/21-99-LNG.pdf.

two years. DOE's regulations (10 C.F.R. § 590.202) require an applicant to submit in its application the contract(s) with the identity of the sellers of gas, the markets in which the gas is to be sold, and the terms of the sale agreement(s) along with a start date; however in practice DOE has allowed applicants to submit these specifics **after** DOE has authorized the total volume to be exported. Under DOE's current rules, an applicant can request authorization to export up to 2050.

In 2021, the Trump Administration did away with the distinction between long-term and short-term authorizations for exports. With this policy, entitled "Including Short-Term Export Authority in Long-Term Authorizations for the Export of Natural Gas on a Non-Additive Basis," DOE discontinued its practice of issuing separate long-term and short-term authorizations under NGA section 3 for exports of gas from the same facility.⁵¹⁴ DOE instead established a practice that all long-term authorizations to export domestically produced gas—including LNG, compressed gas, and compressed gas liquid—will include authority to export the same approved volume via transactions with terms of less than two years on a non-additive basis (including non-additive commissioning volumes exported prior to the start of a facility's commercial operations). In other words, volumes sold in the short-term and long-term are bundled together in one order.

Step-by-step, how does DOE satisfy its responsibilities and how do I participate?

How does an applicant apply for authorization to export gas?

DOE maintains a "How to Obtain Authorization to Import and/or Export Natural Gas and LNG" webpage that is a good place to start for understanding the application process:

<https://www.energy.gov/fe/services/natural-gas-regulation/how-obtain-authorization-import-and-or-export-natural-gas-and-lng>.

The first formal step an applicant takes is to file an application with the DOE. Applicants that have not previously registered with DOE must create an account. DOE has an online portal for applicants submitting short-term blanket (2-year) authorizations.⁵¹⁵ Long-term export and import applications cannot use the Portal and must be submitted in hard copy or electronically.⁵¹⁶

Note that before the DOE application is formally filed, the applicant may have approached DOE informally and/or as part of its FERC certification process—the applicant's filings with FERC may reveal details about DOE and the applicant's interactions that would not otherwise be apparent from the DOE docket.

What must the application include?

DOE's application process is much simpler than FERC's, and the simplified application reflects that. The contents of an application are described in 10 C.F.R. § 590.202. If known at the time, it must identify all participants in the transaction, including the parent company and any corporate or other affiliations among the participants.⁵¹⁷ Each application "shall" contain "a statement describing the action sought from FE [now renamed DOE's Office of Fossil Energy and Carbon Management], the

⁵¹⁴ The rule can be found here: 86 FR 2243-46 (published Jan. 12, 2021)

<https://www.federalregister.gov/documents/2021/01/12/2020-28599/including-short-term-export-authority-in-long-term-authorizations-for-the-export-of-natural-gas-on-a>.

⁵¹⁵ See "Import/Export Authorization Portal for Natural Gas User Manual," FECM, April 2019, Version 1.2.

https://fossil.energy.gov/fergas-fe/docs/Portal_User_Manual_v_1_2.pdf.

⁵¹⁶ FECM. "How to Obtain Authorization to Import and/or Export Natural Gas and LNG." <https://www.energy.gov/fecm/how-obtain-authorization-import-and-or-export-natural-gas-and-lng>.

⁵¹⁷ 10 C.F.R. § 590.202(b)(3).

justification for such action, **including why the proposed action is not inconsistent with the public interest.**⁵¹⁸ The application also must address the potential environmental impact of the project and, to the extent possible, list and describe any environmental assessments or studies being performed on the proposed gas project. The application must be updated as the status of any environmental assessments change.⁵¹⁹

Each application filed with DOE must be accompanied by a \$50 filing fee.⁵²⁰ Applications must be filed at least 90 days before the proposed import or export—an applicant that wishes to obtain faster authorization must show good cause for why the process should be expedited.⁵²¹

Once DOE receives an application, it assigns the project a docket number (e.g., 21-98-LNG is the Freeport LNG expansion docket number). Any additional information submitted to DOE related to this project (e.g., intervention motions, comments) must reference this docket number.

Where can I find the docket information for an applicant’s DOE filings?

The docket information for an applicant’s DOE filings is available here, searchable by year application filed and year application granted: <https://www.energy.gov/fe/articles/electronic-docket-room-e-docket-room>. Bookmark this page if you will be challenging multiple projects.

To find a specific project, it is probably easiest to use the first section of the database to search by the year the application was filed.⁵²²

First expand the date range of interest:

E-DOCKET DATABASE

Please note, to begin your search using the [database](#), select the 'Show' dropdown tab beside "Search Criteria", in order to show your search options. If you need any additional assistance with navigating this database, [email](#) the docket room. ([Click](#) to view information on how to obtain an authorization.)

APPLICATIONS, INCLUDING LNG EXPORT, COMPRESSED NATURAL GAS (CNG); RE-EXPORTS & LONG-TERM NATURAL GAS, SUBMITTED TO THE DOE BY YEAR

2021 - 2020 —

- 2021
- 2020

As of January 2022, clicking on a year (e.g., 2021) navigates to a new screen listing the applications that have been filed thus far this year (two, as of Nov. 2, 2021). Clicking on “Docket Index” opens a new webpage with the docket information for each project.⁵²³

⁵¹⁸ 10 C.F.R. § 590.202(a) (emphasis added).

⁵¹⁹ 10 C.F.R. § 590.202(b)(7).

⁵²⁰ 10 C.F.R. § 590.207.

⁵²¹ 10 C.F.R. § 590.201(b).

⁵²² <https://www.energy.gov/fecm/articles/electronic-docket-room-e-docket-room>.

⁵²³ “2021 LNG Export, Compressed Natural Gas (CNG), Re-Exports & Long Term -LNG” <https://www.energy.gov/fecm/articles/2021-lng-export-compressed-natural-gas-cng-re-exports-long-term-lng>.

Office of Fossil Energy and Carbon Management »

2021 LNG Export, Compressed Natural Gas (CNG), Re-Exports & Long Term -LNG

Please note: To view the complete docket listing, please click the 'Docket Index' link pertaining to a particular docket. Docket Indexes and Service Lists that are not listed can be obtained by contacting the Docket Room at 202-586-9478 or email at fergas@hq.doe.gov.

All application link files are in PDF format and require pdf viewer.

DOCKET NO.	DATE FILED	IMPORT/EXPORT	COUNTRY	APPLICANT	DOCKET INDEX
21-98-LNG	09/10/2021	Export	NFTA	Freeport LNG Expansion, L.P., FLNG Liquefaction, LLC, FLNG Liquefaction 2, LLC and FLNG Liquefaction 3, LLC	Docket Index
21-99-LNG	09/14/2021	Re-export	FTA/NFTA	Carib Energy (USA) LLC	Docket Index

After a short description of the project and the application, there will be an identification of the cumulative impact studies and environmental documents on which DOE will rely in deciding whether to grant the application.⁵²⁴ At the end of the page will be the table with the docket entries. The docket should contain a copy of the export application⁵²⁵ and the notice of application (if non-FTA exports are requested),⁵²⁶ which contains important information on when and how to comment and intervene.

How do I sign up for notifications of filings?

As of January 2022, the only way to get automatic notifications of filings in a certain docket is to file a motion to intervene during the intervention period specified in the Notice of Application.

When and how do I comment on an open docket?

The comment period will be defined in the notice of application, which is published in the Federal Register and on the docket for the project. The comment period should be no less than 30 days, and has typically been 60 days.

The notice of application will also explain how to file comments. During the COVID-19 pandemic, DOE has switched to only accepting electronic submissions, unless a commentator finds this an undue hardship, at which point they are directed to reach out to DOE for alternative options. Once the

⁵²⁴ See, e.g., “Freeport LNG Expansion, L.P., FLNG Liquefaction, LLC, FLNG Liquefaction 2, LLC and FLNG Liquefaction 3, LLC - FE Dkt. No. - 21-98-LNG” <https://www.energy.gov/fecm/articles/freeport-lng-expansion-lp-flng-liquefaction-llc-flng-liquefaction-2-llc-and-flng>.

⁵²⁵ See e.g., “Application For Long-Term Authorization To Export Liquefied Natural Gas To Non-Free Trade Agreement Nations” FE Docket No. 21-98-LNG (Freeport LNG Expansion, L.P.) <https://www.energy.gov/sites/default/files/2021-09/21-98-LNG.pdf>.

⁵²⁶ See e.g., “Notice of Application” 86 FR 56,258 (FE Docket No. 21-98-LNG) https://www.energy.gov/sites/default/files/2021-10/2021-22018_FE_NOA_Freeport%20LNG%20Expansion%20LP.pdf.

pandemic is resolved, DOE anticipates that it will again accept postal mail and hand delivery of comments.⁵²⁷

As for electronic submissions, unlike FERC’s process, there is no e-filing system in place as of January 2022. Instead, commentors and would-be intervenors have been directed to email all filings directly to fergas@hq.doe.gov (make sure this is still the correct address to use for your project!).⁵²⁸ All filings must include a reference to the Docket Number or the application title—the notice will describe the specific information that must be included. The notice will also describe any other rules on how to file supporting material, and whether hyperlinks in comments are allowed (which recently have **not** been permitted). To make sure that the filing has been received, it is good practice to request and receive a confirmation that it has been received. The filing should eventually be visible on the public docket, but there may be some delay before it is posted.

There may be multiple comment periods for one project. For example, if the applicant amends its application, a new notice will issue, and the comment period will reopen for comments on the requested amendment. Would-be commentors should not delay in hopes that a new comment period opens!

WARNING

Do not rely on DOE’s general “Dockets Open for Public Comment” page⁵²⁹ to check for dockets that are accepting comments—instead use the E-Docket Room⁵³⁰ and check docket by docket. DOE does not appear to have updated the “Dockets Open for Public Comment” page since 2014!

What is the difference between a comment and a protest?

DOE allows anyone to file a comment or a protest in response to an application. Neither will grant an advocate the same rights as an intervention, but unlike a comment, the filing of a protest is one way to convert a proceeding into a contested proceeding,⁵³¹ triggering the need for merits-related conversations between the applicant and DOE to go on the record.⁵³² Also unlike a comment, a protest must be served on the applicant.⁵³³ Comments can simply be sent to the DOE by the means described in the notice.

An example answer and protest to the Jordan Cove application amendment filed by Sierra Club can be found in Appendix 26 and online at:

⁵²⁷ See, e.g., Notice of Application on Docket No. 21-98-LNG. 86 FR 56,259 (Oct. 8, 2021) (“DOE is currently accepting only electronic submissions at this time. If a commenter finds that this change poses an undue hardship, please contact Office of Resource Sustainability staff at (202) 586–2627 or (202) 586–4749 to discuss the need for alternative arrangements. Once the Covid-19 pandemic health emergency is resolved, DOE anticipates resuming all of its regular options for public comment submission, including postal mail and hand delivery/courier.”).

⁵²⁸ Sometimes comments can be filed through the project’s listing on <https://www.regulations.gov/>. (You can search by agency and name). No other motions can be submitted this way—they must be submitted in the manner described by in the notice.

⁵²⁹ “Dockets Open for Public Comment” (April 9, 2014) <https://www.energy.gov/fecm/downloads/dockets-open-public-comment> (listing no dockets despite Freeport LNG’s export application being open at this time).

⁵³⁰ <https://www.energy.gov/fecm/articles/electronic-docket-room-e-docket-room>.

⁵³¹ 10 C.F.R. § 590.102(b) (defining “contested proceeding”).

⁵³² 10 C.F.R. § 590.108.

⁵³³ 10 C.F.R. § 590.107(a).

https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2012/applications/March_23_2016_12-32-LNG/SC_MOI_03_23_16.pdf.

How do I file a motion to intervene?

Motions to intervene may be filed at any time following the filing of an application, but no later than the date fixed for filing such motions in the notice of application (or subsequent DOE order). Late intervention motions are only granted for good cause. Advocates should intervene as soon as possible to avoid a procedural fight that they might lose for failure to show good cause for the delay. In addition, late intervenors must accept the record in the proceeding as-is before their intervention.⁵³⁴

The motion to intervene should include the facts supporting all rights and interests the intervenor has in the proceeding because “participation of the intervenor shall be limited to matters affecting asserted rights and interests specifically set forth in the motion to intervene.”⁵³⁵ A motion to intervene must state, to the extent known, the position taken by the advocate (e.g., opposed to the authorization requested) and the factual and legal basis for such positions (e.g., the Natural Gas Act, the public interest review, DOE’s regulations, NEPA, and the APA) to advise the parties and the DOE as to the specific issues of policy, fact, or law to be raised or controverted.⁵³⁶ It need not be a long document (2-3 pages), but often it is combined with comments or a protest, so previous examples may appear long at first glance. A few example motions to intervene from the Jordan Cove Project are found in the Appendix:

- Appendix 29 (Motion to Intervene, Protest, and Comment) filed by Sierra Club: https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorization/2012/applications/sierra_club08_06_12.pdf. The motion to intervene is pages 1-3; the remainder is the Club’s protest and comments.
- Appendix 31 (Motion to Intervene and Protest) filed by the American Public Gas Association: https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2012/orders/apga08_06_12.pdf.

Any party may file an answer to any motion (including a motion to intervene) up to 15 days after the motion is filed. Advocates should expect the applicant to file such an answer to intervention motions because DOE’s regulations state that failure to answer is deemed a waiver of any objection to the intervention.⁵³⁷ Advocates are encouraged to request in the original motion to intervene that they be given a chance to reply if any party answers opposing the motion.⁵³⁸ DOE is likely to grant a timely motion to intervene even if it is answered, but an untimely motion may not be so lucky.

Note that filings are typically due at DOE by **4:30 PM Eastern Time** on the date outlined in the relevant notice. This is different from at FERC, which has a 5:00 PM Eastern Time deadline. Late filings will seldom be considered. Preserve your rights; file early!



⁵³⁴ 10 C.F.R. § 590.303(h).

⁵³⁵ 10 C.F.R. § 590.303(g).

⁵³⁶ 10 C.F.R. § 590.303(c).

⁵³⁷ 10 C.F.R. § 590.303(e).

⁵³⁸ Cf. 10 C.F.R. §§ 590.302, 590.310 (allowing for procedural motions and briefing in these cases).

What are my rights and responsibilities as an intervenor?

By intervening, you become a “party” to the application process,⁵³⁹ and you gain certain rights and responsibilities. Only parties may request additional procedures, like conferences, oral presentations, or trial-type hearings. Only parties may apply for rehearing of a DOE order on the applications. Parties may also conduct discovery (*i.e.*, get information from an applicant about their project or application beyond what they have disclosed) on other parties through the use of written interrogatories or production of documents, with the DOE being the arbitrator of discovery procedure disputes as they arise.⁵⁴⁰ Parties may also seek admissions of facts from other parties. If you are contemplating using these tools to seek information from an applicant, make sure to consult legal counsel because discovery motions like this can be difficult to draft well without prior experience.

Intervenors will be added to the “service list” for the project and will be sent a copy of all documents filled in the docket. Intervenors must send (“serve”) a copy of all documents they file to everyone else on the service list. This includes the motion to intervene, comments, and the application for rehearing. People on the service list include the applicant, consulting agencies (if any) and other intervenors. The service list for each project can be found using the DOE docket number here: <https://fossil.energy.gov/fergas-fe/#/serviceList>. DOE’s regulations do not allow service by email.⁵⁴¹ Advocates are encouraged to request that DOE allow service by email.⁵⁴² DOE has agreed to such a request in the past,⁵⁴³ which has saved the parties time and money.

How does intervention make the process more transparent?

Intervention is the best way to convert the application process to a “contested proceeding.” In a contested proceeding, DOE may no longer keep its communications with the applicant private. Instead, it must make accessible to the public any off-the-record communication that is relevant to the merits of a proceeding.⁵⁴⁴ The docket entry for these communications are normally tagged as “off-the-record.”⁵⁴⁵ Off-the-record communications may also be comments received from interested parties.

If you suspect there are off-the-record conversations not being placed on the docket, a FOIA request may help. It is important to tailor the FOIA request to meet the requirements of DOE’s FOIA request regulations: 10 C.F.R. Part 1004 et seq.⁵⁴⁶ (See also Chapter 6 Section C.12 (Corps FOIA requests) for general advice on drafting FOIA requests and sample FOIA requests for a variety of agencies.)

What’s the deadline to request that DOE conduct a conference, oral presentation, or trial-type proceeding as part of its review process, and what should that request include?

If an advocate wants to request that DOE conduct a conference, oral presentation, or trial-type proceeding before deciding on the application, the advocate **must** do so during the comment period,

⁵³⁹ 10 C.F.R. § 590.102(l).

⁵⁴⁰ 10 C.F.R. § 590.305.

⁵⁴¹ 10 C.F.R. § 590.107(c) (allowing for service by hand, certified mail, registered mail, or regular mail).

⁵⁴² As a motion or under the DOE’s own powers at 10 C.F.R. § 590.310 to provide for additional procedures.

⁵⁴³ Order Allowing Electronic Service in Proceeding, FE Docket No. 12-32-LNG (Jordan Cove Project) (Aug. 10, 2018)

https://fossil.energy.gov/ng_regulation/sites/default/files/programs/12-32-LNG_Jordan_Cove_081018.pdf.

⁵⁴⁴ 10 C.F.R. § 590.108 (“Off-the-record communications”).

⁵⁴⁵ See e.g., <https://www.energy.gov/fecm/downloads/record-communication-jordan-cove-energy-project-lp-fe-dkt-no-12-32-lng>.

⁵⁴⁶ For DOE’s web portal for FOIA requests, see <https://www.energy.gov/management/freedom-information-act>.

or risk forever waiving the option to request these additional procedures.⁵⁴⁷ So that DOE does not overlook this request, advocates are encouraged to make this request in a separate motion, not the motion to intervene, and include the information required by DOE for requests for conference (10 C.F.R. § 590.311), oral presentations (10 C.F.R. § 490.312), and trial-type hearings (10 C.F.R. § 590.313). Only advocates that have intervened (thereby becoming “parties”) may request these additional procedures.

Any request for a **conference** should demonstrate why the conference would materially advance the proceeding. Any request for an **oral presentation** should identify the substantial question of fact, law, or policy at issue, show that it is material and relevant to a decision in the proceeding, and demonstrate why an oral presentation is needed. Any request for a **trial-type hearing** must show that there are factual issues genuinely in dispute that are relevant and material to a decision and that a trial-type hearing is necessary for a full and true disclosure of the facts.⁵⁴⁸

DOE must rule on a motion for additional procedures like a conference, oral presentation or trial-type proceeding. Unlike for other motions, motions for additional procedures are not denied by default after a certain amount of time passes.⁵⁴⁹ If DOE agrees that additional procedures are appropriate, it will file another notice in the Federal Register and the docket as to what those procedures will be.⁵⁵⁰

How likely is it that DOE grants additional procedures, and if it does, what should I expect?

DOE has not granted additional procedures like a conference, oral presentation or trial-type proceeding in the past. Significant pressure would likely need to be placed on the agency to change this predilection. If a request for a conference, oral presentation, or trial-type proceeding is granted, it is very important to read 10 C.F.R. Subpart C “Procedures” and then work with an attorney experienced with advocacy in front of the DOE or other federal agency on LNG projects.⁵⁵¹ Even if the request is not granted, the making of the request itself may help elevate public and political scrutiny of the project.

However, DOE has granted other sorts of additional procedures, such as requests to allow service by email and extensions of time to file comments or answer. DOE has even allowed an answer to a request for rehearing, which isn’t normally considered.⁵⁵² Advocates should not hesitate to request

⁵⁴⁷ 10 C.F.R. § 590.205(b) (“Failure to request additional procedures at this time **shall** be deemed a waiver of any right to additional procedures should the Assistant Secretary decide to grant the application and authorize the import or export by issuing a final opinion and order in accordance with § 590.316.”) (emphasis added).

⁵⁴⁸ The Notice of Application may no longer include this detail describing what the additional procedures are and what an advocate must show to have one granted. Compare “Freeport LNG Development, L.P.; Application for Blanket Authorization To Export Previously Imported Liquefied Natural Gas on a Short-Term Basis,” 78 FR 35,263 at 65 (June 12, 2013) <https://www.govinfo.gov/content/pkg/FR-2013-06-12/pdf/2013-13944.pdf> (including these details) with “Freeport LNG Expansion, L.P.; FLNG Liquefaction, LLC; FLNG Liquefaction 2, LLC; and FLNG Liquefaction 3, LLC; Application for Long-Term Authorization To Export Liquefied Natural Gas to Non-Free Trade Agreement Nations,” 86 FR 56,258-60 https://www.energy.gov/sites/default/files/2021-10/2021-22018_FE_NOA_Freeport%20LNG%20Expansion%20LP.pdf (omitting these details). This lack of transparency is another reason that it is so important to read the statute and regulations that DOE must follow, and not just rely on the case-by-case notices.

⁵⁴⁹ See 10 C.F.R. § 590.302(c) (“Any motion, except for motions seeking intervention or requesting that a conference, oral presentation or trial-type hearing be held, shall be deemed to have been denied, unless the Assistant Secretary or presiding official acts within thirty (30) days after the motion is filed.”).

⁵⁵⁰ 10 C.F.R. § 590.206.

⁵⁵¹ 10 C.F.R. §§ 590.301-17.

⁵⁵² DOE did so when ruling on Sierra Club’s rehearing request in Alaska LNG, likely because it was ruling adversely to the party requesting the answer (the applicant).

any additional procedures that would be helpful in challenging the process and increasing its transparency.

How do I file an application for rehearing DOE's order?

An application for rehearing of a final opinion and order, conditional order, or emergency interim order may be filed by any party within thirty (30) days after issuance.⁵⁵³ This request **must** be filed timely to preserve an advocate's right to later litigate the authorization, if it stands.

It is important not to delay in filing an application for rehearing—to understand how DOE computes time, see 10 C.F.R. § 590.105 (“Computation of time”). Note also that unlike other agencies, DOE's business hours end at 4:30 pm E.T.⁵⁵⁴ Anything filed later than that will be deemed to have been filed on the next regular business day.

The application for rehearing must state the alleged errors in the order and must set forth specifically the ground or grounds upon which the application is based. If an order is sought to be vacated, reversed, or modified by reason of matters that have arisen since the issuance of order, the matters relied upon shall be set forth with specificity in the application. The application shall also comply with the filing requirements of § 590.103.⁵⁵⁵ With very rare exceptions, only issues raised in the application for rehearing can be appealed to a federal court for review, so it is very important to consult with litigation counsel at the rehearing stage to ensure that all viable issues are preserved for the appeal.⁵⁵⁶

Two examples of applications for rehearing are in the Appendix, namely in Appendix 30 (Sierra Club's Request for Rehearing in the Jordan Cove Project)⁵⁵⁷ and in Appendix 28 (Sierra Club's Request for Rehearing the Alaska LNG Project).⁵⁵⁸

The filing of an application for rehearing does not stay (i.e., pause) DOE's order,⁵⁵⁹ an advocate must specifically request in the application that the order be suspended (and even if requested, is by no means guaranteed to be granted). DOE has discretion to not grant a stay of the order and may rule on the application without holding a hearing or requesting additional briefing.⁵⁶⁰ No one may file an answer to a rehearing application (although a **motion** to answer would likely be allowed); however, on a case-by-case basis, DOE may allow the parties to file briefing or answers and may even order that a conference, oral presentation, or trial-type hearing be held on some or all of the issues presented by an application for rehearing.⁵⁶¹ For example, in the Alaska LNG rehearing proceeding, the applicant was allowed to file an answer, which DOE considered. But do not rely on DOE granting additional proceedings and hold back any arguments—whether DOE grants additional proceedings is up to the

⁵⁵³ 10 C.F.R. § 590.501(a).

⁵⁵⁴ 10 C.F.R. § 590.105.

⁵⁵⁵ 10 C.F.R. § 590.501(b).

⁵⁵⁶ 15 U.S.C. § 717r(b) (“No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do.”) Recall that “Commission” refers to DOE in this instance.

⁵⁵⁷ https://www.energy.gov/sites/prod/files/2020/08/f77/Rehearing%20Request_%20SC%208_5_20.pdf.

⁵⁵⁸ <https://www.energy.gov/sites/prod/files/2020/09/f79/Rehearing%20request%20-%20Alaska%20LNG%20DOE%20SC.pdf>.

⁵⁵⁹ 10 C.F.R. § 590.502.

⁵⁶⁰ 10 C.F.R. § 590.503.

⁵⁶¹ 10 C.F.R. § 590.505.

discretion of DOE. Don't rely on DOE exercising its discretion in your favor if there is a way to make the point in a timely filing that DOE's rules require it to consider.

If DOE does not act on the rehearing application within thirty days, the application is deemed denied.⁵⁶² After that point, an advocate may appeal the DOE's order in federal court: either the D.C. Circuit or, if the advocate prefers, the local circuit court of appeals presiding over the location of the applicant's principal place of business—likely the Fifth Circuit for Texas and Louisiana applicants.⁵⁶³ Note that most appeals that have the choice of the Fifth or D.C. Circuit end up in D.C.; the Fifth Circuit has a reputation for being more conservative and less receptive to environmental advocates' concerns.

TIEBREAKING: WHAT IF THE CASE IS FILED IN BOTH CIRCUITS?

If one party seeking rehearing files in one circuit and the other files in another, the case will essentially be randomly assigned to one or the other. Thus, it's possible that you'll still end up in the Fifth Circuit even if you file in D.C.

Experienced litigation counsel can help you plan for and navigate this scenario!

This right to appeal after thirty days is triggered even if DOE has indicated that it will eventually act on the rehearing request (but hasn't yet).⁵⁶⁴ If this happens, it can be helpful to appeal. Appealing puts a clock on DOE to issue its order because DOE may revise its order only up until the administrative record (i.e., the documents on the project's DOE docket) must be sent to and docketed with the reviewing court. In addition, a court may be more likely to stay DOE's order pending review than DOE itself may be—it is at least one more entity involved that has that power.

⁵⁶² 10 C.F.R. § 590.504.

⁵⁶³ 15 U.S.C. § 717r(b) (“Any party to a proceeding under this chapter aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia.”) (emphasis added). Note that the reference to the “Commission” actually refers to the now-defunct Federal Power Commission. Since that agency was dissolved, DOE and FERC have stepped into its shoes for the purposes of implementing the different parts of the NGA and thus references to the Commission here apply to both FERC and DOE. This is why § 717r(b) governs judicial review, and not § 717r(d)(1) (providing for review of actions by federal agencies other than “the Commission”).

⁵⁶⁴ DOE recognized an intervenor's right to do just that in its Rehearing Order on the Alaska LNG Project. See <https://www.energy.gov/sites/default/files/2021-04/ord3643b.pdf> (“consistent with *Allegheny Defense Project* [v. FERC, 964 F.3d 1, 3, 18-19 (D.C. Cir. 2020)], Sierra Club was permitted to consider its Rehearing Request ‘deemed’ to have been denied’ for purposes of judicial review when DOE did not issue an order on the Rehearing Request within 30 days.”) (quoting 15 U.S.C. § 717r(a)).

WARNING

DOE has recognized that there is an avenue in the NGA that would allow *anyone* (i.e., not just a “party”) to request that an authorization be suspended or revoked *even if* that authorization is no longer subject to judicial review—i.e., if a court has upheld the authorization, or if the advocate has missed the deadline for a rehearing request and the order has become final without a judicial challenge.⁵⁶⁵ **Do not rely on this avenue to challenge a terminal!** DOE has indicated that it “take[s] very seriously the investment-backed expectations of private parties and would not rescind a previously granted authorization except in the event of extraordinary circumstances.”⁵⁶⁶ Nor does DOE believe it would be bound to conduct a public-interest review in deciding on such a request—indeed, it does not believe the NGA sets forth *any* specific criteria for evaluating such requests.⁵⁶⁷ The conclusion here should be: intervene on-time to preserve your rights as a party.

How do I litigate a certification after rehearing is concluded?

As discussed in the section on rehearing above, advocates have a choice to litigate in the D.C. Circuit or in the Circuit where the applicant is located or has its principal place of business.⁵⁶⁸ If parties file in both possible locations, the ultimate location will be assigned randomly.

Specific litigation strategy is beyond the scope of this guide because each case will depend on the specific facts of the application and the law in place at the time. It is imperative to seek experienced litigation counsel advice before pursuing a case to make sure the arguments you are bringing have not already been rejected by courts and will not prejudice other cases.

What are some issues I can raise and what are example motions, comments from previous challenges?

As of January 2022, DOE’s rules make it almost impossible to stop a project by simply commenting on and litigating a DOE authorization—but intervening and filing comments/protests are essential to preserve one’s rights in case the law becomes more favorable in the middle of the authorization process. The issues identified below are just a few of those that should also be raised politically, to convince the current Administration to revisit DOE regulations and procedures and scrutinize export applications more heavily, in a manner closer to what the Natural Gas Act and NEPA intend. Without political change, challenging the DOE authorization process will remain extremely difficult.

Foundational Studies.

To support its duty to conduct a public-interest review under the NGA, DOE relies heavily on the foundational economic and environmental studies it has conducted or commissioned (see Section 5.B.2). DOE is likely to update these studies in the coming years (as of January 2022, an environmental study on gas exported from Alaska is already underway⁵⁶⁹); participating in the

⁵⁶⁵ Ltr. from Paula A. Gant (Deputy Assistant Secretary, Office of Oil and Natural Gas) to Senator Murkowski, Oct. 17, 2013, 2-3, <https://www.energy.senate.gov/services/files/9E99E412-CE05-449D-8893-DC8D64C32D02> (citing 10 C.F.R. § 590.501(b) and 10 C.F.R. § 590.103).

⁵⁶⁶ *Supra*, 3.

⁵⁶⁷ *Supra*.

⁵⁶⁸ 15 U.S.C. § 717r(b).

⁵⁶⁹ *Alaska LNG Project LLC - FE Dkt. No. - 14-96-LNG*, E-Docket, <https://www.energy.gov/fecm/articles/alaska-lng-project-llc-fe-dkt-no-14-96-lng> (last visited Mar. 31, 2022).

comment period for these studies will be critical. Depending on the methods and scope of these studies, advocates can help shape these studies to better reflect the true economic and environmental costs of exporting gas. For example, studies suggest that the rate of methane emissions attributable to gas production and transportation is underestimated in the 2014 and 2019 studies—to such an extent that the overseas use of United States gas may result in **higher** life cycle emissions than using local coal.⁵⁷⁰

DOE will also likely need help including the effects on environmental justice communities, who are often disproportionately negatively affected by gas development without the ability to garner some of the benefits of increased trade and the growth of the stock market, for example. DOE should also be encouraged to not simply study the lifecycle greenhouse gas footprint of gas exports compared to coal (as it has done in its prior environmental studies), but to how increased use of gas can displace cleaner energy sources, like renewables, which are increasingly the energy alternative that imported United States gas would be replacing.⁵⁷¹

Upstream and downstream greenhouse gas emissions.

Whenever possible, advocates are encouraged to ask DOE to come to a sensible conclusion on how it should weigh greenhouse gas emissions in its public interest review and in any NEPA-required environmental review. DOE has traditionally argued that consideration of upstream and downstream emissions from export terminals (*i.e.*, emissions as the gas is produced in the field and travels to the export terminal and emissions after it arrives and is used in the destination country) is within DOE's exclusive authority—and not FERC's. Based on DOE's asserted ownership of accounting for these emissions, FERC has disclaimed the responsibility to consider downstream and upstream emissions in its NEPA review of export terminals.⁵⁷² But despite asserting authority in this area, DOE has avoided actually including a case-by-case analyses of these greenhouse gas emissions in its analyses for each application, on the grounds that such emissions are not reasonably foreseeable and cannot be calculated. And as of a December 2020 rule, DOE announced that it will now only consider the emissions emitted during the marine vessel transport of LNG.⁵⁷³

In essence, DOE is trying to have it both ways—both claiming responsibility for assessing upstream and downstream emissions yet failing to conduct any meaningful case-by-case analysis of those emissions. This has been further complicated by the Categorical Exclusion (discussed below) proposed during the Trump Administration. DOE's inconsistent position could be raised in comments and public campaigns with the administration to alter DOE's practices.

Categorical Exclusions.

As discussed in Section 5.B.3, in 2021 DOE broadened the projects that are categorically excluded (CatEx'd, in shorthand) from NEPA review to include all marine vessel exports from LNG terminals,

⁵⁷⁰ Sabin Center for Climate Change Law, *DOE's Proposed Revisions to its National Environmental Policy Act Implementing Procedures Regarding Natural Gas Exports*, Docket ID DOE-HQ-2020-0017, June 1, 2020, 7-8, <https://climate.law.columbia.edu/sites/default/files/content/%5BFINAL%5D%20DOE%20Comment%20Letter%20%5B6-1-20%5D.pdf> (citing Ramon A. Alvarez et al., *Assessment of Methane Emissions from the U.S. Oil and Gas Supply Chain*, 361 *SCIENCE* 186 (2018) and Yuzhong Zhang et al., *Quantifying Methane Emissions from the Largest Oil-Producing Basin in the United States from Space*, 6 *Science Advances* 1 (2020)).

⁵⁷¹ Sabin Center, *supra*, 8-9.

⁵⁷² Giannetti, *Hot Potato on LNG Emissions*, *supra* note 143.

⁵⁷³ *Supra*.

even if the application would require new construction.⁵⁷⁴ If DOE decides to reconsider this exclusion, advocates should be prepared to weigh in with comments and public and political pressure to reinstate NEPA review for more types of export terminals. Advocates can draw from blog posts and the comments that have already been filed during the notice of proposed rulemaking to create the categorical exclusion in the first place. Commentors also highlighted problems with DOE's use of the foundational studies and its treatment of upstream and downstream impacts:

- Appendix 32: Sabin Center for Climate Change Law, *DOE's Proposed Revisions to its National Environmental Policy Act Implementing Procedures Regarding Natural Gas Exports* (Docket ID DOE-HQ-2020-0017), June 1, 2020, <https://climate.law.columbia.edu/sites/default/files/content/%5BFINAL%5D%20DOE%20Comment%20Letter%20%5B6-1-20%5D.pdf>.
- Appendix 33: Delaware Riverkeeper Network, *DOE NEPA/NG Procedures*, RIN 1990-AA49, June 1, 2020, <https://www.delawariverkeeper.org/sites/default/files/DOE%20Proposed%20NEPA%20Rule%20Submission.pdf>.
- Appendix 34: Sierra Club, et al., *Comments on Docket No. DOE-HQ-2020-0017*, June 1, 2020, https://biologicaldiversity.org/programs/climate_law_institute/pdfs/20-06-01-Sierra-Club-et-all-DOE-LNG-CatEx-Comment.pdf.
- Appendix 35: Center for Biological Diversity, *Docket No. DOE-HQ-2020-0017 - DOE's Proposal to Update NEPA Implementing Procedures for Authorizations to Export Natural Gas and Associated Transportation by Marine Vessel*, June 1, 2020, <https://www.regulations.gov/comment/DOE-HQ-2020-0017-0019>.
- Gillian Giannetti, *Federal Agencies Play Hot Potato on LNG Emissions*, Dec. 8, 2020, <https://www.nrdc.org/experts/gillian-giannetti/federal-agencies-play-hot-potato-lng-emissions>.

Example Filings.

Below are example filings that advocates may find helpful. Advocates reviewing older comments and protests should be aware that the 2020 and 2021 changes to the DOE's policies and regulations may make some arguments no longer valid.

- Appendix 27: Sierra Club's Motion to Intervene and Protest in Alaska LNG. FE Docket No. 14-96-LNG (Nov. 17, 2014) https://www.energy.gov/sites/prod/files/2014/11/f19/Sierra_Club_11_17_14.pdf.
- Appendix 28: Sierra Club's Request for Rehearing in Alaska LNG. FE Docket No. 14-96-LNG (Sep. 21, 2020) <https://www.energy.gov/sites/prod/files/2020/09/f79/Rehearing%20request%20-%20Alaska%20LNG%20DOE%20SC.pdf>.
- Appendix 29: Sierra Club's Motion to Intervene, Protest, and Comments in Jordan Cove Energy Project. FE Docket No. 12-32-LNG (Aug. 6, 2012)

⁵⁷⁴ Bud Earley, *DOE Rule Sharply Limits Evaluation of Environmental Impacts of LNG Exports*, Dec. 10, 2020, <https://www.insideenergyandenvironment.com/2020/12/doe-rule-sharply-limits-evaluation-of-environmental-impacts-of-lng-exports/#more-7372>. (explaining the new rule and DOE's position that upstream production impacts are not reasonably foreseeable and downstream emissions at the point of consumption are "too attenuated to be reasonably foreseeable and do not have a reasonably close causal relationship to the granting of an export authorization") The final rule can be found here: *National Environmental Policy Act Implementing Procedures*, 88 Fed. Reg. 78,197-205, <https://www.govinfo.gov/content/pkg/FR-2020-12-04/pdf/2020-26459.pdf>.

https://fossil.energy.gov/ng_regulation/sites/default/files/programs/gasregulation/authorizations/2012/applications/sierra_club08_06_12.pdf.

- Appendix 30: Sierra Club's Request for Rehearing in Jordan Cove Energy Project, FE Docket No. 12-32-LNG, Aug. 8, 2020, https://www.energy.gov/sites/prod/files/2020/08/f77/Rehearing%20Request_%20SC%208_5_20.pdf.



Chapter 6

ARMY CORPS DECISIONS & PERMITS

CHAPTER SIX: THE ARMY CORPS OF ENGINEERS' PERMITS AND DECISIONS

Overview of the Corps' role in LNG permitting

Should I get involved in a Corps permit challenge?

If you have the resources⁵⁷⁵ to challenge both the FERC certification process and Corps permits, then yes. Corps permits are required for basically every major LNG project: practically every new or expanded terrestrial LNG export terminal will need the Corps' 404 and section 10 permits, because the construction of these projects involve both disturbing the land around and spilling or relocating soils and other debris into wetlands and waterways, some of which are used for shipping. A Corps challenge is also a vehicle to raise wide-ranging concerns about the project. By law, the Corps must consider not just the environmental impacts of the project to wetlands and waterways, but also a whole host of other impacts, such as to the local economy, historical sites, safety—any effect that might make the project less in the public's interest. The law also requires that the Corps only grant permits that avoid, minimize, and compensate for the destruction of or impact to wetlands and waterbodies affected by the project. Finally, the Corps' current very opaque decision-making process could greatly benefit from the increased scrutiny and transparency that mounting more Corps challenges would bring.

What are the Corps decisions and permits that are relevant to LNG terminals?

Whenever an applicant's project might impact the Army Corps of Engineers' "jurisdictional resources," the applicant will need a Corps permit.⁵⁷⁶ The first decision point for advocates to be aware of then is the analysis and decision as to whether a site contains the "jurisdictional resources" that triggers the need for a Corps permit at all.

The Army Corps of Engineers ("the Corps") has jurisdiction over certain—but not all—"aquatic resources"⁵⁷⁷ (e.g., the ocean, rivers, lakes, wetlands, navigable waters, certain mudflats, certain sandflats). The threshold question of whether such jurisdictional "waters" exist is an initial question that does not arise in the same way for every project. Sometimes the Corps addresses this question on its own. Sometimes the applicant specifically requests that the Corps make an official, binding determination.⁵⁷⁸ If neither of these scenarios is the case, the Corps treats every aquatic resource on site as a jurisdictional water that will need the protection of a permit.⁵⁷⁹

⁵⁷⁵ Resources for fighting a permit from start to finish include: funding sufficient to support a multi-year legal challenge, hiring experts, community outreach and engagement, and site visits. There are ways to bring the costs down, however: some resources spent on other challenges can also be leveraged on a Corps permit challenge without too much additional difficulty (e.g., the same experts used in a FERC challenge could potentially address similar issues in the Corps challenge) and other well-resourced organizations may potentially be willing to collaborate on certain aspects of a Corps permit challenge (e.g., Sierra Club may have funding for litigation in this area).

⁵⁷⁶ The Corps administers four main permits, three of which are ecosystem- or waterbody-dependent (404, 10, 103), and a fourth that is required when a proposed project might impact an existing Corps project (408).

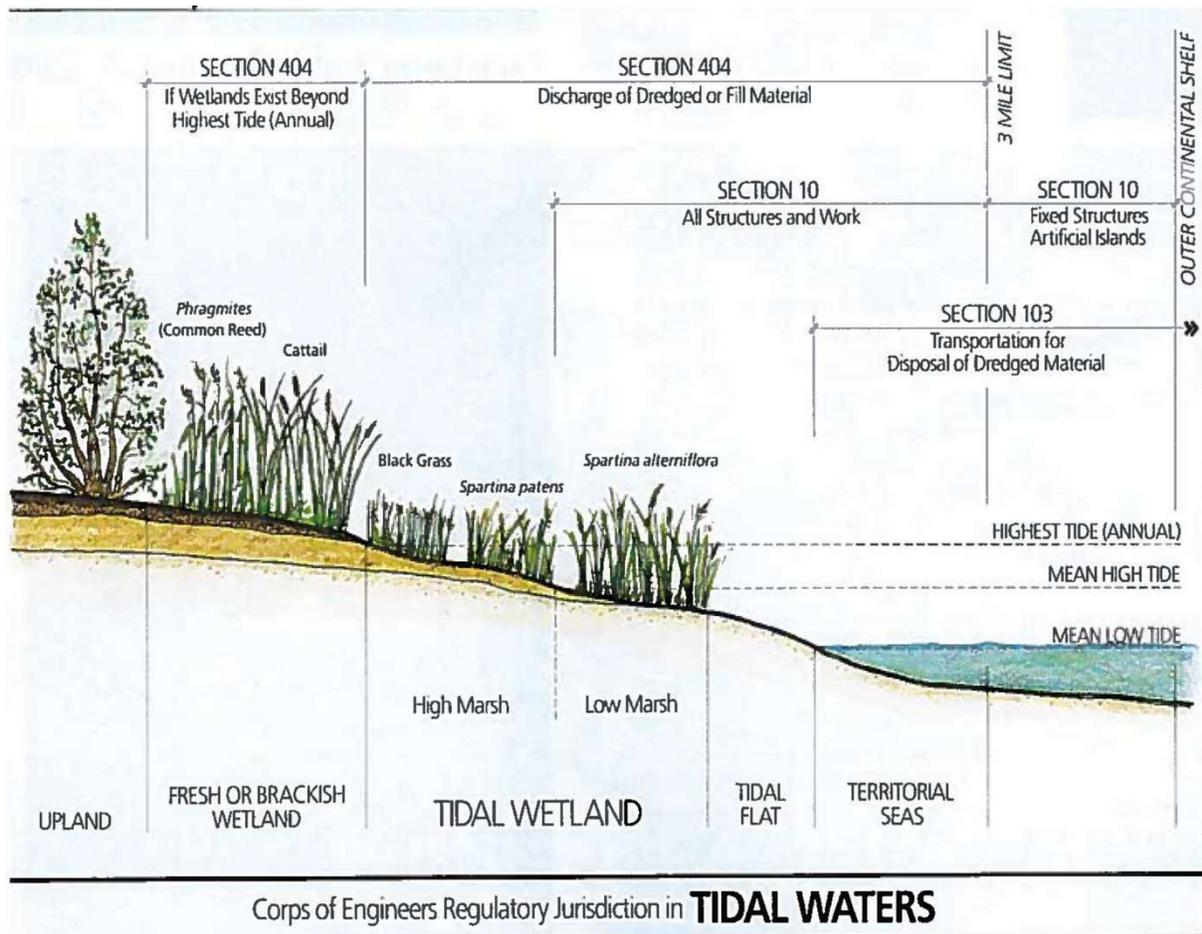
⁵⁷⁷ "Aquatic resources" is a term that used to describe both the waters that it does have jurisdiction over and the waters that it does not. Note that the Corps' jurisdictional "waters" sometimes don't look like water at all—they may be wetlands, mudflats, sandflats, and only periodically flooded areas. The definition of what is jurisdictional is in flux, as Section 6.B.1 describes further.

⁵⁷⁸ This is known as an "approved jurisdictional determination."

⁵⁷⁹ U.S. Army Corps of Engineers, *Jurisdictional Determinations*, ¶ 4(a)(3), Regulatory Guidance Letter No. 16-01, Oct. 2016, <https://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll9/id/1256> (describing how a preliminary jurisdictional determination (PJD) "may be used as the basis for a permit decision; however, for purposes of computation of impacts,

Whichever the scenario, this threshold analysis is known as a “jurisdictional determination”—in other words, are there any aquatic resources on site that the Corps is responsible for protecting at all. And for LNG terminals, the answer will highly likely be yes—given that all of the proposed terminals are designed to export LNG via tanker ships, an applicant typically proposes that the terminal be built next to a waterway, and often on coastal wetlands.

Once it is clear that the Corps has jurisdiction, there are three permits that might be needed, depending on the ecosystem and waterbodies at issue: the sections 404, 10, and 103 permits. The Corps’ diagram of a coastal region below shows in which areas each of the three permits are required.⁵⁸⁰



compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a PJD will treat all aquatic resources that would be affected in any way by the permitted activity on the parcel as jurisdictional”).
⁵⁸⁰ “Simplified Jurisdiction in Tidal Waters” at 9. <https://www.coj.net/sraidrc/docs/handouts/u-s-army-corps-of-engineers.aspx>; See also “Pictorial Representations of Jurisdiction.” Corps’ Headquarters’ Website. <https://usace.contentdm.oclc.org/utis/getfile/collection/p266001coll1/id/7064>. Because the fourth Corps permit (section 408) is implicated wherever an existing Corps project is located, it could come into play in any of the shown ecosystems.

Two of these ecosystem- and waterbody-based Corps permits that almost certainly all terminals will need are the section 404⁵⁸¹ and the section 10⁵⁸² permits. The 404 and section 10 permits are needed when there is discharge of dredged⁵⁸³ or fill materials into “waters of the United States” or when “navigable waters” (waterways that are and have been used for shipping) are impacted by the project, respectively.⁵⁸⁴ For large projects like the initial construction or major expansion of a LNG terminal, the Corps will require applicants to go through the more rigorous process of seeking an “individual permit,” as opposed to getting a general permit, which is reserved for activities that will result in only minimal adverse effects. The individual permit should have conditions attached to it that limit the project’s impacts to the environment.⁵⁸⁵

The two other permits that the Corps oversees—section 103 and section 408 permits—are less likely to be relevant for LNG terminals. A section 103 permit⁵⁸⁶ is the third permit shown in the diagram above and is needed before dredged material can be disposed into the ocean, which begins beyond the territorial limit of 3 miles from shore. Only deepwater LNG terminals might need this permit, as any near-shore dredging and disposal for a land-based terminal should be covered by a 404 permit.

The fourth permit, the section 408 permit,⁵⁸⁷ is ecosystem-independent. The need for a 408 permit is triggered when the new project may affect pre-existing Corps projects, such as federally

⁵⁸¹ Named for the section in the statute that it is based on: the Clean Water Act § 404. The intent of § 404 is to protect the nation’s waters from “the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.” Specifically, an applicant needs a 404 permit whenever a project involves discharging dredged or fill materials (e.g., sediment or dirt) into “**waters of the United States**,” (“WOTUS”) which includes wetlands. In simple terms, anytime a project involves dirt mixing with a waterbody or wetland, the law requires the project to have a 404 permit. Because LNG terminals occupy a large footprint, are coastal, and need to be accessed by LNG tankers—some of the largest ships in the world—the construction of these terminals requires soils to be moved, shipping channels to be dredged, and often wetlands to be impacted; and thus 404 review is triggered. Note that as of December 7, 2021, EPA and the Corps proposed reverting the definition of WOTUS to largely align with its pre-2015 definition (based on 1986 regulations), updated to align with intervening Supreme Court precedent. “*Revising the Definition of “Waters of the United States”*” EPA. <https://www.epa.gov/wotus/revising-definition-waters-united-states>. The proposed rule can be found here: https://www.epa.gov/system/files/documents/2021-12/revised-definition-of-wotus_nprm_december2021.pdf, 86 FR 69,372 at 69,373. (Dec. 7, 2021).

⁵⁸² Named for the section in the statute that it is based on: the Rivers & Harbors Act of 1899 § 10, which is codified at 33 U.S.C. § 403. **A section 10** permit is needed for all work or structures in or affecting the course, condition or capacity of “**navigable waters of the United States**.” This includes activities such as certain modifications, excavations, or filling of these waterways. Given that most new terminals will require constructing tanker docks and dredging the navigable waterbodies adjacent to them, they’ll need some sort of section 10 permit, as these activities are in and affecting these waters. (Although perhaps only a letter of permission or general permit—both which are used when only minor impacts are expected—as opposed to an individual permit.) It is possible that an existing facility that is only expanding its terrestrial footprint might not need such a permit. Section 10 reviews and Section 404 reviews are primarily the same, except for 404 projects require an alternatives analysis that is described in the 404(b)(1) Guidelines (see Sections 6.B.3 and 6.B.4 for details).

⁵⁸³ Dredging is the act of removing soils and debris from the bottom of a waterbody to make the waterbody channel deeper so larger ships can transit the channel or to reshape the land around the waterbody. Dredged material is often deposited nearby as fill dirt. One environmental concern with dredging and filling is that the soil dredged and used as fill may be polluted with heavy metals, petrochemicals, and other toxins.

⁵⁸⁴ The definition of these terms is in flux, as Section 6.B.2 describes further.

⁵⁸⁵ These conditions might limit how an applicant can construct a project, require that construction be halted during breeding seasons, or prohibit certain activities entirely. See 40 C.F.R. §§ 230.70 - 230.77.

⁵⁸⁶ Named for the section in the statute that it is based on: the Marine Protection, Resources and Sanctuaries Act (MPRSA) § 103. This permit is needed for disposing dredged material into the territorial sea and ocean. Although the Corps issues this permit, EPA also plays a significant role in this permitting process: EPA authors the rules about when and how a permit is to be issued (i.e., the Corps must follow EPA’s ocean dumping criteria), and must concur that the permit is proper, otherwise the Corps cannot issue the permit. For more, see *Ocean Disposal of Dredged Material*. EPA. <https://www.epa.gov/ocean-dumping/ocean-disposal-dredged-material>.

⁵⁸⁷ Named for the section in the federal code that it is based on: 33 U.S.C. § 408, which is also known as the Rivers & Harbors Act of 1899 § 14. This permit is required when the proposed activity may alter, occupy, or use an existing Corps project.

constructed flood risk reduction projects and federal navigation channels. LNG terminals being planned in already industrialized areas (or brownfield sites in general) are more likely to need a 408 permit because there are more likely to be existing Corps projects at that location. LNG activities have triggered Section 408 review in the past; for example Cameron LNG's proposal to construct an intake structure for emergency water for firefighting and install shoreline protection triggered review under 408.⁵⁸⁸ But even though 408 permits may be required—and indeed, when they are required they must be approved prior to a 404 or section 10 permit issuing—the Corps analysis for these permits doesn't provide as much leverage for advocates to influence these permits, and they do not appear to have been needed for the existing or currently proposed LNG terminals.⁵⁸⁹ Therefore this guide does not explore section 408 permits.⁵⁹⁰

What are ways an advocate can get involved in challenges to 404 and section 10 permits?

The 404 individual permitting process poses more regulatory stumbling blocks for an applicant than the section 10 process and has the potential to impose more substantive restrictions on a project (e.g., it often requires the applicant to participate in compensatory mitigation projects), so centering a challenge on this permit is advised.⁵⁹¹ However, the section 10 permit should not be ignored and should be challenged at the same time as almost certainly all facilities will need and will be pursuing both at the same time. Possible points of advocate intervention for the 404 and section 10 permits are, in chronological order:

- Regularly search the Corps websites and FERC docket to have the earliest possible notice that the applicant has started approaching the Corps for a jurisdictional determination or permit
- Mobilize and listen to community groups and other advocates who might organize against the permit throughout the entire process; enlist their help in researching the project and surrounding area to understand and document the expected impacts of the project
- Identify and retain possible experts based on the site-specific features at the proposed project location
- Appeal in federal court any final approved jurisdictional determination as to which aquatic resources on site are jurisdictional

Section 408 is a threshold approval, and a Section 10 or Section 404 permit cannot be issued until a 408 review is completed and an alteration approved.

⁵⁸⁸ Cameron LNG Public Notice. (Oct. 27, 2016) <https://www.mvn.usace.army.mil/Missions/Section-408/Public-Notices/Article/988750/02-3266-cameron-lng-llc-proposes-to-construct-an-intake-structure-to-provide-an/>. Note that this 408 permission was sought after the facility received other permits.

⁵⁸⁹ A search of 408 permits for LNG facilities in the Corps' Headquarters database returned only two 408 permits, both sought in 2020, one by the now abandoned Annova LNG project in 2020, and one by the yet-to-be-constructed Eagle LNG facility. See <https://permits.ops.usace.army.mil/orm-public#> (Searched the 408 database and filtered by "LNG"). Although this database may not be complete, it is representative of the lack of 408 public notices found on the District websites as well.

⁵⁹⁰ The points for advocacy intervention are similar to a 404 permit (commenting on the initial application, no real ability to comment on a draft permit, opportunities to litigate the issued permit). The Corps has published a guidance document on the Section 408 process: Engineer Circular (EC) 1165-2-220 outlines the process and criteria the Corps uses to implement this section, (see <https://www.publications.usace.army.mil/USACE-Publications/Engineer-Circulars/>), and located here: https://www.publications.usace.army.mil/Portals/76/Publications/EngineerCirculars/EC_1165-2-220.pdf?ver=2018-09-07-115729-890. Note that it may be replaced in the future, so an advocate interested in learning more should confirm that other guidance has not superseded it.

⁵⁹¹ Although this guide focuses on terminal challenges, an advocate should keep in mind that 404 is particularly useful in challenging pipelines: the increased footprint of a pipeline likely increases the quantity of impacts to jurisdictional waters (e.g., water and wetlands crossings) that would need to be reviewed under 404 or section 10.

- Advocate behind-the-scenes with both the Corps and consulting agencies (like EPA, FWS, and relevant state agencies), raising concerns about impacts to aquatic resources that the agencies could elevate to the Corps on their own
- Identify the Corps project manager (from the public notice) and other relevant regulatory personnel in case it becomes necessary to enlist their help in obtaining environmental documents, the permit, the record of decision, and other information about the permitting process that should be—but isn't—readily publicly available
- Submit public comments after an applicant files an application for a Corps permit to: raise issues directly, preserve issues for litigation,⁵⁹² and build the administrative record with all necessary information to support litigation if the permit issues
- Request the agency hold a public hearing, if one was not set during the comment period
- Participate in a public hearing on the application if a hearing is granted (rare occurrence) and the comment period that reopens after a hearing takes place
- Track the progress of permitting and any appeal by communicating with the Corps and submitting FOIA requests for permitting and environmental review documents⁵⁹³
- Litigate the issued permit in the circuit court where the project is sited (Fifth Circuit for Texas and Louisiana).⁵⁹⁴

Who in the Corps will I be dealing with?

The Corps is split into Divisions, which are further subdivided into geographic Districts⁵⁹⁵, which often operate slightly differently from one another. Advocates challenging the Corps' treatment of LNG terminals will primarily be interfacing with the local District office during the permitting process, as normally Districts are those with the decision-making authority for jurisdictional determinations and issuing permits.⁵⁹⁶ For Louisiana coastal projects, this will be the New Orleans District of the Mississippi Valley Division.⁵⁹⁷ For Texas coastal projects, this will be the Galveston District of the

⁵⁹² A commentator who fails to raise an issue during the comment period may still be able to argue the point in federal court—but likely only after a protracted fight about whether that issue should have been raised earlier. An experienced litigator should be able to help advise on whether an overlooked (or unapparent) issue can be raised in court, but to avoid wasting resources, identify all possible issues during the comment period!

⁵⁹³ Note that there is no official administrative appeals role for advocates prior to filing a lawsuit against the Corps; only permit applicants may appeal permits and landowners/applicants may appeal jurisdictional determinations directly to the agency, and it is highly unlikely the Corps will invite an advocate to participate in the process. See Sections 6.E.1 – 6.E.4 for more.

⁵⁹⁴ The Natural Gas Act changes the default rule that appeals go to federal district court and instead sends appeals of Corps permits and decisions straight to the circuit court where the facility is to be located. 15 U.S.C. 717r(d)(1) (“**The United States Court of Appeals for the circuit in which a facility** subject to section 717b of this title or section 717f of this title **is proposed to be constructed, expanded, or operated shall have original and exclusive jurisdiction over any civil action for the review of an order or action of a Federal agency** (other than the Commission) or State administrative agency acting pursuant to Federal law to issue, condition, or deny any permit, license, concurrence, or approval (hereinafter collectively referred to as “permit”) required under Federal law, other than the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.)”) (emphasis added).

⁵⁹⁵ Army Corps of Engineers, *Where We Are*, <https://www.usace.army.mil/locations.aspx> (last viewed April 1, 2022).

⁵⁹⁶ Although communication will typically be with at the District level, some information can more easily be found on the Corps' Headquarters' websites. In addition, other agencies, such as EPA and FWS, play consulting roles in the permitting process. See Section 6.D.4. EPA even has veto authority over a 404 permit, although it is rarely exercised. See Section 6.D.3. Advocates may also need to be in contact with the regional staff at such consulting agencies during the Corps permitting process.

⁵⁹⁷ New Orleans District Website, <https://www.mvn.usace.army.mil/> (last viewed Mar. 31, 2022). Louisiana is unique in that applications for Corps permits for projects within Louisiana's coastal zone are also filed with the Louisiana Department of Natural Resources. Because of this requirement, it is sometimes easier to find Corps project documents for LNG terminals by searching the LDNR by project for the “Joint Permit Application,” as opposed to going through the New Orleans District's website. See Louisiana Office of Coastal Management, “*Search for Coastal Use Permit*,”

Southwestern Division.⁵⁹⁸ (See also Section 6.C.6, Public Notice.) Corps Headquarters will often not be involved in individual permitting decisions, but Headquarters' websites can be a useful source of regulatory guidance and some project documents are eventually pooled into a searchable database there.⁵⁹⁹

Note that the local District offices and Headquarters are not the most transparent about the progress of the permitting process for each terminal, as is discussed further in Section 6.C.2. Because FERC is lead agency for LNG projects and the public FERC process often begins before the public Corps process, monitor the FERC docket as well. The applicant's filings with FERC should disclose when the applicant expects to apply with the Corps for permits.⁶⁰⁰

What are some of the reasons to challenge a Corps decision or permit?

Although to-date there are no examples of an LNG export terminal being successfully stopped by a challenge to an Army Corps decision or permit for the terminal itself,⁶⁰¹ this is an under-challenged area ripe for advocate involvement, and one which can build on lessons from challenges to Corps decisions on LNG and oil pipelines.⁶⁰² Three main reasons to challenge the Corps' decisions and permits relating to applicant activities affecting waters and wetlands:

1. They're relevant in each case—every terminal will need at least two types of Corps permits: one for activities affecting navigable waters (section 10), and one for activities affecting waters and wetlands (section 404);
2. Unlike other purely procedural regulations that govern other permits that an LNG terminal needs, the regulations governing the Corps' permits require that the applicant actively modify its project to avoid the worst impacts to waters and wetlands; and

<http://reports.dnr.state.la.us/sonris/cmdPermit.jsp?sid=PROD> (last viewed Mar. 31, 2022)(note that embedded in the Joint Permit Application can be landowner information, supplemental information, agency correspondence and more).

⁵⁹⁸ Galveston District Website, <https://www.swg.usace.army.mil/> (last viewed Mar. 31, 2022); see also *Regulatory And Policy Trends In The Galveston District*, Oct. 22, 2019, https://www.swg.usace.army.mil/Portals/26/docs/regulatory/e-library/SAME_20191022.pdf?ver=2020-08-13-154427-770.

⁵⁹⁹ See <https://permits.ops.usace.army.mil/orm-public>. Note that this public database is not always regularly updated for the Galveston and New Orleans Division.

⁶⁰⁰ See FERC's online docketing system. <https://elibrary.ferc.gov/elibrary/search>. The applicant's initial filings with FERC will state when it expects to file applications for other required permits. By signing up for the eSubscription service, an advocate can automatically be sent notification of all FERC filings and in that way also keep track of when comment periods for the Corps permits are likely to occur. Sign up through: www.ferc.gov/docsfiling/esubscription.asp. Some projects are also tracked on the federal government's Permitting Dashboard, located here: <https://www.permits.performance.gov/projects> (e.g., Commonwealth LNG, Gulf LNG, Alaska LNG, Cameron LNG, and Jordan Cove LNG). The site summarizes the Corps' progress for these projects.

⁶⁰¹ As of December 2021, environmental groups are in the process of litigating the 404 permit for Rio Grande LNG in Texas for the second time. Gaige Davila, *RGV environmentalists sue Army Corps of Engineers after LNG, pipeline projects receive operating permit*, Texas Public Radio, Nov. 27, 2021, <https://www.tpr.org/environment/2021-11-27/rgv-environmentalists-sue-army-corps-of-engineers-after-lng-pipeline-projects-receive-operating-permit>. The 404 permit for Gibbstown Logistics Center in New Jersey was also challenged and although it may not qualify as an "LNG facility" for Natural Gas Act purposes, that challenge is also instructive. See http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200422_docket-120-cv-04824_complaint.pdf; see also https://www.nrdc.org/sites/default/files/media-uploads/2021.04.27_nrdc_proposed_amicus_brief_gibbstown_dock_2_002_1.pdf.

⁶⁰² Pipelines have traditionally been the subject of Corps challenges because the increased footprint of a pipeline typically increases the quantity of impacts to jurisdictional waters (e.g., water and wetlands crossings) that implicate 404 or section 10. Challenges brought against the pipelines that are instructive are those connected to Jordan Cove LNG (in Oregon), the Atlantic Coast Pipeline (in West Virginia, Virginia, and North Carolina), the Bayou Bridge Pipeline (in Louisiana) and the Mountain Valley Pipeline (in Virginia and West Virginia). For work in Louisiana and the Fifth Circuit, the Bayou Bridge oil pipeline challenge is particularly instructive on the issues of spill concern and mitigation—and how the Louisiana coastal use permitting process dovetails the 404 process.

3. the Corps does not have a history of being a strong advocate for ecosystem protection and so a lot could be gained in advocates scrutinizing these permits.

Other reasons to challenge a 404 permit:

- **This permit will be relevant for virtually every facility.** If 404 challenges are brought regularly against every LNG terminal, a body of comments / briefing will be developed such that each additional challenge requires less new work. It's also another chance to ensure that the applicants spend the appropriate time and resources needed to gather and present the Corps with all of the information that is required by law to evaluate whether a permit should be issued, and if so, what conditions must be placed on the project.
- **The 404 regulations require substantive results.** A 404 challenge could force the applicant to **substantively** change its project plans because 404 law requires that the Corps only issue permits that actively avoid impacts to protected ecosystems when practicable. This is fundamentally different from the requirements of NEPA, which are folded into FERC's certification of the project (discussed previously in Chapter 4)—NEPA only allows advocates to challenge whether FERC followed the correct **procedure** before certifying the project. In other words, FERC can comply with NEPA and still allow the worst alternative to proceed, whereas under section 404 the Corps **must** avoid impacts when practicable. The Corps' permits also can include substantive teeth because under 404, the Corps may add conditions to a permit so that impacts are avoided or minimized. In these ways, substantive changes to the permit can be forced, unlike the outcome of a NEPA challenge with FERC.
- **The law requires that the Corps consider more than just environmental impacts.** For all Corps permits, the Corps is required to conduct a "public interest review," which requires the weighing of at least 21 different factors of how the project could impact the "needs and welfare of the people." This includes safety, historical and cultural resources, economy, fishing, tourism, endangered species, as well as water quality. Thus a Corps challenge is a vehicle for elevating holistic concerns about a project more so than a challenge to an air permit, for example, in which by law the permitting agency can ignore damage wrought by the project if it is unrelated to air emissions. Although a court will likely defer to the Corps' ultimate conclusion on what is in the public interest, the fact that the law requires the Corps to recognize and weigh all of these public-interest factors is a powerful legal and public-opinion tool.
- **The law creates an opening to leverage intra-agency differences of opinion.** The Corps is required to solicit comments from other federal agencies before it issues a permit. In some cases, those agencies have more power than simply the ability to submit comments—EPA and FWS has the authority to elevate certain specific concerns with the District office's decision-making and get the Corps and the other agency's headquarters to also scrutinize a proposed permit.⁶⁰³ EPA's comments can carry extra weight because it co-wrote some of the regulations (the so-called 404(b)(1) Guidelines) that the Corps must follow before issuing a 404 permit. EPA even has the ability to veto a 404 permit that it disagrees with,⁶⁰⁴ although EPA has rarely exercised this power and it has never been used on any aspect of an LNG project. However, merely the threat of an intra-agency dispute can put the Corps and the applicant back on track.

⁶⁰³ See Section 6.D.1, discussing CWA § 404(q).

⁶⁰⁴ This power is codified in CWA § 404(c) and described in Section 6.D.3.

- **Much of the work will mirror the NEPA challenge with FERC.** The Corps tries to take a backseat role to FERC when it comes to permitting LNG terminals, as FERC is designated the lead authority for these projects and is thus responsible for implementing NEPA and preparing the project’s administrative record. In taking this backseat role, the Corps often relies heavy on FERC’s NEPA analysis (the EIS documents) to support its rationale that the project meets the regulatory requirements necessary to merit a 404 permit. Thus an advocate who is already challenging NEPA will be relying on much of the same supporting environmental analysis materials in formulating a 404 challenge.
- **There is no administrative appeals role for LNG challengers once the permit is issued.** Instead, a challenger goes straight to the federal Circuit Court presiding over the terminal’s proposed location. Although advocates must wait until the administrative appeals process is concluded, advocates don’t need to waste resources in an administrative appeals process.⁶⁰⁵
- **For LNG terminals, this is an under-contested area ripe for challenge.** Advocates have brought 404 challenges to gas pipelines, but only one terminal itself has been challenged under 404 (the Rio Grande LNG terminal) and as of December 2021 that challenge is on-going.⁶⁰⁶
- **Although statistically the Corps is likely to issue a 404 permit, the permit can include conditions such that the environment is better protected.** The Corps Headquarters estimates that nationwide, less than one percent of all requests for permits are denied.⁶⁰⁷ However, advocates challenging 404 permits can argue for stricter conditions on the permit than might otherwise be added. These could restrict the applicant from using more harmful construction methods, restrict construction during wildlife nesting or spawning seasons, and require additional compensatory mitigation. So even if the facility is ultimately permitted, the environment is protected as best as possible.

Reasons to challenge the other Corps permits:

- **The analysis may be taking place at the same time.** The Corps typically analyzes all of a terminal’s requested permits together,⁶⁰⁸ the exception being section 408, which if needed must be sought first, but often is added once additional activities are added to existing facilities.⁶⁰⁹
- **Section 10 and 408 permits are subject to a public interest review, like the section 404 permit.** Because a similar test, the “public interest review,” is used for a 404 and a section 10 permit, an advocate that is already mounting a section 404 challenge can capitalize on their knowledge of 404 permitting to structure the section 10 arguments.

⁶⁰⁵ See 15 U.S.C. 717r(d)(1) (stating that judicial review of Corps actions shall be in the federal circuit court where the project is located).

⁶⁰⁶ In 2020, the Corps suspended the first 404 permit it granted to the applicant after advocates sued the agency in the Fifth Circuit. The Corp reissued the 404 permit in September 2021, which as of December 2021, advocates are in the process of challenging again. Texas Public Radio, *RGV environmentalists sue Army Corps of Engineers after LNG, pipeline projects receive operating permit*, Nov. 27, 2021, <https://www.tpr.org/environment/2021-11-27/rgv-environmentalists-sue-army-corps-of-engineers-after-lng-pipeline-projects-receive-operating-permit>.

⁶⁰⁷ Army Corps of Engineers, *Frequently Asked Questions*, <https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Frequently-Asked-Questions/> (last viewed Mar. 31, 2022).

⁶⁰⁸ See e.g., Rio Grande LNG Public Notice, Sept. 19, 2019, 1 (indicating the Corps’ intent to review the project “pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act”)

⁶⁰⁹ Cameron LNG Public Notice, Oct. 27, 2016, <https://www.mvn.usace.army.mil/Missions/Section-408/Public-Notices/Article/988750/02-3266-cameron-lng-llc-proposes-to-construct-an-intake-structure-to-provide-an/>. This 408 permission was sought after the facility received other permits.

- **These permits are under-contested.** The lack of scrutiny on Corps permits means there is the potential for low-hanging improvements that advocates could help the Corps make in following all of the necessary regulations correctly.

How is this chapter organized?

There are six sections in this chapter. Section A is this introductory section. Section 6.B describes the legal framework that the Corps must follow in issuing a 404 permit, from an overview of what aquatic resources are jurisdictional to a summary of the Corps and EPA regulations that govern the analysis the Corps must conduct before issuing a permit (covering what is known as the 404(b)(1) Guidelines as well as the Corps' public interest review and its procedural regulations). This Section also describes typical arguments that an advocate could make based on the regulations that restrict the issuance of 404 permits. An advocate unfamiliar with 404 law should start here.

Section 6.C explains how an advocate actually participates in the 404 permitting process from any approved jurisdictional determination that is made to notice of the permit application and up until the issuance of a permit. Section 6.D explains how other agencies like the EPA and FWS can participate in the permitting process and how an advocate might slow the permitting process down by capitalizing on the fact that EPA or FWS might disagree with the Corps' analysis that a permit is warranted. Section 6.E explains what happens after a 404 permit is issued and how to litigate the issued permit. Both Sections 6.D and 6.E provide links to comments/briefing filled in LNG challenges. Because there have not been a lot of 404 challenges to LNG terminals themselves, some of the links are to comments and briefing filed challenging fossil fuel pipelines as some of the arguments may overlap. Section 6.F briefly provides more information on Section 10 permits.

What laws govern the Corps' decisions on a 404 permit?

Whether a section 404 permit is granted depends on a variety of laws and regulations and what types of aquatic resources are impacted. There are three main steps the Corps must conduct before issuing a permit, with different corresponding regulations and legal review requirements for each:

1. The Corps must determine which aquatic resources will be considered jurisdictional, and whether there are any "special aquatic sites" on location; this is governed by Supreme Court case law and the Corps and EPA's regulations. (See Section 6.B.1 and 6.B.2, below.)
2. In considering a permit application, the Corps must follow EPA's regulations that protect certain aquatic resources—the 404(b)(1) Guidelines. (See Section 6.B.3 and 6.B.4, below.)
3. The Corps must conduct a "public interest review" before issuing the permit.⁶¹⁰ (See Section 6.B.5)

⁶¹⁰ 33 C.F.R. § 320.4(a)(1) (pursuant to the Corps' CWA and Rivers and Harbors Act Section 10 implementing regulations, the "decision whether to issue a permit will be based upon an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest.").

Other laws that the Corps must comply with (or check that the project complies with) are addressed in Sections 6.B.6 and 6.B.7 (e.g., the Endangered Species Act, Section 106 of the National Historical Preservation Act⁶¹¹, NEPA, the Coastal Zone Management Act, and Section 401 of the Clean Water Act. Sections 6.B.8, 6.B.9, and 6.B.10 provide practical tips as to what an advocate might include in comments and experts to retain.

QUICK REVIEW: DID THE CORPS FOLLOW THE LAW?

1. Has it made the correct jurisdictional determinations for the site?
2. Did it fully follow the 404(b)(1) Guidelines?
3. Did it consider all factors in the public-interest balancing test?
4. Did it confirm compliance with the ESA, NHPA, section 401 of the CWA, NEPA, and the CZMA?

If not, the Corps' failures are grounds for a 404 challenge.

What activities and aquatic resources will trigger the need for a 404 permit?

The intent of section 404 is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.⁶¹² Specifically, an applicant needs a 404 permit whenever a project involves discharging dredged or fill materials (e.g., sediment or dirt) into "**waters of the United States,**" which includes wetlands.⁶¹³ Given that all of the proposed terminals are designed to export LNG via tanker ships, an applicant typically proposes that the terminal be built next to a waterway, and often on coastal wetlands. An applicant therefore likely will need a 404 permit for at least two reasons: (1) the applicant will be using fill material (e.g., dirt) to fill in wetlands that currently exist where the terminal and supporting infrastructure is to be built; and (2) during construction and operation, the neighboring waterway will need to be dredged so that the huge tankers can dock with the facility—and that dredged material will need to be disposed of, potentially in adjacent wetlands.

⁶¹¹ This requires that each federal agency identify and assess the effects its actions may have on historic buildings. See U.S. GSA, *Section 106: National Historic Preservation Act of 1966*, <https://www.gsa.gov/real-estate/historic-preservation/historic-preservation-policy-tools/legislation-policy-and-reports/section-106-national-historic-preservation-act-of-1966> (last viewed Apr. 1, 2022).

⁶¹² See 33 U.S.C § 1344.

⁶¹³ EPA, *Current Implementation of Waters of the United States*, <https://www.epa.gov/wotus/current-implementation-waters-united-states> (last viewed Mar. 31, 2022). The EPA and the Corps work together to define "waters of the United States," but this definition is also constrained by Supreme Court law.

How does the Corps determine which aquatic resources are jurisdictional and important?

Whether a water or wetlands is jurisdictional depends on the fact-intensive definition of “waters of the United States” (“WOTUS”), which for decades has been and still continues to be in flux.⁶¹⁴

However, some aquatic resources that are relevant to LNG terminals have been well within the definition of WOTUS despite the definitional changes. These waterbodies include perennial (always-flowing) streams, rivers, lakes, and ponds. Wetlands adjacent to these waterbodies have also always been jurisdictional, although what a wetland is has shifted and is a fact-intensive question. Land may be a wetland even if it only is periodically flooded or it may be a wetland because it has soil and vegetation known to be typical of wetlands. Because a wetland can be fact-intensive to delineate and thus open to interpretation, an advocate should focus on the site’s potential for overlooked wetlands when deciding whether to challenge a jurisdictional determination. (Consultation with a wetlands delineation expert is highly encouraged.) In addition, certain mudflats and sandflats are jurisdictional under the pre-2015 definition that is currently controlling as of January 2022.⁶¹⁵ And dry stream bed that only flow during rainstorms can under certain circumstances also be jurisdictional and may be overlooked by the Corps and the applicant. This issue arises more often in climates typical to the southwest United States as opposed to the east—another reason to consult with an expert and connect with community members familiar with the site itself.

For any given project the Corps either will make an official determination as to which aquatic resources are indeed jurisdictional (an “approved jurisdictional determination”), or will assume all such resources fall into its jurisdiction (by making no official determination, or simply a “preliminary jurisdictional determination.”). The Corps typically relies on the applicant and the applicant’s consultants to propose which aquatic resources on site are jurisdictional and may conduct a site visit or review aerial photos or historical data to aid in its determination. The quantity and type of jurisdictional aquatic resources on site is important because it affects whether the

MORE ABOUT THE LEGAL DEFINITION OF WOTUS.

The changes to WOTUS have been on the margins, as Supreme Court precedent has evolved, Administrations have changed, and federal courts have blocked the Administrations’ changes. The definition of WOTUS expanded under the Obama Administration, shrunk during the Trump Administration,¹ and is currently being revised under the Biden Administration. Until the Biden Administration issues a new final rule, the Corps is interpreting WOTUS consistent with its pre-2015 definition. Because of this flux, an exact definition is beyond the scope of this guide, but can be found at:

<https://www.epa.gov/wotus/current-implementation-waters-united-states>.

¹ The Navigable Waters Protection Rule: Definition of “Waters of the United States” 85 FR 22250. June 22, 2020. <https://www.federalregister.gov/documents/2020/04/21/2020-02500/the-navigable-waters-protection-rule-definition-of-waters-of-the-united-states>.

² Jurisdictional Information: 3 September 2021 – Current Implementation of Waters of the United States. https://www.usace.army.mil/missions/civil-works/regulatory-program-and-permits/juris_info/.

⁶¹⁴ Army Corps of Engineers, *Jurisdictional Information*, https://www.usace.army.mil/missions/civil-works/regulatory-program-and-permits/juris_info/ (last viewed Mar. 31, 2022).

⁶¹⁵ EPA, *Current Implementation*, *supra* note 613.

project should be moved, what conditions need to be imposed on any issued permit, and what mitigation might be necessary.⁶¹⁶ For more information on judicial determinations and the role for advocates, see Section 6.C.3.

In addition, if certain specific aquatic resources (“Special Aquatic Sites”) are present, the Corps is forced to take a harder look at impacts and whether the applicant must do more to avoid impacts in those areas before receiving a 404 permit.⁶¹⁷ “Special Aquatic Sites” are a subset of waters of the United States that are large or small areas possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. Special aquatic sites include wetlands, sanctuaries and refuges, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes. These sites are generally recognized as significantly influencing or positively contributing to the overall environmental health of the entire ecosystem and receive special attention under EPA’s Section 404(b)(1) guidelines, described below.⁶¹⁸ Given that many of these planned projects are coastal, there are likely many special aquatic sites impacted by the terminal, pipeline, and compressor locations.

Advocates are encouraged to research the footprint of the proposed LNG terminal to identify jurisdictional waters and special aquatic sites—some information may be in the public notice documents (see Sections 6.C.6 – 6.C.8) but the majority of useful information will likely be in FERC’s

JURISDICTIONAL CHECKLIST (FOR THE ADVOCATE & ADVOCATE’S EXPERT)

Are there any aquatic resources on site? (Answer for all LNG terminals should be yes)

- WOTUS? – Non-WOTUS? (e.g., groundwater, isolated irrigation ditches)

Are any of those aquatic resources jurisdictional, i.e., WOTUS?

- The ocean? - Lakes and rivers? - Wetlands? - Mudflats / sandflats? (non-exhaustive list)

Are any of these WOTUS areas also “special aquatic sites,” i.e., those with special ecological characteristics of productivity, habitat, or wildlife protection?

- Wetlands? - Sanctuaries? - Mudflats? - Vegetated shallows? (non-exhaustive list)

Practice tip: When thinking about the project and drafting comments, keep in mind that a WOTUS that is also a “special aquatic site” will get more protections than just a WOTUS.

⁶¹⁶ In particular, the **type** of jurisdictional aquatic resources on site may warrant special consideration by the agency and advocacy, including what type of replacement function should be approved for compensatory mitigation for unavoidable losses of that resource: e.g., should the Corps allow mitigation bank credits for bottomland hardwood wetland forests to replace lost coastal marshes, even though the two resources may not provide equivalent ecosystem functions? Unfortunately, the Corps has a record of not taken these nuances into consideration when approving mitigation plans.

⁶¹⁷ For example, if a project is not “water-dependent” (e.g., a terminal’s compressor stations or pipeline) yet affects special aquatic sites, then the Corps is directed to presume that alternative locations are available for that component of the project, and the applicant will more likely be required to change its project design. And for the special aquatic site category of wetlands, the Corps recognizes that their destruction can have broader cascading effects on the surrounding ecosystem that must be considered. 33 C.F.R. § 320.4(b)(3) (“Although a particular alteration of a wetland may constitute a minor change, the cumulative effect of numerous piecemeal changes can result in a major impairment of wetland resources. Thus, the particular wetland site for which an application is made will be evaluated with the recognition that it may be part of a complete and interrelated wetland area.”).

⁶¹⁸ Specifically, Subpart E of the Guidelines (§§ 230.40 - 230.45) details Potential Impacts on Special Aquatic Sites.

environmental documents (the draft or final EIS, depending on which is available at the time public comments are solicited⁶¹⁹), which the Corps will likely rely on to support its ultimate permitting decision.⁶²⁰ Advocates should strongly consider contracting with a wetlands delineation expert if funds allow.

What are the 404(b)(1) Guidelines?

When assessing an application for a permit to impact jurisdictional aquatic resources, the Corps must follow binding guidelines established by the Corps and the EPA, which are codified at 40 C.F.R. § 230 (the so-called 404(b)(1) Guidelines).⁶²¹ EPA summarizes part of the Corps' responsibilities under the 404(b)(1) Guidelines as a three-step analytical process, shown here.⁶²²

Step 1. Avoid - Adverse impacts to aquatic resources are to be avoided and no discharge shall be permitted if there is a practicable alternative with less adverse impact.

Step 2. Minimize - If impacts cannot be avoided, appropriate and practicable steps to minimize adverse impacts must be taken.

Step 3. Compensate - Appropriate and practicable **compensatory mitigation** is required for unavoidable adverse impacts which remain. The amount and quality of compensatory mitigation may not substitute for avoiding and minimizing impacts.

These three steps are three of the four conditions listed in Subpart B of the Guidelines that must be satisfied for a permit to issue, and at the simplest level these steps are as follows: First, adverse impacts to jurisdictional resources should be avoided. If adverse impacts cannot be avoided, impacts should be minimized.⁶²³ Remaining impacts should spur the need for compensatory mitigation—for example, the restoration or preservation of a nearby wetlands to compensate for the impacts of the

⁶¹⁹ The public notice should clearly indicate if the DEIS or FEIS is available and identify the FERC docket number needed to retrieve this information.

⁶²⁰ Recall that for large projects like LNG terminals that must seek permits and permissions from multiple federal agencies, one agency is designated as lead, in part to reduce paperwork and duplicative work—and for LNG projects, it is FERC. (See Chapter 4 for more information about FERC's role.) FERC as lead agency thus has the responsibility for preparing the administrative record, which in effect means it prepares the environmental impact documents (EIS) that are to support the permitting decisions of all agencies, including the Corps. (The Corps has discretion to prepare its own EIS documents.)

⁶²¹ EPA issues these guidelines in consultation with the Corps, and the Corps incorporates them into its own regulations as well. See 33 C.F.R. §§ 320.4(b)(4), 325.2(a)(6). The Corps, on its own and jointly with EPA, has also issued other applicable guidance. See, e.g., 33 C.F.R. § 332.1(f) (explaining continuing validity of various guidance documents). See also EPA, *Policy and Guidance Documents under CWA Section 404*, <https://www.epa.gov/cwa-404/policy-and-guidance-documents-under-cwa-section-404>. See also 33 U.S.C. § 1344(b).

⁶²² EPA, *Wetlands Compensatory Mitigation*, August 2015, https://www.epa.gov/sites/default/files/2015-08/documents/compensatory_mitigation_factsheet.pdf.

⁶²³ 40 C.F.R. Part 230 Subpart H lists examples of minimization measures. These can include, *inter alia*, “selecting sites ... to prevent or avoid creating habitat conducive to the development of undesirable predators,” “avoiding sites having unique habitat or other value,” or “habitat development and restoration.” 40 C.F.R. § 230.75(d).

project.⁶²⁴ This three-step analytical process is required whenever there is a discharge of dredge or fill material into the waters of the United States and aquatic ecosystem. As part of this three-part analysis, the Corps is also required to make certain factual determinations in writing describing the potential short-term and long-term effects of the proposed discharges,⁶²⁵ including the cumulative and secondary effects on the aquatic ecosystem.⁶²⁶

Each of these steps has several caveats—the Corps will not require that the applicant avoid **all** adverse impacts—only those with no “practicable alternatives.”⁶²⁷ To be “practicable,” an alternative must be “available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.”⁶²⁸ Unavoidable impacts need not be minimized to zero, and the Corps limits the required mitigation (e.g., restoration of other wetlands) to what is “appropriate and practicable.” In practice, this means that the Corps routinely issues 404 permits that cause wetland destruction—to stop a Corps permit, an advocate must show that the Corps failed to follow the law, e.g., by failing to apply the nuances of the 404(b)(1) Guidelines.

Some of these nuances are described in a 1990 Memorandum of Agreement between the EPA and the Department of the Army as follows:

Avoidance. *Section 230.10(a) allows permit issuance for only the **least environmentally damaging practicable alternative**. The thrust of this section on alternatives is avoidance of impacts. Section 230.10(a) requires that no discharge shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. In addition, Section 230.10(a)(3) sets forth **rebuttable presumptions** that 1) alternatives for non-water dependent activities that do not involve special aquatic sites are available and 2) alternatives that do not involve special aquatic sites have less adverse impact on the aquatic environment. Compensatory mitigation may not be used as a method to reduce environmental impacts in the evaluation of the least environmentally damaging practicable alternatives for the purposes of requirements under Section 230.10(a).*⁶²⁹

It's important to note that this requirement that the Corps select the least environmentally damaging practicable alternative (or “LEDPA”) at the initial step is a substantive duty put on the Corps permits that is missing from the NEPA requirements, which are only procedural. This difference is particularly useful in pipeline challenges because the siting of a pipeline may be more flexible than the siting of

⁶²⁴ “The fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States authorized by [Corps] permits.” 33 C.F.R. § 332.3(a)(1). This offset is intended to achieve the “federal government[’s] ... longstanding national goal of ‘no net loss’ of wetland acreage and function.” EPA and Corps, Compensatory Mitigation for Losses of Aquatic Resources, Final Rule, 73 Fed. Reg. 19594-01 (Apr. 10, 2008). The applicant typically prepares an initial compensatory mitigation plan; the Corps is responsible for approving it, and other agencies, like the EPA, may also weigh in on whether it is sufficient.

⁶²⁵ 40 C.F.R. 230.11.

⁶²⁶ 40 C.F.R. 230.11(g)&(f).

⁶²⁷ 40 C.F.R. § 230.10(a).

⁶²⁸ 40 C.F.R. § 230.10(a)(2). At least one court has held that the applicant has the burden of clearly demonstrating there are no practicable alternatives, see *Northwest Environmental Defense Center v. Wood*, 947 F. Supp. 1371, 1374 (D. Or. 1996) (arguing for this proposition)—a burden the Corps has tended to let slide.

⁶²⁹ Memorandum of Agreement between the U.S. Department of the Army and EPA (1990) (emphasis added).

the LNG terminal itself, which will need to be accessible by tanker ship and therefore likely limited to the coast. This distinction between the 404 permit and NEPA process should not be overlooked.⁶³⁰

As the 1990 MOU excerpt above points out, the Guidelines (at 40 C.F.R. 230.10(a)(3)) also describe two rebuttable presumptions that may be triggered as to the availability of alternatives to the proposed project. Both presumptions are triggered when special aquatic sites might be impacted. The **first** rebuttable presumption is triggered when the “**basic purpose**” of the project is not “water-dependent.”⁶³¹ For example, a residential housing development’s basic purpose is to provide housing and would therefore not be water-dependent, whereas the Corps has considered that water-dependent projects might include dams and docks.⁶³² And when the basic purpose of the activity is not water-dependent, the Corps must presume that there are alternatives to the project available that avoid impacts to special aquatic sites, unless the applicant clearly demonstrated otherwise.⁶³³

Whether an entire LNG project must be considered “water-dependent” even if certain of its components (like pipelines, compressor stations, pre-treatment liquefaction and storage) have been shown to not require direct access to water⁶³⁴ does not appear to be clearly settled and may be an issue to raise in comments as some advocates have done in challenging: Annova LNG (most fully

⁶³⁰ See *Greater Yellowstone Coalition v. Flowers*, 321 F.3d 1250, 1262 n.12 (10th Cir. 2003) (explaining how error is committed if agencies don’t comply with the CWA’s and NEPA’s different analytical requirements).

⁶³¹ “Water-dependent” isn’t defined in the Clean Water Act or in its implementing regulations, but the Corps’ guidance and court cases have helped shed light on this term. The lack of a fixed definition means that there may be room to argue that LNG projects (or at least the majority of the component parts) are not water-dependent. “Basic purpose” is also not defined in the statute or regulations; rather, only guidance and court cases explain this concept. Corps’ guidance shows that “basic purpose” is not the same thing as “overall purpose” or the “purpose” defined by NEPA (the latter two are more alike); it is a separate analysis required specifically for the Corps to meet its 404 permitting obligations under the Guidelines. See Army Corps of Engineers, *Updated Standard Operating Procedures for the U.S. Army Corps of Engineers Regulatory Program*, July 1, 2009, 15-16, <https://www.spd.usace.army.mil/Portals/13/docs/regulatory/qmsref/eis/Regulatory%20SOP%20July%202009.pdf> (outlining the Corps’ and the NEPA-lead agency responsibilities when it comes to defining “basic project purpose and water dependency,” “overall project purpose and alternatives analysis,” and NEPA’s “purpose and need”); see also *City Club of N.Y. v. U.S. Army Corps of Eng’rs*, 246 F. Supp. 3d 860, 872 (S.D.N.Y. 2017) (one district court explaining the difference between overall purpose and basic purpose, and vacating the permit for the Corps’ failure to accurately define the project’s basic purpose).

⁶³² See Army Corps, *Updated SOP*, *supra* note 631, 15 (explaining that “the basic project purpose of any residential development is to provide housing for people. Houses do not require access or proximity to a special aquatic site and they do not have to be located in a special aquatic site to fulfill their basic purpose of housing people. Therefore, a residential development is not water dependent.”); See also *Sierra Club v. Antwerp*, 709 F. Supp. 2d 1254, 1261 (S.D. Fla. 2009) (citing a previous Corps SOP (from Oct. 15, 1999), as cited in *Fla. Clean Water Network, Inc. v. Grosskruger*, 2008 U.S. Dist. LEXIS 91937 (M.D. Fla. Oct. 30, 2008)).

⁶³³ 40 C.F.R. Part 230.10(a)(3).

⁶³⁴ For example, storage and liquefaction facilities at LNG terminals have been successfully located at least a mile from the vessel loading area. See App. 46 (Annova 404 Comments, Jan. 29, 2019) <https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/DOW%20et%20al%20Annova%20LNG%20404%20applicati%20on%20comments%20FINAL.pdf>. Under logic applied by one district court, this would mean that the storage and liquefaction activities are not water-dependent. See *Sierra Club v. Antwerp*, 709 F. Supp. 2d 1254, 1261 (S.D. Fla. 2009) (reasoning that “If limestone excavation is not inherently water dependent in one situation, then it is not inherently water dependent in another,” collecting cases and ultimately finding the Corps’ dependency analysis arbitrary and capricious).

cited),⁶³⁵ Cameron LNG,⁶³⁶ and Jordan Cove LNG.⁶³⁷ Historically the Corps and FERC has not well-documented its analysis of water-dependency for LNG projects or articulated the project's basic purpose (much less distinguished it from the overall purpose).⁶³⁸ Depending on the particular project proposed, it might be possible to argue that the supporting equipment (such as pre-treatment or liquefaction trains) could be relocated inland to a location devoid of special aquatic sites. For instance, at the Freeport LNG operations in Texas, the pre-treatment facility is located more than three miles from the export terminal.

The **second** rebuttable presumption is that alternatives that do not involve special aquatic sites have less adverse impacts on the aquatic environment. Examined alternatives must be congruent with the projects "**overall purpose**," which is generally narrower than a project's basic purpose.⁶³⁹ Applications for projects that have more than one purpose may require a separate alternatives analysis,⁶⁴⁰ arguably this would apply to at least the pipeline and terminal portion of a project. The possible triggering of this presumption is another reason for advocates to research and be familiar with the special aquatic sites in the project area, as well as the pre-existing infrastructure.⁶⁴¹ Finally, even if these presumptions do not apply, the Corps still must conduct an alternatives analysis.

On top of requiring that the three avoid/minimize/mitigate conditions are correctly analyzed and fully satisfied, a fourth, catch-all condition must be satisfied. Specifically, the Guidelines also prohibit discharges that (1) cause or contribute violations to the state water quality standards; (2) cause or contribute violations to the toxic effluent standards under section 307 of the CWA; (3) jeopardize Endangered Species; (4) violate requirements to protect marine sanctuaries;⁶⁴² and (5) cause or contribute to significant degradation of waters of the United States.⁶⁴³ Of these five additional conditions, advocates may find persuasive arguments that on-shore LNG terminals impact water

⁶³⁵ See App. 46 (Annova 404 Comments, Jan. 29, 2019). Advocates argued that the layout of other LNG projects demonstrate that gas pre-treatment facilities and liquefaction equipment can be at least a mile from the marine loading area, yet the DEIS failed to explore alternatives that would avoid siting liquefaction, pretreatment, and other non-water-dependent facilities outside of wetlands.

⁶³⁶ *Sierra Club & GRN Comments on Draft EIS for Cameron LNG, LLC's and Cameron Interstate Pipeline, LLC's Liquefaction Project, FERC Docket Nos. CP13-25 & CP13-27* at 12-14, Mar. 3, 2014, https://environmentalnewsstand.com/sites/environmentalnewsstand.com/files/documents/apr2014/epa2014_0622b.pdf (arguing in a challenge to Cameron LNG that gas liquefaction is not wetlands-dependent, yet FERC's DEIS failed to analyze non-wetlands alternatives, making it unlawful, and pointing out that neither FERC nor the applicant claimed that the liquefaction or storage are water-dependent activities).

⁶³⁷ WELC, *Comments on the Jordan Cove DEIS dated Nov. 2014, Dockets CP13-483 & CP13-492*, Feb. 2015, 128-29, <https://law.lclark.edu/live/files/19245-2015-03-group-comments-on-deis-for-jordan-cove-lng> (arguing that a worker's camp proposed as part of the Jordan Cove terminal should not benefit from "water-dependent" treatment; FERC ignored this comment in its 2019 FEIS under the argument that these components were removed from the 2019 proposal, see FERC, *Appendix R: Comments on the Draft EIS and Responses*, Jordan Cove FEIS App. R Part 12, Nov. 15, 2019, 47 https://www.ferc.gov/sites/default/files/2020-05/11-15-19-FEIS_Appendix_R-Part_12.pdf).

⁶³⁸ Based on a review of the Rio Grande LNG and 2019 Jordan Cove FEIS documents.

⁶³⁹ See Army Corps, *Updated SOP*, *supra* note 631, 15; see also Consensus Building Institute, *Navigating the Clean Water Act §404 Application Process: Information to Assist Permit Applicants*, Feb. 2018, 19-21 https://www.cbi.org/assets/news/EPA_TSD_Final.pdf (not Corps guidance, but a document created under contract with EPA to describe the 404 application process).

⁶⁴⁰ See also Consensus Building Institute, *supra* note 639, 19-21 (not Corps guidance, but a document created for EPA to describe the 404 application process).

⁶⁴¹ Advocates that have studied the project area and are familiar with the pre-existing infrastructure will be better prepared to proactively address potential arguments that "one more pipeline" will not harm the special aquatic site it has been proposed to traverse, making the co-location site better than alternatives. (E.g., consider cumulative impacts.)

⁶⁴² 40 C.F.R. § 230.10(b)(1)-(4).

⁶⁴³ 40 C.F.R. § 230.10(c).

quality ((1), (2), and (5)) and endangered species (3). Deepwater ports are more likely to implicate marine sanctuaries (4). All viable arguments should be included in comments.

The structure of the 404(b)(1) Guidelines is further described below.⁶⁴⁴

How are the 404(b)(1) guidelines structured?

The 404(b)(1) regulatory guidelines provide the substantive environmental review criteria for CWA Section 404 permit applications—in other words, the guidelines describe part of what the Corp must do before issuing a 404 permit.⁶⁴⁵ The first step of drafting comments or a legal brief should be to read through these Guidelines. As codified in EPA’s regulations at 40 C.F.R. § 230 et seq., the Guidelines are divided into eight Subparts.⁶⁴⁶

Specifically, the subparts are (with callouts to sections that are particularly relevant for LNG terminal challengers):

- **Subpart A - General (§§ 230.1 - 230.7):** includes provisions of general applicability, such as purpose and definitions; § 230.2 clarifies the applicability of the guidelines and other guidance documents; § 230.5 is particularly valuable in that it outlines the general procedures the Corp should follow, in sequence; § 230.6(b) explains that the level of documentation and effort that the Corps puts into assessing a permit should be commensurate with the significance and complexity of the proposed project;
- **Subpart B - Compliance With the Guidelines (§§ 230.10 - 230.12):** establishes the four conditions which must be satisfied in order to make a finding that a proposed discharge of dredged or fill material complies with the Guidelines;⁶⁴⁷ § 230.11 describes some of the factual determinations the Corp is required to make in determining whether these conditions are satisfied.
- **Subpart C - Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem (§§ 230.20 - 230.25):** Like Subparts D-F, a very useful springboard to highlighting potential impacts from the project. Recall that this is a non-exhaustive list. Advocates should do outside research on potential impacts based on the LNG terminal’s location itself. Outside research could be in the form of academic articles, other agency literature about the area (e.g. Park service literature about the nearby ecosystem, community knowledge, expert opinion, etc).
- **Subpart D - Potential Impacts on Biological Characteristics of the Aquatic Ecosystem (§§ 230.30 - 230.32):** Like Subparts C, E-F, a very useful springboard to highlighting potential impacts from the project.
- **Subpart E - Potential Impacts on Special Aquatic Sites (§§ 230.40 - 230.45):** Like Subparts C, D, F, a very useful springboard to highlighting potential impacts from the project. When an LNG

⁶⁴⁴ See 40 C.F.R. § 230.10 (describing the first step, identifying adverse impacts to be avoided based on an assessment of practicable alternatives); 40 C.F.R. Part 230 Subpart H (describing the second step, minimizing adverse effects); 40 C.F.R. Subpart J (describing the third step, compensatory mitigation).

⁶⁴⁵ See 33 U.S.C. § 1344(b)(1) (requiring that the Corps create guidelines for issuing permits).

⁶⁴⁶ 40 C.F.R. § 230.4.

⁶⁴⁷ These four conditions are to avoid, minimize, and compensate for impacts, as well as the laundry list of prohibitions mostly related to water quality: no discharges that (1) cause or contribute violations to the state water quality standards; (2) cause or contribute violations to the toxic effluent standards under section 307 of the CWA; (3) jeopardize Endangered Species; (4) violate requirements from the Marine Protection, Research, and Sanctuaries Act of 1972; and (5) cause or contribute to significant degradation of waters of the United States.

terminal has the potential to impact a “special aquatic site” under this subpart, enhanced scrutiny of the project is warranted, as “[f]rom a national perspective, the degradation or destruction of **special aquatic sites**, such as filling operations in wetlands, is considered to be among the most severe environmental impacts covered by these Guidelines.”⁶⁴⁸

- **Subpart F - Potential Effects on Human Use Characteristics (§§ 230.50 - 230.54):** Like Subparts C-E, a very useful springboard to highlighting potential impacts from the project.
- **Subpart G - Evaluation and Testing (§§ 230.60 - 230.61):** Note that the testing guidelines may be updated soon.
- **Subpart H - Actions to Minimize Adverse Effects (§§ 230.70 - 230.77):** A very useful subpart for brainstorming ways that the Corps could require the applicant to minimize impacts—and a de facto checklist for things the Corps probably should have considered, but didn’t.
- **Subpart I - Planning to Shorten Permit Processing Time (§ 230.80):** concerns advanced identification of disposal areas.
- **Subpart J - Compensatory Mitigation for Losses of Aquatic Resources (§§ 230.91 - 230.98):** A primer on the Corps’ views of compensatory mitigation. Again, a de facto checklist for things the Corps probably should have considered, but didn’t.

This is just a brief summary of the Guidelines; there is no substitute for reading the Guidelines in their entirety!

But compliance with the 404(b)(1) Guidelines is not all that is required for a 404 permit to issue. The Corps’ regulations, at 33 C.F.R. Parts 320, 323 and 325, also must be followed, which among other things, outline the Corps’ public interest review process, which is also part-and-parcel of the 404 permitting process.

What is involved in the Corps’ public interest review, and how does it make a 404 challenge a particularly useful challenge?

In addition to the Guidelines, and pursuant to the Corps’ CWA and Rivers and Harbors Act Section 10 implementing regulations, the Corps states that the “decision whether to issue a permit will be based upon an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest.”⁶⁴⁹ This “public interest” review lies at the heart of the Corps’ analysis and must guide the agency’s review of the applicant’s project. The public interest review is intended to be broad, capturing all relevant issues that could impact the environment, human health and well-being, and natural resources. The Corps states:

*Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonable may be expected to accrue from the proposal must be balanced against its reasonable foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process. That decision should reflect the national concern for both protection and utilization of important resources.*⁶⁵⁰

⁶⁴⁸ 40 C.F.R. § 230.1(d) (emphasis added); see also 40 C.F.R. §§ 230.3(q-1) (defining “special aquatic sites”).

⁶⁴⁹ 33 C.F.R. § 320.4(a)(1).

⁶⁵⁰ 33 C.F.R. § 320.4(a)(1).

The Corps' regulations include a non-exhaustive list of 21 factors that may be relevant the public interest review for each individual project. 33 C.F.R. § 320.4(a)(1) states in part:

*All factors which may be relevant to the proposal must be considered including the cumulative effects thereof: among those are **conservation, economics, aesthetics, general environmental concerns, wetlands,**⁶⁵¹ **historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.**⁶⁵²*

It is important to notice a few things about this language. First, wetlands are highly valued in the public interest analysis, similar to how the 404(b)(1) Guidelines identify wetlands as special sites meriting additional protection. This is another reason to both scrutinize whether the Corps accurately identified all wetlands on site and in drafting comments specifically call out impacts to wetland. Second, the factors that must be considered extends beyond impacts to waters.

Third, this is only a starting point for factors that might be relevant; these regulations specifically require that that “[a]ll factors which **may** be relevant to the proposal **must** be considered.” (emphasis added). Climate change, for example, is not listed, but is undoubtedly something that impacts the public interest (it also falls under “energy needs” and “general environmental concerns”). LNG terminals have an especially large impact in this arena, from the annual greenhouse emissions to the decades of service life of the terminal to the destruction of wetlands that protect from increased flooding. Environmental justice is also not listed but is part of at least the category of “needs and welfare of the people.”

Fourth, by requiring an analysis of “cumulative impacts” and by including a non-exhaustive, but far-reaching, list of factors, the Corps' regulations show that before a permit may issue, the Corps must first conduct a **broad** analysis of the public interest that captures **all** impacts associated with the project and not just those that result directly from the permitted activities.

In other words, with the public-interest-review mandate, the Corps should be analyzing not just the impacts of the terminal construction itself, but broadly the impacts of the project as a whole. This is a unique and valuable facet of a 404 permit—the fact that by law the Corps' review must look beyond the project itself to far reaching effects.⁶⁵³ Note that despite the language of the law, the Corps takes a much narrower view of its responsibilities—a perspective that may only be able to be changed through litigating issued permits, but nonetheless one that should be challenged in comments during the permitting process itself. An advocate should push the Corps to correctly analyze in-depth the above listed factors, along with any others that appear relevant given the unique siting of each

⁶⁵¹ Note that wetlands receive special scrutiny under the Guidelines and the public interest review: the Corps' regulations explain that wetlands “perform functions important to the public interest,” including: “significant natural biological functions, including food chain production, general habitat and nesting, spawning, rearing and resting sites for aquatic or land species;” . . . protecting “natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, current patterns, or other environmental characteristics;” . . . shielding other areas from wave action, erosion, or storm damage.” . . . providing “water purification functions” . . . serving “as sanctuaries or refuges;” “as valuable storage areas for storm and flood waters;” and “ground water discharge areas that maintain minimum baseflows important to aquatic resources.” 33 C.F.R. § 320.4(b)(2).

⁶⁵² 33 C.F.R. § 320.4(a)(1) (emphasis added).

⁶⁵³ Contrast for example, a challenge to a state air permit, in which only narrow impacts in the form of emissions can be raised.

project. An advocate can point out that the Corps would be acting contrary to its own regulations if it only considered the effects of the construction and other permitted activities.

Does the Corps also have to comply with NEPA?

Yes. However, it may rely on FERC's NEPA analysis. For example, FERC's NEPA documents should include an analysis of alternatives for the project; if detailed enough, the Corps may rely upon that analysis to support its own analysis as to the least environmentally damaging practicable alternatives—the first “avoid” step in the 404(b)(1) Guidelines.⁶⁵⁴ If, however, the NEPA documents do not consider the alternatives in sufficient detail to make every analysis legally required by the Guidelines, the Corps must supplement the NEPA documents with additional information.⁶⁵⁵ The Corps will make this decision on a case-by-case basis, so an advocate should keep abreast of public notices to determine if there will be an additional EIS beyond those issued by FERC. Ideally, FERC's EIS documents will have issued before the Corps posts public notice of the application for Corps permits—the public notice should make this clear, but an advocate can always check FERC's docket as well.

The Corps has a choice of adopting FERC's NEPA analysis or preparing its own NEPA documents. In the Rio Grande LNG review process, for example, the Corps both prepared its own Environmental Assessment and incorporated FERC's final EIS by reference and relied on that document's analysis.⁶⁵⁶

For more information about NEPA, see Chapter 4, which describes NEPA in the context of FERC's responsibilities.

What other laws must be followed or permits that are needed before a 404 permit issues?

Regardless of the type of permit, the Corps must also comply with Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, and its Tribal Trust Responsibilities. It is required to consult with state and federal wildlife agencies,⁶⁵⁷ and receive and consider comments submitted by the EPA. Section 404 or section 10 permits also require a water quality certification (or a waiver of that certification) under Section 401 of the Clean Water Act, a task that has largely been assigned to the states.⁶⁵⁸ For more information on 401 permits see Chapter 7. In addition, the applicant must also apply for and receive Coastal Zone Management Act consistency determinations from the State, if applicable, prior to the Corps rendering a 404 permit decision. For more information, see Chapter 10 Section A. A large LNG project will also require that the Corps has complied with NEPA; for this the Corps typically relies on FERC's NEPA analysis, since FERC is the lead agency on LNG projects.⁶⁵⁹

⁶⁵⁴ See *Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515, 1526 n.17 (10th Cir. 1992).

⁶⁵⁵ 40 C.F.R. § 230.10(a)(4)

⁶⁵⁶ Pet.'s Br. at 20. http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200723_docket-20-60281-brief.pdf.

⁶⁵⁷ 33 C.F.R. § 320.4(c).

⁶⁵⁸ EPA, *Overview of CWA Section 401 Certification*, <https://www.epa.gov/cwa-401/overview-cwa-section-401-certification> (last viewed Apr. 1, 2022). In rare occasions not typical to LNG export facility permitting, EPA or tribes have the responsibility for 401 certifications.

⁶⁵⁹ Note that final NEPA documents may not be available during the public comment period, so advocates will need to couch their comments in terms of what such an analysis should include and anticipate what arguments the agency may use to justify granting the permit. For more information on the NEPA process, see Section B of Chapter 4 (FERC Certification).

What are some ways that I can use the Guidelines and public interest review as a basis for a Section 404 permit challenge?

A successful challenge will be one in which an advocate can show that the Corps failed to take an action or conduct an analysis that the 401(b)(1) Guidelines require. This may be difficult at the comment stage because the Corps will not have completed its analysis (the public's comments are solicited on the project application, not the draft Corps permit) and not all background supporting documents (like FERC's DEIS or FEIS) may have issued.

One possible structure for comments that an advocate could use are:

1. Describe the aquatic resources impacted, including any that should be jurisdictional but aren't, highlighting the wetlands and other "special aquatic sites" that will receive more scrutiny;
2. Overview the Corps responsibilities to both comply with the 404 Guidelines (avoid / minimize / compensate for impacts), plus its responsibilities to avoid water quality impacts and protect endangered species. (Recall that the 404(b)(1) Guidelines are a discrete set of independent tests that must be satisfied for a project to proceed in the permit review process);
3. Walk point-by-point through the public interest factors (and any related issues) and explain how the project and project application are on balance not in the public interest. (Recall that the public interest review involves a weighing and balancing of a wide range of at least 21 considerations);
4. Point out any missing information that the Corps does not yet have from the applicant that is necessary before a decision can be made, and any other responsibilities it must comply with, e.g., other laws or its obligation to consult with other agencies.⁶⁶⁰
5. Analyze whether the conditions that might be attached to any issued permit will accomplish the intended outcome. This would include investigating the compensatory mitigation measures that are likely to be approved; advocates are encouraged to be familiar with their district's mitigation methodology to best do so⁶⁶¹

Note that an argument that the Corps simply made the wrong decision while conducting an analysis under the 401(b)(1) Guidelines will likely fail; advocates have found that courts will defer to the Corps' analysis of its assessment of the impacts and will give the Corps the benefit of the doubt about whether its analysis complied with the law. The Corps should not receive as much deference when it is interpreting and applying regulations that the Corps did not author (such as the 404(b)(1) Guidelines, which EPA authored).⁶⁶²

⁶⁶⁰ The Corps also has responsibilities under Section 106 of the National Historic Preservation Act, and its Tribal Trust Responsibilities; if the application does not address this, an advocate should point this out.

⁶⁶¹ For example, the New Orleans District uses the Louisiana Wetlands Rapid Assessment Method (LRAM), accessible here: https://www.mvn.usace.army.mil/Missions/Regulatory/Mitigation/Assessment_Method/ (last viewed Apr. 1, 2022).

⁶⁶² *E.g.*, *City Club of NY v. Corps*, 246 F. Supp. 3d 860, 869 (S.D.N.Y. 2017) (in refusing to defer to the Corps' interpretation of the 404(b)(1) Guidelines, noting that "Auer deference applies only 'when an agency interprets its own regulation.'"); see also *Kentuckians for the Commonwealth v. U.S. Army Corps of Eng'rs*, 746 F.3d 698, 708 n.3 (6th Cir. 2014) (stating that "Auer deference applies only to disputes over the meaning of an agency's own regulation" and going on to defer to the Corps' interpretations of its own NEPA implementing regulations).

In addition, it cannot be overstated how important it is to read the Guidelines in their entirety when bringing such a challenge. To show a clear violation of the guidelines, an advocate will want to quote the Guidelines back to the agency and to the reviewing Circuit Court.

For more detailed examples of how to structure 404 comments, see Appendix 45 (Outline) and Appendix 46 (Annova LNG comments filed Jan. 29, 2019) and Appendix 36 (Rio Grande supplemental comments filed Oct. 21, 2019).

What are some specific things I could point out as violations of the Guidelines?

As with any other challenge, advocates must familiarize themselves with FERC’s DEIS and FEIS—and any environmental supporting documents the Corps prepares as well—because the facts therein will be used to judge whether the Corps has complied with the 404(b)(1) Guidelines and the public interest review. Note that not all of these documents may be available during the public comment period, and so it may only be at the litigation stage that an advocate can fully brief an argument on how the permit was improperly issued. Note that advocates in Louisiana should have easier access to underlying Corps documents during the comment period; Corps applications for Louisiana projects in the state’s coastal zone (i.e., all LNG terminals) must be cross-filed with the Louisiana Department of Natural Resources.⁶⁶³ LDNR makes these documents publicly available, whereas they otherwise would be difficult to obtain from the Corps.

Keeping in mind that each terminal’s unique facts will raise unique issues, advocates can begin by addressing the existence of wetlands and other special aquatic sites, and then use the Guidelines’ three-step process to identify the issues relevant to their terminal (recall that Subparts C through F (§§ 230.20 – 230.54) highlight the possible negative effects of a project that the Corps itself is required to consider⁶⁶⁴):

- Have the jurisdictional waters/wetlands or other special aquatic sites been identified correctly?
The 404 and section 10 permitting process does not apply until there are impacts to jurisdictional waters, and it matters if those have been quantified correctly. Review the available material to determine if it appears the jurisdictional waters have been identified. The Guidelines also direct the Corps to be particularly scrutinizing of a subset of jurisdictional waters known as “special aquatic sites,”⁶⁶⁵ which include sanctuaries and refuges designated under state, federal,

⁶⁶³ Because of this cross-filing requirement, it is sometimes easier to find Corps project documents for LNG terminals by searching the LDNR by project for the “Joint Permit Application,” as opposed to going through the New Orleans District’s website. See Louisiana Office of Coastal Management, *Search for Coastal Use Permit*, <http://reports.dnr.state.la.us/sonris/cmdPermit.jsp?sid=PROD> (last visited Mar. 31, 2022) (note that embedded in the Joint Permit Application can be landowner information, supplemental information, agency correspondence and more). For example, documents available from LDNR for Driftwood LNG include the Joint Permit Application (see “CUP Number: P20170501”), https://sonlite.dnr.state.la.us/sundown/cart_prod/pkg_crm00100_forms.cart_menu?pcup_num=P20170501, which has to-date gone through 13 revisions; see “Joint Permit Applications History.” CUP Number: P20170501. https://sonlite.dnr.state.la.us/sundown/cart_prod/cart_crm_application_his?pcup_num=P20170501&pshow_appl_email=N. The original application contains more embedded information such as the original application form, adjacent landowner lists, supplemental information, agency correspondence, and section 408 materials: see “Joint Permit Application.” Permit Number: P20170501. (Received: 5/26/17) https://sonlite.dnr.state.la.us/sundown/cart_prod/cart_crm_application?pcup_num=P20170501&piline_id=1&pshow_appl_email=N (found in Step 13 of 15).

⁶⁶⁴ Namely, each section in Parts C-F has a subsection b describing “Possible loss of environmental characteristics and values” or “Possible loss of values” for each vulnerability. See Subpart C - Potential Impacts on Physical and Chemical Characteristics of the Aquatic Ecosystem (§§ 230.20 - 230.25); Subpart D - Potential Impacts on Biological Characteristics of the Aquatic Ecosystem (§§ 230.30 - 230.32); Subpart E - Potential Impacts on Special Aquatic Sites (§§ 230.40 - 230.45); Subpart F - Potential Effects on Human Use Characteristics (§§ 230.50 - 230.54).

⁶⁶⁵ 40 C.F.R. § 230.1(d) (emphasis added); see also 40 C.F.R. § 230.3(q-1) (defining “special aquatic sites”).

or local laws; wetlands; mud flats; vegetated shallows; coral reefs; and riffle and pool complexes. Recall that practicable alternatives are presumed when special aquatic sites are implicated—and it is anticipated that LNG projects will impact at least wetlands, and possibly mud flats, vegetated shallows, and sanctuaries or refuges. Don't rely on the Corps to make this determination correctly. Review the EIS, public notice documents, any jurisdictional determinations and compare to what community members, aerial photographs, and even other state and federal agencies have said, know, or shown about the aquatic resources located in the project area. Recall that the Corps' public interest regulations also specifically identify wetlands for additional scrutiny, recognizing that the wetland site impacted may be part of a complete and interrelated wetland area, and so the cumulative effects should be addressed.⁶⁶⁶ If there are discrepancies, or simply missing information, point it out.

- Failure to define the basic purpose of the project correctly, leading to an incorrect water-dependency analysis. Recall that when an activity is not water-dependent, practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. (40 C.F.R. § 230.10(a)(3); see also Section 6.B.3) For many LNG projects, the Corps and applicants have failed to define or distinguish a project's basic purpose (which is broad and used in the water-dependency analysis) from the overall purpose (which is narrower and used to identify alternatives). If the Corps or NEPA documents fail to identify the basic purpose correctly, point that out. If the Corps treats the entire LNG project as "water-dependent," that also might be error. For example, some **advocates have argued that at a minimum, some components of an LNG project are not water-dependent (e.g., pipelines, work camps, liquefaction trains, LNG storage, compressors)**, and so alternative sites for these components that don't hurt special aquatic sites should be assumed. If the Corps treats part of the project as not water dependent (e.g., the pipeline portion), consider whether the applicant has met its burden to clearly demonstrate that routes that avoid special aquatic sites are not available. If not, point that out. Consult with an attorney with experience in 404 challenges to see if the project you are challenging is vulnerable on any of these grounds.
- Failure to avoid adverse impacts because of an insufficient alternatives analysis. Recall that the Guidelines prohibit the Corps from issuing a permit when there is a practicable alternative to the proposed discharge that would have a less adverse effect on jurisdictional waters and the aquatic ecosystem.⁶⁶⁷ And "an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes."⁶⁶⁸ In addition, the Guidelines state that "practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise."⁶⁶⁹ Thus, if the EIS documents and public notice do not indicate that the applicant and Corps have seriously assessed alternative locations or footprints for the project, highlight that. Or if an EIS mentions alternative sites but does little to quantify the relative ecosystem impacts (e.g., how many wetlands, species are impacted), highlight that. An advocate could argue simply that the Corps has failed to make these analyses, or an advocate could propose alternative sites, after looking at nearby geography for sites that would not impact as many aquatic ecosystems (even sites that the applicant does not own may be considered⁶⁷⁰). This can be particularly persuasive

⁶⁶⁶ 33 C.F.R. § 320.4(b) (describing the Army's general policies for evaluating permit applications that impact wetlands).

⁶⁶⁷ 40 C.F.R. § 230.12(a)(3)(i).

⁶⁶⁸ 40 C.F.R. § 320.10(a)(2).

⁶⁶⁹ 40 C.F.R. § 230.10(a)(3).

⁶⁷⁰ 40 C.F.R. § 230.10(a)(3).

for components of the project that are not water-dependent, which the Guidelines presumes can be located elsewhere. For example, advocates challenging the first permit issued to Rio Grande LNG argued that the Corps failed to adequately consider alternatives to the compressor site; that it could be moved inland without affecting the project’s purpose. Alternatives do not need to be limited to moving the project—it may become apparent from the applicant’s own words that a viable alternative could be shrinking the size of the terminal’s footprint, because of known improvements in equipment efficiency.⁶⁷¹ (See also Section 6.B.3.)

- As part of a review of the alternatives analysis, examine the overall project definition. An applicant may not define a project in such a way that precludes the existence of any alternative sites⁶⁷²—typically the application will specify a project purpose—if it is too narrow, this is a ground to challenge. (For example, a project’s overall purpose that is to build a 5 MTPA LNG export facility in Port Fourchon is too narrow.) An advocate might also argue that the applicant’s definition of a project shows that other alternatives for the project are clearly available, yet were still ignored. This issue came up in the Rio Grande LNG project in Brownsville, TX. The applicant insisted that a six-liquefaction-train design was necessary to achieve what it stated was the project’s purpose: to process 27 MTPA of gas. Advocates for community groups argued that the applicant’s own materials and contracts showed that the same purpose could be achieved with a smaller five-train footprint, an alternative that would necessarily impact less wetlands. Yet despite this clear alternative built into the project definition, the Corps had failed to consider it as an alternative. Whether this argument will be successful is still unknown—the Corps voluntarily reissued the permit and as of December 2021 litigation over this new permit is on-going—but this demonstrates the type of project-definition problem an advocate might be able to identify.
- Failure to minimize adverse impacts. It may be that the documents available to review during the public comment period do not show that the applicant has sufficiently minimized the adverse effects of the project. Subpart H of the Guidelines (40 C.F.R. § 230.70-230.77) lists a non-exclusive set of ways that an applicant could minimize adverse of effects and is a helpful starting place for crafting an argument on minimizing effects. For example, certain technologies for dredging and driving the structural piles needed to create the LNG tanker docks create varying degrees of underwater disturbances and noise that can harm aquatic life and unleash contaminants from the seafloor, especially if used during breeding season.⁶⁷³ The Corps has the authority to condition the permit and require the applicant to take such actions to minimize adverse impacts (e.g., no construction during breeding season for specific marine species), and advocates are encouraged to push the Corps to do this.
- Failure to require adequate compensatory mitigation. Although an advocate’s goal often is to stop a project entirely, it is important to not overlook challenging the sufficiency of the Corps’ analysis and mitigation requirement, as it may be that the project is eventually constructed. The public is entitled to comment on the mitigation proposals,⁶⁷⁴ so even though during the public comment period the public may not have access to the Corps’ full analysis of alternatives and impacts, the mitigation plan itself should be available.⁶⁷⁵ The Corps’ regulations state that “[t]he

⁶⁷¹ See App. 53 (Pet. Br. in *Shrimpers v. Corps*, Case No. 20-60281 (5th Cir. (filed July 23, 2020)) at 46-55).

⁶⁷² *Sylvester v. U.S. Army Corps of Engineers*, 882 F.2d 407, 409 (9th Cir. 1989).

⁶⁷³ This would fall under 40 C.F.R. §§ 230.74 and 230.75, for example.

⁶⁷⁴ 40 C.F.R. § 230.94(b)(2).

⁶⁷⁵ Yes, this is counter-intuitive that the third step of the avoid / minimize / mitigate process is sometimes available for comment before the first two steps are solidified. This is one reason that Corps permits can be more fully challenged only once they issue.

fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States authorized by [Corps] permits”⁶⁷⁶— mitigation is not an excuse to allow otherwise avoidable impacts from happening. This offset is intended to achieve the “federal government[’s] ... longstanding national goal of ‘no net loss’ of wetland acreage and function.”⁶⁷⁷ Subpart J of the Guidelines (40 C.F.R. §§ 230.91 – 230.98) describe the regulatory requirements compensatory mitigation proposals must meet; EPA and the Corps have published a number of additional guidance documents, handbooks, and training that advocates should review when scrutinizing the proposed compensatory mitigation plan.⁶⁷⁸ Acceptable methods of compensatory mitigation include (1) restoration, (2) establishment (creation of aquatic resources), (3) enhancement and (4) preservation. Applicants can buy mitigation credits through a mitigation bank or what is known as an in-lieu fee program⁶⁷⁹ or be responsible for its own mitigation projects.⁶⁸⁰ When reviewing a compensatory mitigation plan, check whether its proposal conforms to what EPA’s and the Corps’ guidance suggests.⁶⁸¹ Research and review third-party literature about the mitigation banks, programs, and projects that the applicant proposes, and see if any problems have arisen that may make this mitigation not as effective. If there is insufficient public information for the plan to be fully assessed (*i.e.*, the quantity of impacted wetlands has not been delineated, or the alternatives assessment is flawed), add that to the comments.⁶⁸² Also check to see if some impacts that have been classified as temporary actually will be permanent (e.g., cutting cypress-tupelo forests is a permanent impact because the likelihood of regeneration is quite low), requiring additional mitigation. Consider whether the mitigation approved is commensurate with the aquatic function lost, and whether it is as close as possible to the area impacted, and not already protected. An expert in mitigation plans would be helpful in assessing the plan.

- Failure to make certain factual determinations needed to support the avoid / minimize / mitigate framework. 40 C.F.R. § 230.11 directs the Corps to make specific findings as to the cumulative, individual, and secondary effects of the proposed project in order to support its permitting decision. Compare what this section of the rules requires to what the Corps and the NEPA documents say. Advocates are encouraged to use their own resources to make these

⁶⁷⁶ 33 C.F.R. § 332.3(a)(1).

⁶⁷⁷ EPA and Corps, *Compensatory Mitigation for Losses of Aquatic Resources*, Final Rule, 73 Fed. Reg. 19594-01 (Apr. 10, 2008).

⁶⁷⁸ These resources are summarized on EPA’s website: <https://www.epa.gov/cwa-404/background-about-compensatory-mitigation-requirements-under-cwa-section-404> and include several training courses (*see id.*, section *Compensatory Mitigation Training Resources*) and *Compensatory Mitigation Site Protection Instrument Handbook for the Corps Regulatory Program*, July 2016, https://www.epa.gov/sites/default/files/2017-01/documents/site_protection_instrument_handbook_august_2016.pdf. Each District may have its own guidance and tools for assessing mitigation: *see e.g.*, *Why Assess Function?* <https://www.swg.usace.army.mil/Missions/Regulatory/Functional-Assessments/> (last visited Mar. 31, 2022) (Galveston District’s link to tools to assess the whether the proposed mitigation will adequately compensate for the impacts expected); *see also Mitigation*, <https://www.mvn.usace.army.mil/Missions/Regulatory/Mitigation/> (last visited Mar. 31, 2022). The New Orleans District uses the Louisiana Wetlands Rapid Assessment Method (LRAM), which advocates have challenged as flawed but is still used by the District: https://www.mvn.usace.army.mil/Missions/Regulatory/Mitigation/Assessment_Method/ (last visited Mar. 31, 2022).

⁶⁷⁹ The Corps has developed an online tracking system for mitigation banks and in-lieu fee programs called “RIBITS,” which is filled with information about mitigation banks, both in general and searchable by geography; it is an excellent resource for advocates looking to understand the compensatory mitigation plan proposed. Army Corps of Engineers, *RIBITS*, <https://ribits.ops.usace.army.mil/ords/f?p=107:2> (last visited Mar. 31, 2022).

⁶⁸⁰ EPA, *Mechanisms for Providing Compensatory Mitigation under CWA Section 404*, <https://www.epa.gov/cwa-404/mechanisms-providing-compensatory-mitigation-under-cwa-section-404> (last visited Mar. 31, 2022).

⁶⁸¹ *Supra*.

⁶⁸² This principal applies to commenting on the FERC process as well—sometimes a FERC EIS may rely on a compensation plan that the Corps hasn’t issued yet. If so, point out that the fact that the agency’s analysis is built on hypothetical or missing data.

determinations, and also to confirm that the Corps has made these findings. Recall that the more persuasive argument will be that the Corps failed to make a determination here, not that the determination was wrong.

- Will the permit's conditions be enforced? Some districts have a poor track record of enforcing the conditions on their permits. For example, in 2017 the New Orleans District reported not having a single boat that it could use to investigate violations of permit conditions in the Atchafalaya Basin, rendering enforcement of many conditions impossible during most of the year.⁶⁸³ If a situation like that exists in your district, point that out in comments. If possible, suggest how the conditions might be made more enforceable—could automatic monitoring be installed or regular site visits documenting conditions required? The results of monitoring and enforcement activities should be easily publicly available online.

Don't forget to comment on the other Guideline conditions that the Corps must confirm are met:

⁶⁸³ App. 47 at 4-5 (Cmts on Bayou Bridge Pipeline, MVN-2015-02295-WII, WQC 160921-03, filed Jan. 31, 2017).

- Will there be a violation of State Water Quality Standards? 40 C.F.R. § 230.10(b)(1) prohibits the Corps from permitting activities that will end up violating state water quality standards. However, 33 C.F.R. § 320.4(d) allows the Corps to rely on the state’s Clean Water Act section 401 certification to demonstrate that there are no water quality impacts unless EPA’s regional administrator (i.e., Region 6 EPA) identifies “other water quality aspects to be taken into consideration.”⁶⁸⁴ Relying on section 320.4(d) the Corps will often simply defer to the state’s certification instead of conducting its own water quality analysis, something several courts have allowed if EPA hasn’t raised this issue in comments.⁶⁸⁵ Therefore, if an advocate wants the Corps to independently address water quality impacts from the project, it is important to also get EPA

OTHER THINGS TO CONSIDER WHEN RAISING WATER QUALITY IMPACTS WITH THE CORPS

Water quality standards vary state by state. EPA has compiled lists online of the standards that it has approved for all states.¹ Note that water quality standards depend on the designated use of each impacted body of water. For example, LNG terminals and associated dredge and fill activities likely will affect waters used for recreation and aquatic life, more so than drinking—credible advocate comments will recognize the uses of the affected waters. Many waterbodies have explicit standards set for them; advocates should be able to find this information by searching EPA’s lists for specific water bodies or conducting a web search.² Water quality standards are set for parameters like dissolved oxygen, temperature, pH, turbidity, toxics, and pathogens, and often have different acceptable values for acute and chronic levels. The dredging activities at an LNG terminal will likely affect dissolved oxygen and turbidity when underwater soils are disturbed. Especially if the channel has a history of heavy industrial use, toxins may be dislodged from the soil when dredging takes place. Consider whether the project application and any environmental documents relied on conduct an analysis of the water quality standards—including whether a 401 certification has issued, and if not, point any failures out. Note that challenging a 404 permit on this ground will likely require an advocate to consult with an expert in this field for the state in question and research the current water quality in the proposed project area. Remember that all outside information relied upon must be submitted to the Corps during the public comment period so that you may rely upon it in subsequent litigation of the permit.

¹ <https://www.epa.gov/wqs-tech/state-specific-water-quality-standards-effective-under-clean-water-act-cwa> (last visited Mar. 31, 2022).

² For example, the waters near the Rio Grande LNG and Texas LNG sites have standards set for it. See 2018 Texas Surface Water Quality Standards (Updated Mar. 18, 2021)(Lower Laguna Madre and Brownsville Ship Channel), 97, <https://www.epa.gov/sites/default/files/2020-01/documents/twxqs-2018.pdf>.

⁶⁸⁴ See 33 C.F.R. 320.4(d)(1). See also *Ohio Valley Envtl Coalition, Inc. v. U.S. Army Corps of Eng’rs*, 883 F. Supp. 2d 627, 639, 641 (2012) (holding that “the Corps can, in appropriate circumstances, rely on a State § 401 certification when assessing the cumulative impacts of a proposed permit” but finding that EPA’s comment letters “detailing the EPA’s concerns were sufficient to remove the conclusive effect of the State § 401 certification with regard to water quality concerns raised by those letters”).

⁶⁸⁵ E.g., *Bering Strait Citizens for Responsible Resource Development v. U.S. Army Corps of Eng’rs*, 524 F.3d 938, 949-50 (9th Cir. 2008).

on board with comments filed explicitly citing 33 C.F.R. § 320.4(d) and raising its water quality concerns. If EPA has already filed comments, review those to determine if EPA has raised water quality concerns that an advocate can amplify. But if EPA hasn't raised the issue or the state has not issued a 401 certification, and water quality is a concern for the project, it's still worthwhile to include those concerns in comments. Although the Corps and a reviewing court might ignore an advocate's concerns about water quality, laws can change and courts may change their interpretation of the law.⁶⁸⁶

- Will the Project violate applicable toxic effluent standards or prohibitions under the CWA § 307? This is prohibited under 40 C.F.R. § 230.10(b)(2) and refers to point-source discharges from the project, like discharges of chemicals or polluted water from a sewer pipe.⁶⁸⁷ As with raising water quality issues under 40 C.F.R. § 230.10(b)(1) (see previous bullet), the Corps may attempt to defer to a state's section 401 water quality certification if EPA does not independently raise concerns. However, this should not dissuade an advocate from raising concerns in comments if the project may violate effluent standards. Mounting a detailed challenge to a 404 permit on this ground will likely require an advocate to consult with an expert in this field and research the effluent expected from the facility given its design. If it does not appear that the Corps has addressed this requirement or lacks additional information, point this out. Remember that all outside information relied upon must be submitted to the Corps during the comment period so that you may rely upon it when litigating the permit.
- Endangered species impacts. Check if there may be impacts to endangered or threatened species⁶⁸⁸ because of the dredging and filling and fully support any arguments that this is an issue when submitting comments to the Corps.⁶⁸⁹ Recall that impacts could be to land and aquatic species (e.g., turtles, birds, marine mammals, protected cats), from critical habitat destruction, vessel strikes, dredging activities, etc. Recall also that many LNG terminals are processing such a large quantity of gas such that LNG tankers may use the nearby shipping channels multiple times a week, if not daily, creating on-going chronic hazards for aquatic species (not to mention hazards for other users of the waterway, like fishers or recreational boaters). Compare the estimated number of vessel transits in the proposed project with other LNG facilities to fact-check the Corps' and applicant's claims.⁶⁹⁰ If the Fish and Wildlife Service and the National Marine Fisheries Services have not yet submitted public comments opining on the impacts of the project, consider whether approaching these agencies with concerns about endangered species impacts would encourage them to include those concerns in their own comments to the Corps. If these agencies have already submitted comments expressing concerns about impacts, echo and amplify those concerns.

⁶⁸⁶ For example, the Biden Administration is currently changing the section 401 certification regulations, which may affect whether the 401 certification is sufficient. Other nuances of the 401 process may make the Corps reliance on a 401 certification less defensible—for example if a state waives its right to certify. For more information, see Chapter 7 on section 401 water quality certifications.

⁶⁸⁷ EPA, *Learn about Effluent Guidelines*, <https://www.epa.gov/eg/learn-about-effluent-guidelines> (last visited Mar. 31, 2022).

⁶⁸⁸ FWS provides a quick search tool for species by county here: U.S. Fish & Wildlife Service, *Find Endangered Species*, <https://www.fws.gov/Endangered/>. For more a more detailed tool that the Service uses for project planning, try U.S. Fish & Wildlife Service, *IPaC: Information for Planning and Consultation*, <https://ecos.fws.gov/ipac/>.

⁶⁸⁹ See 40 C.F.R. § 230.10(b)(3). If there are endangered-species concerns, an advocate should also raise them with the relevant agencies (e.g., U.S. Fish and Wildlife Service).

⁶⁹⁰ One way to find this information would be searching the web for the EIS documents on other LNG terminals, calculating the number of vessel transits expected per unit of LNG exported, and then extrapolating to the proposed terminal size. Keyword searches for “vessel transit” can identify this information in large EIS documents.

- Will the Project cause or contribute to significant degradation of the waters of the United States? Consider whether the Corps has correctly addressed: (1) whether the Project will have significant adverse effects on human health or welfare, including but not limited to effects on municipal water supplies, plankton, fish, shellfish, wildlife, and special aquatic sites; (2) whether the Project will have significant adverse effects on life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical, and chemical processes; (3) whether the Project will have significant adverse effects on aquatic ecosystem diversity, productivity, and stability; and (4) whether the Project will have significant adverse effects on recreational, aesthetic, and economic values. EPA's list of state-specific water quality standards also includes state-specific antidegradation policies, which makes it a potentially useful reference.⁶⁹¹ Recall again that the Corps' complete failure to do a required analysis will be more persuasive than an argument that the Corps performed this assessment incorrectly. The latter argument can be bolstered by packing the record with evidence contradicting the Corps' assessment and advocating with the consulting agencies (EPA and FWS, for example) to submit comments that supports your interpretation of the impacts. Note that in the past, the Corps has taken a very narrow view of the activities it must look at in considering the environmental effects of the proposed activities. If an advocate is planning on raising this issue in litigation, it is highly advisable to consult with more experienced 404 practitioners so that your arguments are properly framed at the litigation stage.

Comments should also address the public-interest review factors:

- General failure to conduct a public interest review. Recall that the Corps has a list of 21 non-exclusive factors that it must consider when weighing the public interest, including the cumulative effects thereof:⁶⁹² conservation, economics (*are there impacts to other economic areas, such as tourism, fisheries, etc?*), aesthetics, general environmental concerns (*think about air pollution, light, noise, vibration, earthquake, tsunami, new roads*), wetlands, historic properties, fish and wildlife values (Imperiled Species, Marine Mammals (*including ship strike and underwater noise issues*), Non-imperiled Fish species, Birds, Other wildlife, Habitat fragmentation (*e.g., by the pipeline, access roads, utilities*)), flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation (*potential impacts to water supply, project water consumption*), water quality (*turbidity, temperature, DO, toxics, ballast water, stormwater (both construction and operation), wastewater discharges*), energy needs, safety (*including based on nearby industries (e.g., fertilizer plants, space launch facilities)*), food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people (*tribes, environmental justice communities, human trafficking*). Advocates should scrutinize this list and be sure to raise and fully brief with supporting documentation the issues that pertain to the LNG terminal being challenged.

⁶⁹¹ EPA, *State-Specific Water Quality Standards Effective under the Clean Water Act (CWA)*, <https://www.epa.gov/wqs-tech/state-specific-water-quality-standards-effective-under-clean-water-act-cwa> (last visited Mar. 31, 2022).

⁶⁹² 33 C.F.R. § 320.4(a)(1).

- For section 10 permits, will the Project interfere with access to or use of navigable waters? 33 C.F.R. § 320.4(g)(3) states that “A riparian landowner’s general right of access to navigable waters of the United States is subject to the similar rights of access held by nearby riparian landowners and to the general public’s right of navigation on the water surface. In the case of proposals which create undue interference with access to, or use of, navigable waters, the authorization will generally be denied.” This issue is particularly relevant for a section 10 permit. The LNG terminal may require the construction of berths or piers that extend into nearby navigation channels, and for small channels, the increased vessel traffic may functionally prohibit others from using the channel while the LNG tankers are present (e.g., either to avoid accidental collisions, reduce security risks, or for health and safety reasons). For example, the Rio Grande LNG terminal would need to be serviced by LNG tankers multiple times a week, on a narrow channel transited by shrimpers and fishers whose use of the waterways is anticipated to be restricted. Consider whether the applicant has addressed the impacts on others’ use of the waterways the LNG terminal abuts. Paying attention to this issue may also help uncover other affected individuals who may want to help with an LNG challenge.

PRACTICE TIP: OUTREACH AND COLLABORATION WITH OTHER STAKEHOLDERS CAN PAY DIVIDENDS

When reviewing a proposed project, always keep an eye out for other stakeholders, such as those mentioned in 33 C.F.R. § 320.4(g)(3). Such commercial and recreational users of the waterway might not be part of your typical client base but can offer on-the-ground insight and eyes to watch out for and document impacts as a result of construction activities if the permit is ultimately approved. They also may be interested in helping challenge the permit—and the more individuals or groups involved in litigation, the more likely a reviewing court will find that at least one will be impacted enough (i.e., has the “standing”) to challenge the permit. And first-hand accounts from the users of a waterway (e.g., observations by commercial fishermen as to how a company’s dredged material is actually interfering with their use of the waterway) can provide leverage with the Corps and the company to require these post-construction problems to be addressed or the permit to be suspended.

- Is there a likelihood that the project will not obtain the required state and local authorizations or certifications? The Corps is directed to process a 404 application concurrently with the permitting process of the terminal’s other required permits, without delay pending action on any of the other permitting processes (e.g., state air permits and water quality certifications, coastal use consistency determinations, etc).⁶⁹³ But the Corps’ regulations state that if other required permits are denied in the meantime, the Corps should either immediately deny the Corps permit without prejudice or continue processing the application.⁶⁹⁴ If the Corps continues processing the application, the Corps is directed to either deny the permit for failing the Corps’ public interest review, or deny it without prejudice and indicate that except for the other missing permits, the 404 permit could, under appropriate conditions, be issued.⁶⁹⁵ This section of the regulations is a hook for advocates that are challenging multiple permits at once; an advocate

⁶⁹³ 33 C.F.R. § 320.4(j).

⁶⁹⁴ *Supra*.

⁶⁹⁵ 33 C.F.R. § 320.4(j).

could argue that the Corps must halt its analysis while other permits are pending / while the applicant changes its proposed project in order to obtain said permits.

- Are there historic, cultural, scenic or recreational areas that could be impacted? 33 C.F.R. § 320.4(e) states that “[f]ull evaluation of the general public interest requires that due consideration be given to the effect which the proposed structure or activity may have on [historic, cultural, scenic, and recreational] values.” (“Values” in this context can be understood to mean the historical, cultural, scenic and recreational **resources** that would be impacted by the project.) The law tells the Corps that when possible the permits it issues should be consistent with the protections and importance that other laws place on these resources, and avoid significant adverse impacts to them.⁶⁹⁶ For proposed LNG sites, other federal, state, regional and local agencies or governments may have already designated (e.g., through land classifications) some of the areas and resources as containing historical, cultural, scenic, and recreational resources.⁶⁹⁷ Community groups may be aware of many such classifications already; also consult agency and government websites (and contact their personnel) and look into federal, state, and local laws governing these resources⁶⁹⁸ to make sure nothing is overlooked. Beyond looking at impacts to already-designated areas, other questions to consider include: Could the facility impact the viability of fish and wildlife habitat, and thus impact recreational hunters and fishers? Will the facility introduce industry into an otherwise natural and scenic area enjoyed by locals and visitors? Do local families picnic and swim in the areas nearby? Are there archeological resources, Native American religious or spiritual sites, shipwrecks or submerged aircraft in the area that would be damaged?
- Will floodplain function be impaired? In 33 C.F.R. § 320.4(l) the Corps recognizes the “significant natural values” and “numerous functions important to the public interest” that floodplains possess. The Corps is directed to “avoid to the extent practicable, **long and short term significant adverse impacts** associated with the occupancy and modification of floodplains, as well as **the direct and indirect support of floodplain development** whenever there is a practicable alternative.” *Id.* (emphasis added). When there are no practicable alternatives to locating the project in the floodplain, the Corps is directed to consider alternatives within the floodplain that will lessen significant adverse impacts to the floodplain.⁶⁹⁹ The coastal location of planned LNG terminals and projected sea level rises should make this issue very relevant in all challenges, although an advocate will need to carefully consider whether the surrounding geography makes an alternative location feasible; recall that many of the proposed terminals plan on exporting LNG via tanker, so some portion of the footprint will likely be in a floodplain. But potentially an advocate could argue that the applicant should consider modifying the terminal design to minimize impacts on floodplain function by using permeable building materials,

⁶⁹⁶ 33 C.F.R. § 320.4(e).

⁶⁹⁷ For example, the Atchafalaya National Heritage Area stretches across Louisiana and is Congressionally recognized as containing historical, cultural, and natural resources deserving of extra protections. See <https://www.atchafalaya.org/welcome> (last visited Mar. 31, 2022).

⁶⁹⁸ For example, Section 106 of the National Historic Preservation Act of 1966. See also, *Federal Historic Preservation Laws, Regulations, and Orders*, <https://www.nps.gov/subjects/historicpreservation/laws.htm> (last visited Mar. 31, 2022). Also investigate if there are nearby or on-site wild and scenic rivers, historic properties and National Landmarks, National Rivers, National Wilderness Areas, National Seashores, National Recreation Areas, National Lakeshores, National Parks, National Monuments, National Heritage Areas, estuarine and marine sanctuaries, or archeological resources, including Indian religious or cultural sites. For a list of Texas laws on these issues, see <https://www.thc.texas.gov/project-review/statutes-regulations-rules> (last visited Mar. 31, 2022). One place to start in Louisiana is its Department of Culture, Recreation & Tourism, <https://www.crt.state.la.us/> (last visited Mar. 31, 2022).

⁶⁹⁹ 33 C.F.R. § 320.4(l)(3).

elevating structures away from the floodplain, and minimizing the overall site footprint.⁷⁰⁰ Wetlands are well known for their ability to buffer and minimize the effects of floods; this is another reason to push for minimal and reduced impacts on wetlands, especially in coastal areas that are regularly struck by hurricanes. Even impacts to inland wetlands can exacerbate coastal flooding. For example, in Louisiana there is a disturbing trend of sediment deposition filling in inland wetlands (e.g., the Atchafalaya Basin), depriving the coast of needed sediments for land building, exacerbating adverse effects of flood events and leaving these coastal areas that much more at risk of damaging impacts from severe weather events and flooding. Advocates can also cite the damages Hurricane Harvey, Hurricane Ida, and other weather events have made to other industrial facilities along the Gulf Coast in support of arguments about siting additional industrial facilities on floodplains.

- Have the economic impacts of the facility been properly considered? The Corps' regulations state that *"it will generally be assumed that appropriate economic evaluations have been completed, the proposal is economically viable, and is needed in the market place. However, the district engineer in appropriate cases, may make an independent review of the need for the project from the perspective of the overall public interest. The economic benefits of many projects are important to the local community and contribute to needed improvements in the local economic base, affecting such factors as employment, tax revenues, community cohesion, community services, and property values."*⁷⁰¹ Although couched in benefits language, an advocate could use this section to argue for the Corps to conduct an independent review of the need for the project. For many LNG projects, the actual job benefits to locals are not as cheery as an applicant may paint. Construction jobs are temporary and permanent jobs often go to workers from outside the area with experience in LNG. The most direct benefits of a facility—the gas itself—are by definition exported for overseas gain, with most of the negative impacts left to be felt locally. An advocate could also bring in information about the tax exemptions a project has received that would discount actual the economic benefits of a project. See Chapter 9 on Louisiana and Texas tax abatement programs for more details and background research that could be cited.
- Does the Corps lack sufficient information to make a reasonable judgment? 40 C.F.R. § 230.12(a)(3)(iv)

PRACTICE TIP: USING EXPERTS

Experts can make your arguments more persuasive by providing "expert opinions," which the Corps and a reviewing court may give more weight to than just advocate argument. To support arguments about economic impacts, consider if there are funds to hire experts in economics to assess the impacts of a proposed project. An ecological economist—i.e., one with knowledge of the economic benefit of the natural area and the ultimate economic harm to local economies—can be very helpful, as well as a more traditional economist. Batker Consulting, LLC is one firm of ecological economists that has worked with environmental advocates on economic impacts of projects; contacting environmental attorneys may also help identify potential experts.

⁷⁰⁰ For more information on floodplain management in Texas, see https://www.twdb.texas.gov/flood/resources/doc/Texas_Quick_Guide.pdf (last visited Mar. 31, 2022).

⁷⁰¹ 33 C.F.R. § 320.4(q).

prohibits a permit from issuing when the application does not contain sufficient information for the Corps to understand the potential impacts. Look at the project to determine whether there is some aspect of the project that the Corps has not considered or collected information on. For example, does the application and NEPA documents lack information about the quantity of WOTUS and wetlands present on alternative sites? That data would be necessary to adequately assess the “avoid impacts” step in the Guidelines. If it is missing, cite this regulation to argue that the Corps does not have sufficient information on the practicable alternatives and the impacts on the proposed development.

- **Ballast water.**⁷⁰² One issue particular to LNG terminals that is related to the named public interest factors of water quality, fish and wildlife values, and economics is the issue of invasive species and pollutants carried in ballast water. Ballast water is stored in the ship’s ballast tanks (in especially large quantities when the ship is not loaded with LNG yet) to regulate the ship’s stability and safety while not under full load. In the case of LNG tankers, ballast water is seawater that is pumped into the tanks after a ship has delivered LNG to a port and is departing with less LNG or no LNG. This ballast water (plus any more that it has added along the way) is discharged once the empty ship nears a port where it will be picking up more LNG, making export terminals a much bigger producer of ballast water than the import terminals that have been previously permitted in the States. And LNG export terminals will have a major effect on the amount of ballast water expelled into U.S. waters: the tankers serving these terminals are so large and predicted to be so numerous that one study estimating the potential impacts of an LNG export buildout from 2015 to 2040 predicted a **90-fold annual increase** in LNG-related ballast water discharge to U.S. waters.⁷⁰³ The contaminants in this ballast water are chemical and biological and can decimate native fish and shrimp populations, which in turn can batter tourism and fishing economies and even cause billions of dollars in damage, as happened in the Great Lakes (by zebra mussels).⁷⁰⁴ If the Corps has not considered ballast water effects as part of the public interest review, an advocate should highlight that failure.
- **Climate change impacts.** Although a climate change analysis is not directly mentioned into the Guidelines or public interest review, it squarely fits within at least the public interest factors of energy needs and general environmental concerns. In addition, climate change would need to be addressed for the Corps’ NEPA responsibilities to have been met.⁷⁰⁵ This makes a 404 or section 10 challenge a place to raise climate change concerns about the project. This can be sea level rise affecting a permitting facility directly, indirect effects from greenhouse gas emissions on the world at large or any other climate impacts that an advocate may find will resonate with the Corps or public opinion. Advocates should be aware that the Corps’ treatment of any climate change analysis will be given deference, and under current conditions at the Corps, the Corps is likely to disregard these impacts as out-of-scope for a 404 review. However, this is no reason to

⁷⁰² This issue could also be raised in the 401 certification process and the coastal consistency review under the CZMA. See also <https://www.invasivespeciesinfo.gov/subject/ballast-water> (last visited Mar. 31, 2022).

⁷⁰³ K. Holtzer, et al., *Potential effects of LNG trade shift on transfer of ballast water and biota by ships*, *Sci. Total Environment*, 580:1470-1474, 2017, <https://www.sciencedirect.com/science/article/abs/pii/S0048969716328169>.

⁷⁰⁴ J. Roche, J. and H.A. Triezenberg, *Telecoupling and the spillover system: Causes and effects of Zebra Mussels in the Great Lakes* (2015), https://www.canr.msu.edu/news/telecoupling_and_the_spillover_system_and_zebra_mussels_triezen15.

Examples of invasive-species impacts from ballast water are tracked by various agencies. See e.g., Florida Fish and Wildlife Conservation Commission, *Ballast Water and the Transport of Harmful Algae*,

<https://myfwc.com/research/redtide/research/scientific-products/ballast-water/> (last visited Mar. 31, 2022) (describing impacts to Tampa Bay (Asian green mussels damaging industrial plants) and Australia (red-tide algae).

⁷⁰⁵ This is true regardless of whether the Corps drafts its own environmental documents or relies on FERC’s.

not comment on climate change impacts—to the contrary, one of the few ways to change the Corps practices will be to have courts remonstrate the Corps for not fully considering climate change—and for a court to do that, advocates must have raised climate change issues in permit challenges.



PRACTICE TIP: ATTACH ALL EVIDENCE BEFORE SUBMITTING COMMENTS!

Don't forget to include all outside information that supports your comments! If you do not attach the evidentiary sources, photos, reports, etc. supporting your arguments in comments, it may irrevocably cripple any subsequent litigation because with only a few exceptions, litigators are limited to using what was included in comments. Do not just provide a URL; it may be defunct by the time the Corps reviews your comments.

This all seems complicated; when should I retain an expert, and what should that expert know about?

Ideally, an expert should be found and retained as soon as it becomes apparent that a company will seek to build or expand an LNG facility. The same expert can be used in challenging multiple permits, as long as the subject matter is within that expert's field of knowledge. Credible experts should have years of experience in the subject matter on which they are opining, either academically or in the field (preferably both). Although an in-state expert may be preferable in terms of experience with the project area and reduced travel costs (which are not always an issue), be mindful that out-of-state experts may need to be retained if in-state options have conflicts of interests and/or ties to fossil fuel industry work.

For Corps permits, *a wetlands delineation expert* is useful when challenging an approved jurisdictional determination and the permit itself. The expert should have experience distinguishing between aquatic resources, WOTUS, and special aquatic sites. Another expert may be needed to support arguments about how 404(b)(1) Guidelines should be applied (*a 404(b) expert*). This expert should understand the guidelines and know how dredging and filling affects aquatic life and water quality. Ideally the expert would understand what makes an alternative "practicable" under the law and what good compensatory mitigation plans should include. An expert that has previously worked as a consultant for industry in navigating the 404 process—even if in non-LNG contexts, such as permitting renewable power infrastructure—could be an ideal candidate, as well as retired government employees with experience reviewing permits. *An expert in economics* could be helpful, especially one that is *an expert in ecological economics*, to illustrate the true economic impacts of the project. An economics expert may also be able to provide project-specific dissection of the project's purpose, the need for the project, and a more realistic projection of the costs and benefits of the project. The economics expert used to challenge a Corps permit may also be able to provide a relevant opinion in the FERC process.

EIP's Center for Applied Environmental Science is a potential resource for advocates looking for referrals and funding for experts. Information about the Center and its list of independent experts can be found here: <https://caes.info/about/> (last visited Mar. 31, 2022).

How do I actually participate in the Corps' 404 review?

Has the government published a flowchart showing the Corps' process of issuing a 404 permit?

Yes! As part of the Open EI project,⁷⁰⁶ the National Renewable Energy Laboratory developed the following flowcharts in August 2016 for the Department of Energy depicting the typical 404 permitting process for issuing individual permits (see below).⁷⁰⁷ (Advocates new to challenging Corps permits should also review 33 C.F.R. § 325 et seq, and in particular § 325.2, which outlines the steps and general timeline in the application for an individual permit.) This remains the typical permitting process used by the Corps, however at least two major steps are not featured.

First, not shown is any threshold jurisdictional determination as to whether there exist waterbodies and wetlands that fall under the Corps' jurisdiction at all. An official jurisdictional determination (also known as an "approved jurisdictional determination") is not a prerequisite for a permit; an applicant can request either a preliminary jurisdictional determination (a non-binding opinion that cannot be used by the applicant as a shield against later enforcement actions), or none at all. However, given the size and complexity of LNG terminals, it is likely that before an applicant officially applies for a permit, the applicant will have requested and received an approved jurisdictional determination from the Corps.⁷⁰⁸ This process, which has no opportunity for public comment or participation, may be part of the pre-application consultation that is shown as the first step in the flowchart below. The approved jurisdictional determination itself can be appealed even before the 404 permit issues—and potentially before the 404 **application** is complete. For more information on the jurisdictional designation process, see Sections 6.C.2 and 6.C.3.

The second item not shown is the participation of other agencies like EPA and FWS, which submit comments during the public comment period and can disrupt this process by elevating issues beyond the regional Corps office. For more details on how EPA and FWS can disrupt the typical 404 process, see Sections 6.D.1 – 6.D.4.

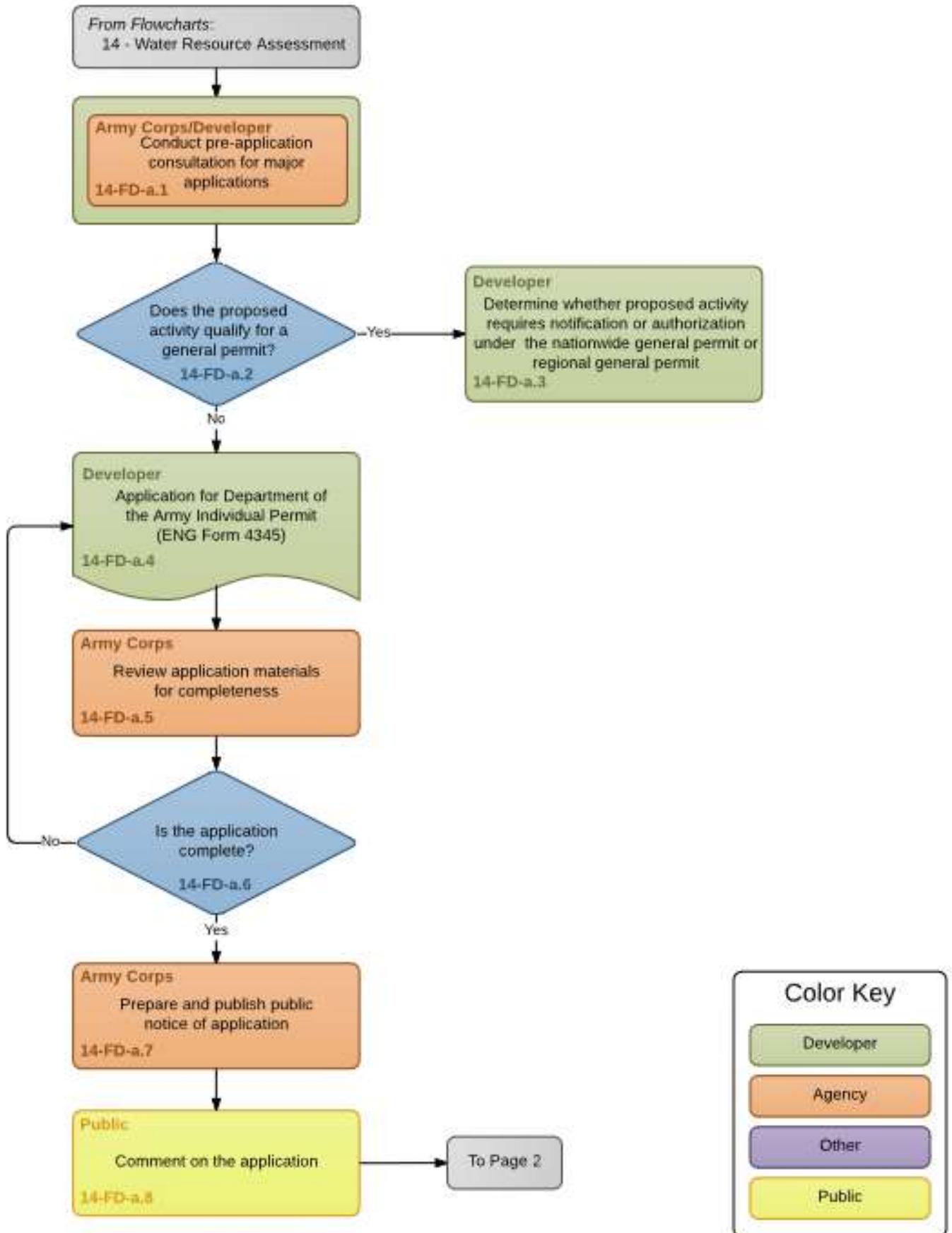
Note that there are a number of such flowcharts published by other organizations online.⁷⁰⁹ Advocates may find them helpful to review, but when in doubt should rely on the Corps' own guidance and the governing statutes.

⁷⁰⁶ <https://openei.org/wiki/Information> (last visited Mar. 31, 2022).

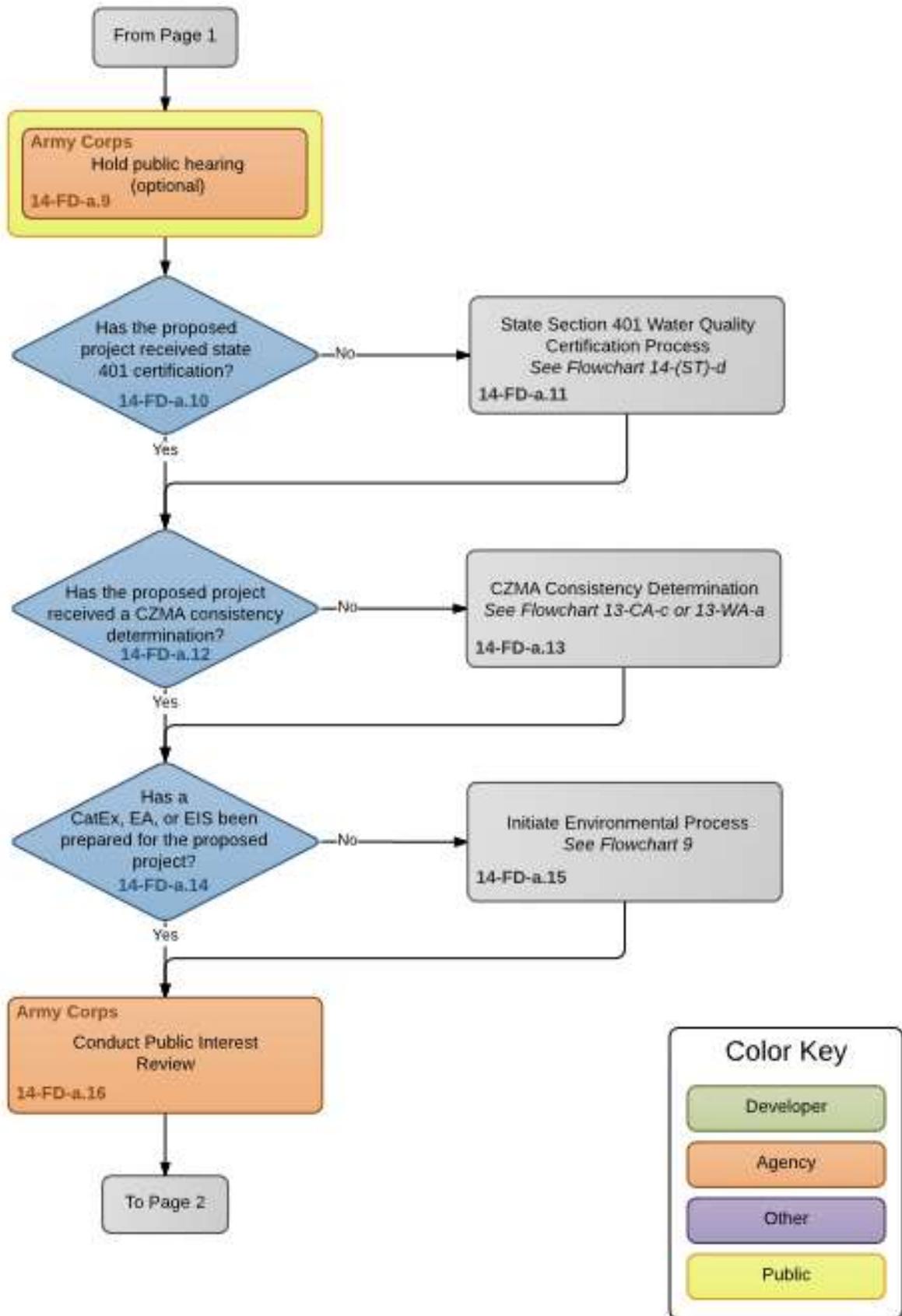
⁷⁰⁷ Clean Water Act Section 404 Permit Application Process, Version 19, Aug. 2016, <https://openei.org/w/images/2/2e/14FDADredgeFillOfWetlandsPermitting.pdf>.

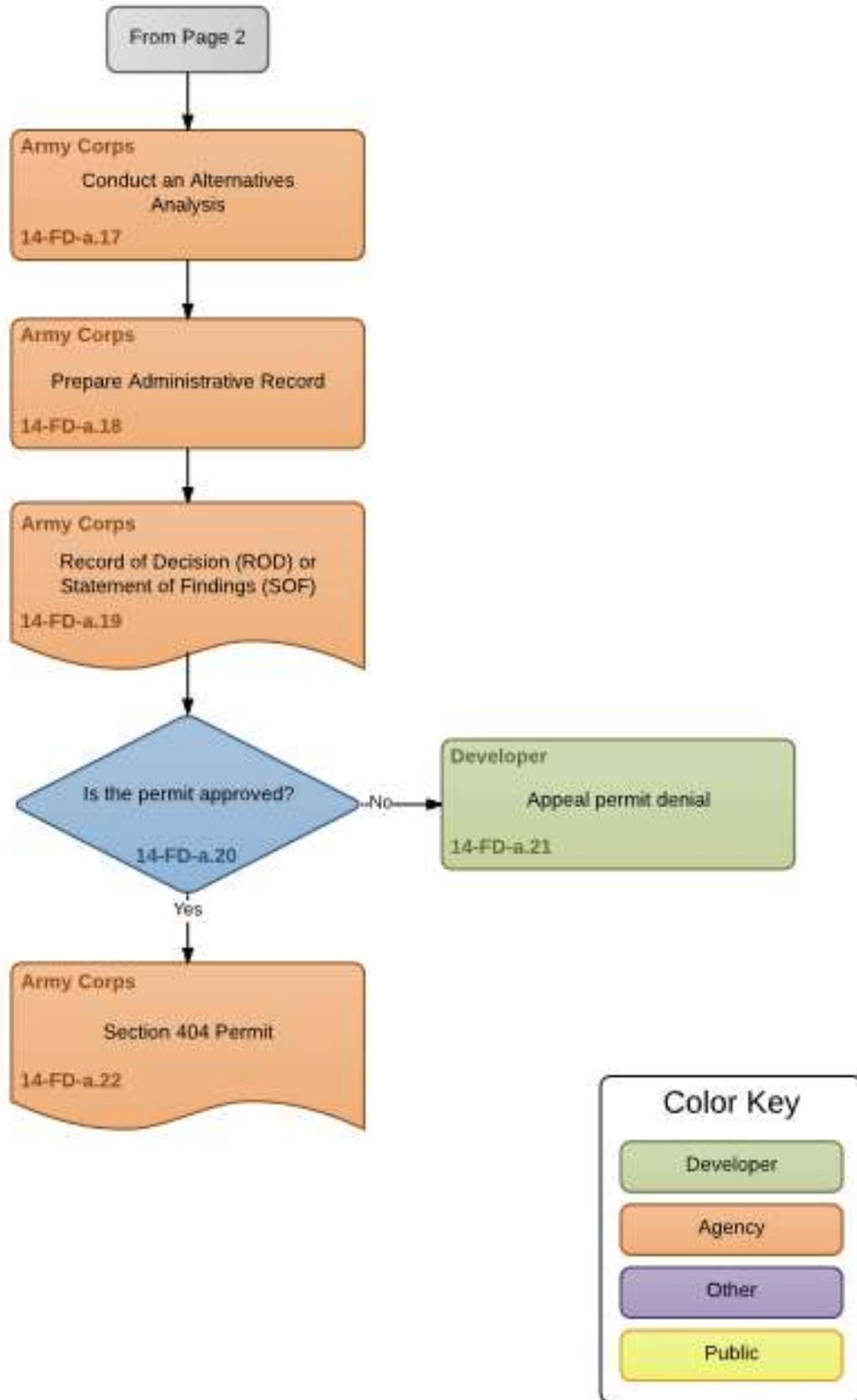
⁷⁰⁸ For example, Rio Grande LNG requested and received an approved jurisdictional determination six months before the public notice of the 404 permit was issued. *Compare Rio Grande LNG AJD*, Feb. 7, 2018, <https://www.swg.usace.army.mil/Portals/26/docs/regulatory/JDs/SWG201500114.pdf> with *Rio Grande LNG and Rio Bravo Pipeline Section 404 and Section 10 Public Notice*, Oct. 18, 2018, <https://www.swg.usace.army.mil/Media/Public-Notices/Article/1666289/swg-2015-00114-rio-grande-lng-llc-and-rio-bravo-pipeline-llc-wetlands-and-water/>. The Corps' website shows that the AJD was available within a week of February 7, 2018—a full six months before the district's website posted the 404 notice.

⁷⁰⁹ See e.g., Construction Advocacy Fund, *So you want to BUILD? Good luck with that...*, https://www.agc.org/sites/default/files/Galleries/enviro_members_file/Environmental%20Permitting%20Flow%20Chart%20%2806-14-2017%29.jpg (last visited Apr. 1, 2022). See also, *Environmental Review & Permitting Process Flowchart*, June 2017, <https://constructionadvocacyfund.agc.org/portfolio-items/environmental-review-permitting-process-flowchart/> (describing the "So you want to BUILD" flowchart).



Developed by the National Renewable Energy Laboratory for the Department of Energy





How do I know if the Corps' jurisdictional determination process and permitting process has started?

Unfortunately, there is no standard and uniform method to track the Corps' progress, especially at the initial stages. However, the following describes tips that should allow advocates to catch the processes as early as possible.

Jurisdictional determinations. It is especially hard to track when the jurisdictional determination process begins. There is no public notice and comment period for jurisdictional determinations. And only approved jurisdictional determinations are published once final; preliminary determinations need not be published. But because there is no official opportunity for public involvement in the jurisdictional determination process until after the decision is made, it is less important to know when this process begins. It is more important to know when the process is final, because then the decision can be appealed—even before the permit itself issues. Approved jurisdictional determinations are often published on the District websites. For links to websites with AJDs, see Section 6.C.3 below (bullet entitled “*Where do I find the jurisdictional determination for a specific project*”). Alternatively, the fact that a determination has been made is sometimes clear from the permit application, once it is publicly available, or from the applicant's filings with FERC.

Permits. As for knowing when the Corps' permitting process has started, the first clue may be in the applicant's filings with FERC.⁷¹⁰ By the time an applicant files publicly with FERC, the applicant has probably been working with the Corps at least preliminarily on jurisdictional determinations and pulling together its permit applications. However, the applicant will likely not have filed a complete application for a Corps permit at that time, so the Corps itself will not yet have filed public notice that a permit might issue because public notice is only required **after** the permit application is officially complete. The applicant is supposed to keep FERC informed of when it will have filed a complete application. So an advocate interested in tracking the progress of the Corps before a Corps application is filed should be able to find the applicant's predictions in the correspondence it sends to FERC, which is publicly filed in FERC's docket.⁷¹¹

Even though it is likely that the applicant's FERC filings will be first evidence of its progress in the Corps process, advocates should also closely monitor the public notices and approved jurisdictional determinations published on the District websites. Some projects are also tracked on the federal government's Permitting Dashboard, located here: <https://www.permits.performance.gov/projects> (e.g., at least Commonwealth LNG, Gulf LNG, Alaska LNG, Cameron LNG, and Jordan Cove LNG). The Corps' progress for these projects is summarized on this site;⁷¹² note however that this site may not be regularly updated and may not track all LNG projects, and so should not replace a search of the Corps Districts' websites and FERC's docket. For more information see Section 6.C.6 below (“*How do I find the public notice?*”).

⁷¹⁰ See FERC's online docketing system, <https://elibrary.ferc.gov/eLibrary/search>. The applicant's initial filings with FERC will state when it expects to file applications for other required permits. By signing up for the eSubscription service, an advocate can automatically be sent notification of all FERC filings and in that way also keep track of when comment periods for the Corps permits are likely to occur. Sign up through: <https://www.ferc.gov/esubscription>.

⁷¹¹ For example, the first public FERC filing filed by the Commonwealth LNG applicant (in August 2019) includes an appendix estimating that its application for a Corps permit will be submitted in Q3 2020. See <https://elibrary.ferc.gov/eLibrary/search>, searching Docket CP19-502, Accession No. 20190820-5125 (at 15).

⁷¹² See e.g., *Commonwealth LNG Permitting Dashboard*, <https://www.permits.performance.gov/permitting-projects/commonwealth-lng-project> (scroll to the bottom to the desired permit and click “view action details” will pull up a summary page: <https://www.permits.performance.gov/proj/commonwealth-lng-project/section-10-rivers-and-harbors-act-1899-and-section-404-clean-water-act>).

In addition, applications for Corps projects in coastal Louisiana (i.e., all LNG terminals) are available from Louisiana Department of Natural Resources (LDNR). This is because applicants for projects in coastal Louisiana must cross-file their applications for Corps permits with the LDNR as part of Louisiana’s coastal permitting process.⁷¹³ LDNR makes the applications and supporting documents publicly available, whereas they otherwise would be more difficult to obtain from the Corps (e.g., Texas applications are harder to find). Thus, advocates challenging LNG terminals in Louisiana may be able to use LDNR to track the Corps’ progress in issuing its permits.

Whatever the manner of notice, just keep in mind that the applicant has already begun discussions with the Corps by the time advocates become aware of the process, either through the project’s initial application with FERC or the Corps’ public notice.

What should I know about the threshold jurisdictional determination, and is there a role for an advocate there?

A less-pursued but potential point of advocacy (if funds for litigation and an expert are available) could be scrutinizing and challenging the Corps’ jurisdictional determinations for the project. Approved jurisdictional determinations (AJDs) can be challenged in federal court even before the permit itself issues.⁷¹⁴ Although a court will be deferential to the Corps’ decision, an improper jurisdictional determination has the potential to alter the Corps’ entire permitting decision, and thus a jurisdictional determination challenge could be very valuable.

The question for an advocate reviewing a jurisdictional determination would be: has the Corps properly identified all of the waters and wetlands impacted by the project that fit the definition of “waters of the United States” for 404 permits or “navigable waters” for section 10 permits? This hasn’t been a large area of advocacy in prior challenges to LNG terminals, but if the Corps and applicant underestimate the jurisdictional waters and wetlands that are impacted, then the entire analysis conducted for the permit may be flawed and vulnerable to challenge.⁷¹⁵ This is especially relevant for 404 jurisdictional designations, which rely on the more ambiguous definition of “waters of the United States” as opposed to the more straight-forward determination of “navigable waters,” which are jurisdictional under Section 10.⁷¹⁶ Contracting with an expert on jurisdictional

⁷¹³ Because of this cross-filing requirement, it is sometimes easier to find Corps project documents for LNG terminals by searching the LDNR by project for the “Joint Permit Application,” as opposed to going through the New Orleans District’s website. See Louisiana Office of Coastal Management, *Search for Coastal Use Permit*, <http://reports.dnr.state.la.us/sonris/cmdPermit.jsp?sid=PROD> (last visited Mar. 31, 2022) (note that embedded in the Joint Permit Application can be landowner information, supplemental information, agency correspondence and more). For example, documents available from LDNR for Driftwood LNG include the Joint Permit Application (see https://sonlite.dnr.state.la.us/sundown/cart_prod/pkg_crm00100_forms.cart_menu?pcup_num=P20170501, which has to-date gone through 13 revisions; see https://sonlite.dnr.state.la.us/sundown/cart_prod/cart_crm_application_his?pcup_num=P20170501&pshow_appl_email=N. The original application contains more embedded information such as the original application form, adjacent landowner lists, supplemental information, agency correspondence, and section 408 materials: see https://sonlite.dnr.state.la.us/sundown/cart_prod/cart_crm_application?pcup_num=P20170501&pline_id=1&pshow_appl_email=N (found in Step 13 of 15) (all links last visited Mar. 31, 2022).

⁷¹⁴ *U.S. Army Corps of Eng’rs v. Hawkes Co.*, 136 S. Ct. 1807, 1815 (2016).

⁷¹⁵ For example, a 404 applicant must avoid impacts to jurisdictional waters and wetlands where practicable and is often required to restore the equivalent amount of impacted waters and wetlands elsewhere when impacts cannot be minimized to zero. The permitting process also requires the Corps and applicant to compare alternative sites for the project when determining if impacts to waters and wetlands can be practicably avoided. But all of these calculations and analyses will be flawed if the initial input—the amount of jurisdictional waters and wetlands—has been underestimated.

⁷¹⁶ Roughly “navigable waters” boils down to: have you ever been able to float a boat in it? See 33 C.F.R. § 329.4 (General Definition) (“Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A

determinations will be essential in order to make a compelling argument that the Corps has erred in making its determination.

- **Who makes these determinations?**

Typically the applicant hires a wetlands delineation consultant to identify any jurisdictional waters on site instead of relying on the Corps to gather the information itself.⁷¹⁷ The Corps then reviews and approves the jurisdictional designation, sometimes without a site visit, and sometimes many months after the initial field determination.⁷¹⁸ This determination is then valid for five years, unless new information warrants revision of the determination before the expiration date or a District Engineer identifies specific geographic areas that merit re-verification.⁷¹⁹

- **What is the difference between an approved jurisdictional determination and a preliminary jurisdictional determination?**

An AJD is defined in Corps regulations at 33 C.F.R. 331.2. It is a definitive, official determination that there are, or that there are not, jurisdictional aquatic resource on a site. It will specify what aquatic resources are or are not jurisdictional on a site for purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures.⁷²⁰ An AJD can be appealed as soon as it issues, and can act as a shield against later enforcement actions by the Corps.

Preliminary JDs are JDs where the question of jurisdiction is set aside voluntarily by the applicant to expedite review of their project during the permit process. A PJD is not a legally binding determination of whether the aquatic resources on site are jurisdictional. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a PJD treats all aquatic resources that would be affected in any way by the permitted activity on the site as jurisdictional aquatic resources, even if they are not.

Theoretically then, a PJD should be a worst-case estimate of the area that could be impacted by a project. Because it is not appealable by itself, an advocate challenging a terminal permitted based on a PJD would have to wait to litigate the jurisdictional determination until after the 404 or section 10 permit is issued. For more information on the difference between AJDs and PJDs, see the 2016

determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity.”) The lack of ambiguity in this definition means challenging a Section 10 jurisdictional determination is unlikely to be productive for an LNG terminal challenge.

⁷¹⁷ The Corps warns applicants that outsourcing the wetlands delineation is faster. See Army Corps of Engineers, *Recognizing Wetlands*, Nov. 2017, <https://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll11/id/2309>. (“Do I Have to Hire a Private Consultant? No. The Corps will delineate wetlands on your property if requested. However, due to limited resources that can result in a delay in the process. Hiring a private delineation professional is entirely up to you, but such professional can, in many cases, provide data necessary to delineate wetlands which generally speeds up the process.”).

⁷¹⁸ 33 C.F.R. 320.1(a)(6) (“The Corps has authorized its district engineers to issue **formal determinations** concerning the applicability of the Clean Water Act or the Rivers and Harbors Act of 1899 to activities or tracts of land . . . A determination pursuant to this authorization shall constitute a Corps final agency action.”) (emphasis added); 33 C.F.R. 331.2 (defining “Approved jurisdictional determination” to be “a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. Approved JDs are clearly designated appealable actions and will include a basis of JD with the document.”); see also, Rio Grande LNG Designation <https://www.swg.usace.army.mil/Portals/26/docs/regulatory/JDs/SWG201500114.pdf> (Field Determination in August 2016, Desk Determination in February 2018).

⁷¹⁹ Regulatory Guidance Letter 05-02, June 14, 2005, <https://www.nap.usace.army.mil/Portals/39/docs/regulatory/rgls/rgl05-02.pdf>.

⁷²⁰ *Quick Reference Chart*, Corps Regulatory Guidance Letter No. 16-01 (RGL 16-01), Oct. 2016, <https://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll9/id/1260>; see also *Questions And Answers* for RGL 16-01, Oct. 2016, <https://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll9/id/1259>.

Corps' Regulatory Guidance Letter 16-01.⁷²¹ EPA also maintains a list of frequently asked questions about jurisdictional determinations here: <https://watersgeo.epa.gov/cwa/CWA-JDs/FAQ/>.

- **What makes an aquatic resource (i.e., water or wetlands) jurisdictional?**

As discussed previously in Section 6.B.2, whether a water or wetlands is jurisdictional depends on the fact-intensive definition of “waters of the United States” (“WOTUS”), which has been in flux for decades.⁷²² The changes to WOTUS have been on the margins of this definition, as Supreme Court precedent has evolved, Administrations have changed, and federal courts have stayed the Administrations' changes. But in a nutshell, the definition of WOTUS expanded under the Obama Administration, shrunk during the Trump Administration,⁷²³ and is currently being revised under the Biden Administration. Until the Biden Administration issues a new final rule, the Corps is interpreting WOTUS consistent with its pre-2015 definition.⁷²⁴ Because of this flux, an exact definition is beyond the scope of this guide, but can be found at: <https://www.epa.gov/wotus/current-implementation-waters-united-states>.

Some waterbodies that are relevant to LNG terminals that have been within the definition of WOTUS despite the definitional changes are perennial streams, rivers, lakes, and ponds. Wetlands adjacent to these waterbodies have also always been jurisdictional, although what a wetland is has shifted and is a fact-intensive question. A wetland may only periodically be flooded or may have soil and vegetation known to be typical of wetlands. Because a wetland can be fact-intensive to delineate and thus open to interpretation, an advocate should focus on the site's potential for overlooked wetlands when deciding whether to challenge a jurisdictional determination. Certain mudflats and sandflats are also jurisdictional under the pre-2015 rules.

- **Where can I find information about the LNG terminal of interest to determine if there is a jurisdictional water that has been overlooked?**

Even though an advocate is unlikely to have permission to access and examine the proposed site itself,⁷²⁵ there are many other sources that the Corps recognizes are instructive in making jurisdictional determinations⁷²⁶ such as:

1. **Soil maps.** Hydric soils can be indicative of a wetland. The Natural Resources Conservation Service (NRCS) has created maps of the different soil types all over the U.S. and publishes that information on the Web Soil Survey at websoilsurvey.nrcs.usda.gov.
2. **Aerial photographs:** Wetlands are sometimes apparent on aerial photographs at different times of the year. Options include Google Earth (www.google.com/earth), U.S. Geological Survey's EarthExplorer (earthexplorer.usgs.gov), National Oceanic and Atmospheric

⁷²¹ U.S. Army Corps of Engineers, *Jurisdictional Determinations*, Corps Regulatory Guidance Letter No. 16-01, Oct. 2016, <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll9/id/1256>.

⁷²² U.S. Army Corps of Engineers, *Jurisdictional Information*, https://www.usace.army.mil/missions/civil-works/regulatory-program-and-permits/juris_info/ (last visited Mar. 31, 2022).

⁷²³ *The Navigable Waters Protection Rule: Definition of “Waters of the United States*, 85 Fed. Reg. 22,250 (Apr. 21, 2020), <https://www.federalregister.gov/documents/2020/04/21/2020-02500/the-navigable-waters-protection-rule-definition-of-waters-of-the-united-states>.

⁷²⁴ U.S. Army Corps, *Jurisdictional Information*, *supra* note 722.

⁷²⁵ If there is access to the site or the site's periphery, the presence of wetland plants, pooled water, and certain soil types can all indicate the presence of jurisdictional wetlands.

⁷²⁶ U.S. Army Corps of Engineers, *Recognizing Wetlands*, Nov. 2017, <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll11/id/2309>.

Administration’s CoastWatch (coastwatch.noaa.gov), and USDA’s Geospatial Data Gateway (datagateway.nrcs.usda.gov).

3. **The National Wetland Inventory (NWI):** <https://www.fws.gov/wetlands/data/mapper.html>.

The NWI was established by the US Fish and Wildlife Service (FWS) to conduct a nationwide inventory of U.S. wetlands to provide biologists and others with information on the distribution and type of wetlands to aid in conservation efforts. It is not binding on the Corps and its determination of what jurisdictional waters are, but the Corps recognizes the resource as useful albeit sometimes dated.

Community groups who use the area recreationally or for fishing and shrimping may also be knowledgeable about the site and how its characteristics vary across the seasons. The Corps also publishes region-specific guidance materials on how to delineate wetlands.⁷²⁷ Advocates in the Gulf Coast should consult that region’s guide when deciding if a challenge to a jurisdictional determination might have merit.

- **What happens if I believe that the approved jurisdictional determination is incorrect?**

Jurisdictional determinations do not have a notice and comment period, so the first time an advocate will learn of the determination is likely when it issues.⁷²⁸

An advocate who disagrees with an approved jurisdictional determination can appeal that decision directly to federal court under the APA—there is no administrative appeals step.⁷²⁹ The Supreme Court clarified this right to judicial review (under the Administrative Procedures Act) as it pertains to applicants and landowners in a 2016 opinion.⁷³⁰ Even though the case did not discuss an outside advocate’s right to judicial review, the case’s logical extension is that an advocate also could challenge a jurisdictional determination in federal court, assuming the advocate can show legal standing.⁷³¹ For basic information about appealing Corps decisions and permits, see Sections 6.E.5 & 6.E.6.

⁷²⁷ Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0), Nov. 2010, <https://usace.contentdm.oclc.org/utlis/getfile/collection/p266001coll1/id/7594>. See also U.S. Army Corps of Engineers, Galveston District, *Wetlands*, <https://www.swg.usace.army.mil/Missions/Regulatory/Wetlands.aspx> (last visited Apr. 1, 2022); see also U.S. Army Corps of Engineers, New Orleans District, *Overview Of Jurisdictional Determination (JD)*, <https://www.mvn.usace.army.mil/Missions/Regulatory/Jurisdiction-Wetlands/>.

⁷²⁸ FERC’s EIS may also describe how aquatic resources have been treated, but FERC does not have authority to make judicial determinations.

⁷²⁹ Because this is a relatively undeveloped area of the law—and even more so in the LNG context, it is unclear whether the Natural Gas Act would trigger review to start immediately in the circuit court, or if the more traditional route (appeal in a district court first) would be proper. Advocates considering appealing an AJD should consult an experienced litigator before deciding on the proper course of action.

⁷³⁰ *U.S. Army Corps of Eng’rs v. Hawkes Co.*, 136 S. Ct. 1807, 1815-16 (2016). In this developer-brought case, the Court first noted that an “Approved Jurisdictional Determination” (“AJD”) is a final agency action that can be administratively appealed by a landowner or applicant. The Court went on to say that if the landowner or applicant continues to disagree with the Corps’ determination even after the administrative appeal is concluded, they may judicially appeal the determination without waiting for any permit to issue. And even though the case did not discuss the right of an environmental advocate to judicial review of a jurisdictional determination, a logical extension of the reasoning in this case requires that advocates also could challenge a determination. Because a typical advocate does not have an administrative appeals option, an advocate would bring suit in federal court as soon as a final determination was made.

⁷³¹ Indeed, the environmental advocacy group Bayou City Waterkeeper successfully survived a motion-to-dismiss brought against it by the Corps when it challenged the Galveston District’s issuance of a AJD in violation of the Administrative Procedures Act. *Bayou City Waterkeeper v. U.S. Army Corps of Eng’rs*, Case No. 3:20-cv-00255 (S.D. Tex. May. 27, 2021) (report and rec. adopted on June 14, 2021). The court found that *Hawkes* allowed an advocacy group to sue after an AJD issues, if the group can show standing (a legal concept requiring that that group suffered an injury that can be traced back to the Corps’ conduct and that the injury can likely be fixed by a court).

The Corps' actions will be reviewed under a deferential standard, namely, the reviewing court will ask: did the agency act arbitrarily or capriciously in making its decision? If not, the Corps' decision will be upheld. Because of this deferential standard, it is especially important to work with a wetlands expert and attorneys experienced in waters of the United States litigation so that the challenge has the best chance of succeeding.

- **Where do I find the jurisdictional determination for a specific project?**

The approved jurisdictional determinations are recorded on Corps forms,⁷³² and should be accessible through the district websites (search applicant name and “jurisdictional determination”) or the Headquarters' website. The availability of this information varies across districts, for example:

The Galveston District publishes a list of determinations, purportedly weekly:

<https://www.swg.usace.army.mil/Missions/Regulatory/Jurisdictional-Determinations/>.

These determinations are searchable through a “CTRL+F” search by project file number (e.g., SWG-2015-00175, for Texas LNG). Searching the district site is recommended for Texas projects; the Headquarters' website does not reliably include AJDs for all projects that have indeed been issued one.

Meanwhile, the New Orleans District relies on the Corps' Headquarters' website to publish AJDs: <https://permits.ops.usace.army.mil/orm-public> (search “All Content” or “AJD” tab). The Headquarters' site is not nearly as frequently updated—as of September 2021 no approved jurisdictional determinations were reported since July 23, 2020. However, because of Louisiana's requirement that applicants working in the state's coastal zone file a joint permit application with the Corps and the Louisiana Department of Natural Resources, advocates can use LDNR's system to access an applicant's Corps application, which will indicate whether a jurisdictional determination has been made.⁷³³

EPA also publishes an interactive map of unexpired AJDs that have been issued since 2015.⁷³⁴ Advocates can also consult this database if they suspect a AJD has issued but cannot find record of it.

- **What if there doesn't seem to be an approved jurisdictional determination for the site?**

If there is no approved jurisdictional determination publicly available and it seems like there should be one already, contact the Corps office to inquire. It may be that the applicant has not requested one or is relying on the non-binding preliminary jurisdictional designation to move their project forward and avoid a potential appeal. A FOIA request may be necessary to understand how jurisdictional determinations are being handled.

⁷³² For Galveston District examples, see *Texas LNG Approved Jurisdictional Designation*, <https://www.swg.usace.army.mil/Portals/26/docs/regulatory/New%20JDs/SWG201500175.pdf> and *Rio Grande LNG Approved Jurisdictional Designation*, <https://www.swg.usace.army.mil/Portals/26/docs/regulatory/JDs/SWG201500114.pdf>.

⁷³³ Step 4 of the Joint Application solicits this information from the applicant. See *Joint Permit Application*, at 2 (Step 4) <http://www.dnr.louisiana.gov/assets/OCM/permits/JPA2010Fillable.pdf>. Applications for specific projects can be found by searching LDNR's website here: Louisiana Office of Coastal Management, *Search for Coastal Use Permit*, <http://reports.dnr.state.la.us/sonris/cmdPermit.jsp?sid=PROD>.

⁷³⁴ EPA, *Clean Water Act Approved Jurisdictional Determinations*, <https://watersgeo.epa.gov/cwa/CWA-JDs/>.

For the actual permitting process, what will the applicant and Corps have done before public notice must be issued?

The first step an applicant typically takes in seeking a 404 permit for a major project like an LNG terminal is to contact the District office for a pre-application consultation.⁷³⁵ (This is usually during or just before the applicant files its pre-file application with FERC—see Chapter 4 Sections C.3–C.5 for more details about the FERC process.) This is an informal process, likely consisting of emails, phone calls, and letters to District staff. And although this process is supposed to be relatively quick, it’s unclear exactly how long the pre-application stage typically lasts for an LNG project.⁷³⁶ During this time, the applicant and Corps work together “so that the potential applicant may begin to assess the viability of some of the more obvious potential alternatives in the application.”⁷³⁷ The regulations direct the Corps “to provide the potential applicant with all helpful information necessary in pursuing the application” and to “maintain an open relationship” with potential applicants and their consultants.⁷³⁸ It’s also likely that the Corps (or FERC, as lead agency) will schedule the applicant for a “Joint Evaluation Meeting” with other state and federal agencies.⁷³⁹ This is exactly what it sounds like—a meeting of the agencies, applicant, and its consultants to discuss and shape the proposed project in its early stages. (Note that the early and close-working relationship between the Corps, applicant, and other agencies can cause the Corps to view advocates as outsiders who are opposed to the permit issuing as proposed and ignorant of the process and work that has been conducted prior to public notice.)

As part of the pre-application stage, the Corps determines whether a letter of permission or an individual permit is needed. For initial LNG terminal applications, an individual permit should be required because of the unique nature and expected large magnitude of impacts from these projects.

After the pre-consultation process, the applicant submits a complete application to the District using Engineering Form 4345.⁷⁴⁰ (Louisiana LNG applicants have been directed to use a modified joint state and federal permit application,⁷⁴¹ the contents of which are then accessible on LNDR’s website.⁷⁴²) It’s likely that an LNG applicant will submit additional information beyond just these forms: the content of the application is described in 33 C.F.R. § 325.1(d) and the Districts often provide additional directions online.⁷⁴³ According to the Corps’ regulations, the applicant must submit additional information beyond the requirements of § 325.1(d) only if the district engineer

⁷³⁵ 33 C.F.R. § 325.1(b).

⁷³⁶ Indeed, it may be several years, judging from the file numbers granted to LNG projects. For example, Rio Grande LNG’s file number was issued in 2015, but the application was not listed as complete until 2018.

⁷³⁷ 33 C.F.R. § 325.1(b).

⁷³⁸ 33 C.F.R. § 325.1(b).

⁷³⁹ U.S. Army Corps of Engineers, Galveston District, *Permit Preapplication Screening*, <https://www.swg.usace.army.mil/Missions/Regulatory/Permits/> (last visited Apr. 1, 2022).

⁷⁴⁰ 33 C.F.R. § 325.1(c). Check with the district responsible for the project for the latest form; the 2018 version can be found here:

https://www.publications.usace.army.mil/Portals/76/Publications/EngineerForms/Eng_Form_4345_2018May.pdf?ver=2018-05-18-102142-420. Also note that this is the bare minimum; it is likely that an LNG applicant will be required to submit additional information to the Corps during the permitting process.

⁷⁴¹ Louisiana DNR, *Joint Permit Application*, <http://www.dnr.louisiana.gov/assets/OCM/permits/JPA2010Fillable.pdf>.

⁷⁴² Louisiana Office of Coastal Management, *Search for Coastal Use Permit*, <http://reports.dnr.state.la.us/sonris/cmdPermit.jsp?sid=PROD> (last visited Mar. 31, 2022).

⁷⁴³ U.S. Army Corps of Engineers, Galveston District, *Permit Application*, <https://www.swg.usace.army.mil/Missions/Regulatory/Permits/Permit-Application.aspx> (describing the need for maps, bulkhead and pier sample plans, dredge sample plans, and information about coastal zone management compliance, impact mitigation, and nearby endangered species and cultural resources).

deems it “essential to make a public interest determination [e.g., for 404 and section 10 permits] including, where applicable, a determination of compliance with the section 404(b)(1) guidelines [for a 404 permit] or ocean dumping criteria [for a 103 permit].”⁷⁴⁴ The pre-application process is not the only time in which the Corps can request additional information from the applicant—more information may be requested during the comment period and the Corps’ substantive review of the permit. But the upshot of this regulation is that advocates who believe that more information should be requested from the applicant should specifically explain with legal citations and examples how that the additional information is essential for the Corps to conduct a proper public interest review and to comply with the 404(b)(1) guidelines.⁷⁴⁵ In addition, FERC as lead agency may request information from the applicant that is relevant to the Corps’ review; this is another reason to closely monitor the FERC docket while working on a Corps challenge.

Once complete, the application will be made part of the record, but it might not be attached to the public notice. The application materials should be made available for in-person inspection—although access may be more difficult during the coronavirus pandemic. And for Louisiana projects, the application should also be available through the project’s joint application posted by LDNR.⁷⁴⁶ An advocate may be able to obtain additional materials exchanged during the pre-application process through a FOIA request; indeed it is highly recommended that advocates submit a FOIA request for permit and application documents whenever a public notice issues. The Galveston District, for example, has an electronic pre-application consultation process that an applicant may utilize—this exchange may have generated documents discoverable through FOIA.⁷⁴⁷ Note that because the comment periods are so short compared to the time it can take to receive documents through a FOIA request, advocates who anticipate that the FOIA documents will be essential to drafting comments should simultaneously send a FOIA request and ask the Corps to extend the public comment period to the full extent allowed by Corps regulations.

Note that some advocates have successfully obtained application documents by reaching out to the Corps project manager directly (the Corps personnel identified in the public notice and assigned to the project). It is good practice to also cc the project manager and any other known Corps personnel related to the project to any FOIA request (and vice versa) so all departments are made aware of the requested records. This may also speed up the Corps’ response, which can be critical given the short window allowed for comments.

How long after the application is submitted will the public receive notice of the application?

Hypothetically, at most fifteen days will elapse between the time an application is submitted and the public receives its first public notice that the Corps is working on a permit.⁷⁴⁸ However, if the application is incomplete in some manner, the Corps will instead give notice to the applicant within those fifteen days to remedy the application. Upon receiving an updated application, the Corps again has fifteen days to confirm that it is complete before the public must be notified.

⁷⁴⁴ 33 C.F.R. § 325.1(d) (“Such additional information may include environmental data and information on alternate methods and sites as may be necessary for the preparation of the required environmental documentation.”)

⁷⁴⁵ As a backup, advocates should augment the record with information that supports their points and not simply rely on the Corps to actually request additional information.

⁷⁴⁶ Louisiana Office of Coastal Management, *Search for Coastal Use Permit*, <http://reports.dnr.state.la.us/sonris/cmdPermit.jsp?sid=PROD> (last visited Mar. 31, 2022).

⁷⁴⁷ <https://www.swg.usace.army.mil/Missions/Regulatory/Permits/> (describing the pre-application electronic process, including the option to submit copies of the preliminary application).

⁷⁴⁸ 33 C.F.R. § 325.2(a)(2).

How do I find the public notice?

The following describes what the Corps is **supposed** to do for each project—in practice, advocates have found that for LNG terminal projects the Corps may rely heavily on FERC to fulfill its responsibilities for public notice and comment.⁷⁴⁹

Nonetheless, after an applicant files its FERC application (i.e., beginning the process of permitting a project), an advocate can start looking for the Corps’ public notice of the project in at least two places: at the Corps Headquarters’ website and on the website of the Corps District with geographical jurisdiction over the project. Again, advocates are warned that despite the Corps’ statutory duty to facilitate public availability of permits and applications,⁷⁵⁰ the Corps is not as transparent as other agencies in doing so, and so an advocate may need to FOIA the Corps to keep abreast of its progress (see Section 6.C.12 on FOIA and the Corps), keep tabs on the applicant’s FERC filings to know when the Corps might be processing the Corps applications (This may align with when FERC releases its EIS documents), and if in Louisiana, use LNDR to track the Corps’ progress.

The first location an advocate could look for a public notice is at the Corps Headquarters’ website: <https://permits.ops.usace.army.mil/orm-public#>. This site purports to list all final and pending individual permits, which are the type an LNG terminal will need. To find pending initial permits, go to the “Pending IP” tab, and search by keyword (e.g., applicant name or “LNG”) and district. By default the map view search function is displayed; toggling to Table View allows for the data to be exported to Excel. From this site an advocate can find the application number for each permit.

The second location an advocate could look for LNG terminals on the Gulf Coast of Louisiana and Texas is the websites of the responsible Districts: likely the New Orleans and Galveston Districts, respectively.⁷⁵¹ Public notices are available here:

- New Orleans District: <https://www.mvn.usace.army.mil/Missions/Regulatory/Public-Notices/>
- Galveston District: <https://www.swg.usace.army.mil/Media/Public-Notices/>

Note that neither District site currently has an easy way to search public notices directly; however by typing the applicant name and the words “public notice” into the upper righthand search bar, you should be able to find the relevant public notices. (E.g., “Freeport LNG public notice” without quotes returns several results). The New Orleans District RSS feed promising “Instant Notification of New Public Notices” is broken as of early 2022; none exists on the Galveston District site currently.⁷⁵²

Make sure to look at all of the documents posted, including the full public notice, project plans, environmental analysis, as well as any documents published with FERC that are available. An advocate may need to contact the District directly to review the full application; additional information as to the scope of information to request should be available in the public notice.

Is it possible that no public notice will be given because none is required?

All LNG terminals that are being proposed or seeking major expansions should be applying for an individual permit, which requires site-specific public notice. However, the Corps also has authority to

⁷⁴⁹ This may be in deference to FERC as lead agency, which is directed by the Natural Gas Act to maintain the record in LNG cases.

⁷⁵⁰ See e.g., 33 U.S.C. 1344(o) (“Public availability of permits and permit applications”).

⁷⁵¹ U.S. Army Corps of Engineers, *Where We Are*, <https://www.usace.army.mil/locations.aspx> (last visited Apr. 1, 2022).

⁷⁵² U.S. Army Corps of Engineers, *Public Notices Overview*, <https://www.mvn.usace.army.mil/Missions/Regulatory/Public-Notices/> (last visited Apr. 1, 2022)(promising “Instant Notification of New Public Notices,” but the functionality was broken).

issue general permits (nationwide and regional) and letters of notice (a subset of individual permits) that it has sought to use in the past (sometimes improperly) for the permitting of fossil fuel projects.

Individual permits (also known as a standard individual permit) are the ones LNG terminals should be requesting and are required whenever more than minimal impacts are expected. The Corps is required to issue public notice of these permits, as is described further in Section 6.C.8.

Nationwide General permits and **Regional General Permits** and **Programmatic General Permits.** A regional general permit (RGP) is a type of general permit that authorizes categories of activities in a specific geographic area that causes only minimal individual and cumulative environmental impacts.

- The Galveston District's regional permits are listed here:
<https://www.swg.usace.army.mil/Missions/Regulatory/Permits/Regional-General-Permits/>
- The New Orleans' District's General Permits are listed here:
<https://www.mvn.usace.army.mil/Missions/Regulatory/Permits/General-Permits/>
- A list of all regional permits across the country are listed here:
<https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit/>

None of these should be used to permit major construction related to LNG terminals. However, the Corps has in the past attempted to use a general permit to permit a fossil fuel pipeline (it since reversed course). If it appears that a project will be permitted using a general permit (this may become apparent in EIS documents available with FERC), advocates should be prepared to push back. Note also that many districts have placed regional conditions on their Nationwide Permits—i.e., additional requirements that an applicant may need to meet beyond the Guidelines or public interest review. Therefore, if permitting through a nationwide permit is proposed, an advocate should verify which district the proposed project is located in and then contact the district office to determine if the district's Nationwide Permit has any additional regional conditions. The district offices can also answer any questions regarding the terms and conditions and/or applicability of a certain general permit to a proposed activity. Some general permits do not require any notification to the Corps to use them while others may require notice to and verification from the Corps prior to use.⁷⁵³

Letters of Permission (LOP),⁷⁵⁴ as described in 33 C.F.R. 325.2(e)(1), are a type of permit issued through an abbreviated processing procedure which includes coordination with Federal and state fish and wildlife agencies, as required by the Fish and Wildlife Coordination Act, and a public interest evaluation, but without the publishing of a site-specific public notice. An LNG terminal's initial permits should not be granted via letter of permission, but subsequent activities may be permitted through a LOP.

Technically, letters of permission are a type of individual permit, but are used primarily for minor modifications to a project. For example, for projects seeking Section 10 permits, LOPs may be used when the District Engineer has concluded that the proposed work would be: 1) minor; 2) would not

⁷⁵³ See <https://openei.org/wiki/RAPID/Roadmap/14-FD-a>.

⁷⁵⁴ This description of letters of permission is taken from: U.S. Army Corps of Engineers, <https://www.swg.usace.army.mil/Missions/Regulatory/Permits/Letter-of-Permission/> (last visited Apr. 1, 2022).

have significant individual or cumulative impacts on environmental values; and 3) should encounter no appreciable opposition.

For projects subject to section 404 of the Clean Water Act, LOPs may be used only after the District Engineer: 1) consults with federal and state fish and wildlife agencies, the Regional Administrator, Environmental Protection Agency, the state water quality certifying agency and, if appropriate, the state Coastal Zone Management Agency, to develop a list of categories of activities proposed for authorization under LOP procedures; 2) issues a public notice advertising the proposed list and the LOP procedures, requesting comments and offering an opportunity for public hearing; and 3) the 401 certification has been issued or waived and, if appropriate, CZM consistency concurrence obtained or presumed either on a generic or individual basis. Note that this is not a public notice for the project, but for the LOP itself.

There are currently only two letters of permission that apply in Texas authorizing certain work to be conducted without public notice: 1) certain excavation activities that do not pose substantial adverse individual or cumulative impacts on the aquatic environment;⁷⁵⁵ and 2) activities at either certain government or utility reservoirs or activities conducted, sponsored or funded by certain federal and state agencies, including bank stabilization, beach nourishment, property protection, and sediment removal (applies nationwide).⁷⁵⁶ The New Orleans District does not publish example letters of permissions on its website, but those can be found on the Headquarters' site.⁷⁵⁷

What will the public notice say and how do I submit comments?

The public notice will specify how and when comments will be received.⁷⁵⁸ The Corps' comment period can be very short—typically 30 but sometimes only 15 days!⁷⁵⁹ As for all permits, advocates should strive to comply with these deadlines, especially in requesting hearings. Hearings must be requested during the comment period.

If additional information comes to light about the project after the end of the comment period, advocates and their counterparts should continue to submit comments even outside the deadline, as the Corps has discretion to consider them, and timely comments “expressing objections to or raising questions about the project should be acknowledged.”⁷⁶⁰ As for all permit challenges, the more comments in opposition to a project, the better, as the Corps must address all comments raised and the more likely it is that Corps decides that a public hearing is necessary! And even if the Corps' public notice and comment period only appears to relate to the project's proposed compensatory mitigation plan, advocates are advised to address all issues that are expected to be relevant to a 404

⁷⁵⁵ See U.S. Army Corps of Engineers, Galveston District, *Public Notice, Permit No. 20204*, July 7, 1995, https://www.swg.usace.army.mil/Portals/26/docs/regulatory/LOP/Galveston%20District%20LOP_Procedure%20for%20Excavation%20Activities.pdf.

⁷⁵⁶ See U.S. Army Corps of Engineers, Galveston District, *Activities at Certain Reservoirs and Federal State Sponsored Projects*, Oct. 6, 1998, https://www.swg.usace.army.mil/Portals/26/docs/regulatory/LOP/Galveston%20District%20LOP_State%20and%20Federal%20Reservoirs.pdf.

⁷⁵⁷ <https://permits.ops.usace.army.mil/orm-public> (search “Final IP” and filter by permit type = “Letters of Permission”).

⁷⁵⁸ See e.g., U.S. Army Corps of Engineers, SWG-2013-00147 *Freeport LNG June 2, 2020 Public Notice for Maintenance Dredging under § 10 and § 103*, June 2, 2020, <https://www.swg.usace.army.mil/Media/Public-Notices/Article/2205506/swg-2013-00147-freeport-lng-development-lp-freeport-harbor-ship-channel-brazori/>.

⁷⁵⁹ 33 C.F.R. § 337.1(a)(8). Note that normally the comment period is no longer than 60 days, unless the applicant requests an extension. CWA Section 404(q): *Memorandum of Agreement between EPA and Department of the Army*, Part II(4), Aug. 11, 1992, <https://www.epa.gov/cwa-404/cwa-section-404q-memorandum-agreement-between-epa-and-department-army-text>.

⁷⁶⁰ 33 C.F.R. § 337.1(d).

permit at that time, as to put the Corps on notice of issues that its final decision and analysis should consider.

In addition, an advocate should cross-file its comments about 404 issues with FERC as well, as FERC is lead agency overseeing the drafting of the EIS documents. Comments already submitted to FERC that address 404 issues could also be resubmitted during the Corps comment period. Cross-filing comments makes it clear that each relevant agency has been put on notice of the deficiencies in the application—a point that can be helpful if the permit will be litigated. As a practice pointer, note that all supporting materials should be filled in full, not just as a weblink. It may be that such supporting material can be sent via FTP, as some advocates have been directed to by their District offices. Advocates are encouraged to have these conversations with their Corps District (and other regional agency offices), as it can facilitate relationship-building in general.

Note also that federal agencies like EPA and FWS also submit comments during the Corps' public comment period. If EPA is inclined to believe that the Corps is improperly applying the 404(b)(1) Guidelines, or that there will be substantial and unacceptable impacts to “aquatic resources of national importance,” EPA should be officially notifying the Corps of its opinions at this time, either as regular comments or as comments that also invoke the 404(q) process (see Sections 6.D.1 and 6.D.2, below). (It almost certainly will have been discussing this with the Corps informally as early as during the pre-application consultation).⁷⁶¹ Thus, advocates should be coordinating with these agencies as soon as possible if there are concerns an advocate believes that an agency should independently raise with the Corps.

Finally, advocates should be aware that the arguments that can be made during litigation of an issued permit will be limited by what has been introduced into the administrative record being built during the comment period. This is one reason why it is very important to do a deep dive into all available documents describing the project (available through the applicant, agencies, or publicly available) and research as best as possible the anticipated impacts to the aquatic resources / jurisdictional resources / special aquatic sites during the comment period; identifying and filing these additional supporting documents during the comment period ensures that they can form the basis of litigation arguments down the road.

Will there be a public hearing?

Probably not, unless advocates are able to demonstrate significant public and political support for one and persuasively articulate why a public hearing is necessary for the Corps to make its decision—the Corps hardly ever grants hearing requests, despite some strong language in the law showing that hearings should be granted.

For such large projects as LNG terminals, advocates can and should request a hearing if a hearing date is not already set in the public notice. Advocates must act quickly to request one. Corps regulations state that anyone may—within the public comment period—request a public hearing.⁷⁶² The reasons for a hearing must be stated in the hearing request. If the district does not resolve the issues raised informally,⁷⁶³ the district is required to set a hearing time and place, and publish notice

⁷⁶¹ See Sections 6.D.1–6.D.3 (describing the 404(q) and 404(c) processes).

⁷⁶² 33 C.F.R. § 327.4(b)

⁷⁶³ Exactly how this would happen is not clear from the regulations, but imaginably would involve discussions with the hearing-requester, applicant, Corps, and potentially Corps Headquarters, which has discretionary power to require hearings in any case. 33 C.F.R. 327.4(c).

of the hearing⁷⁶⁴ at least 30 days before the hearing.⁷⁶⁵ The regulations state that the Corps “shall” grant requests for a hearing “unless the district engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing” and “[i]n case of doubt, a public hearing shall be held.”⁷⁶⁶ (However, this facially strong language is seldom followed.) These rules on hearings apply to both 404 and 103 permits⁷⁶⁷ and section 10 permits⁷⁶⁸ and can be found at 33 C.F.R. § 327 et seq.

In practice, the New Orleans and Galveston Districts very rarely grant public hearings on permits.⁷⁶⁹ One project in the New Orleans District—the Bayou Bridge Pipeline Project⁷⁷⁰—was granted a public hearing only after thousands of signatures were collected calling for the hearing.⁷⁷¹ And even this hearing was not granted solely by the Corps, but was overseen jointly with LDEQ, as part of its responsibility to issue a 401 Water Quality Certification.⁷⁷² The Bayou Bridge Project was a 162-mile proposed crude oil pipeline that stretched across 11 Louisiana parishes and the Atchafalaya Basin—in other words, a large-scale, high-impact project, yet one that was not automatically set for a hearing.⁷⁷³ The take-away from this is that the Corps strongly resists holding hearings!

And the paucity of hearings suggest that advocates will need to mobilize many supporters to leverage sufficient pressure on the Corps to have a hearing granted for an LNG project. Such an effort is likely to fail without the guidance and leadership of community members and organizations, organizers, and other advocates with experience using hearings (in front of any agency) to elevate public awareness of the project and leverage political pressure on the Corps.

What happens at a public hearing if it is granted?

Public hearings for any permit can be excellent vehicles for elevating public awareness of the project and galvanizing opposition to a project. It is also an opportunity to highlight the substantive legal arguments already submitted in comments.

Advocates should be aware that at the public hearing, oral and written statements are accepted and made part of the record. Witnesses are allowed (although no cross-examination is permitted, making a witness similar to a general member of the public presenting comments and opinions about the

⁷⁶⁴ 33 C.F.R. 327.4(c).

⁷⁶⁵ 33 C.F.R. § 327.11(a). The notice of a hearing should point to the DEIS or EA as well. 33 C.F.R. § 327.11(b).

⁷⁶⁶ 33 C.F.R. § 327.4(b)-(c).

⁷⁶⁷ 33 C.F.R. § 327.1.

⁷⁶⁸ 33 C.F.R. § 327.3(b).

⁷⁶⁹ A search of the New Orleans and Galveston Division websites and Facebook pages revealed no hearings for LNG projects, and very few for any other individual project. For example, in the Galveston District News Releases, only one release was tagged as “Public Hearing.” <https://www.swg.usace.army.mil/Media/News-Releases/Tag/9026/public-hearing/> (for an interbasin transfer project in 2012 that would require an EIS).

⁷⁷⁰ See U.S. Army Corps of Engineers, New Orleans District, *Bayou Bridge Pipeline Permit*, <https://www.mvn.usace.army.mil/bayoubridge/> (last visited Apr. 1, 2022) (summarizing the Bayou Bridge Pipeline project with links to the public notices, environmental assessment, and permit issued). See also Live Stream of the Bayou Bridge Pipeline Public Hearing, Jan. 12, 2017, <https://www.facebook.com/usacenola/videos/1293034477406490> (overseen by two hearing officers, one from LDEQ and the other from the Corps).

⁷⁷¹ See Claire Taylor, *Bayou Bridge Pipeline permit hearing Jan. 12*, Lafayette Daily Advertiser, Dec. 6, 2016, <https://www.theadvertiser.com/story/news/2016/12/06/bayou-bridge-pipeline-permit-hearing-jan-12/94995022/>.

⁷⁷² Initial Live Stream of the Bayou Bridge Pipeline Public Hearing, Jan. 12, 2017, <https://www.facebook.com/usacenola/videos/1293034477406490> (overseen by two hearing officers, one from LDEQ and the other from the Corps). See also Later Live Stream of the Bayou Bridge Pipeline Public Hearing, Jan. 12, 2017, <https://www.facebook.com/usacenola/videos/1293166377393300> (a later portion of the hearing, after a break at 10 pm).

There is no livestream of the other portions of the hearing that were found. Full transcript can be found here: <https://edms.deq.louisiana.gov/app/doc/view?doc=10492731>.

⁷⁷³ See Taylor, *supra* note 771.

project). But the presiding Corps officer “shall afford participants a reasonable opportunity for rebuttal”—meaning applicants, their consultants, and supporters can speak in favor of the facility as well.⁷⁷⁴ Advocates can use the opportunity to prepare and submit charts and other data that they may want to have included in the administrative record that would bolster an appeal, and which they did not have an opportunity to submit earlier in written comments.⁷⁷⁵ All “substantial and valid” issues raised in the hearing must be addressed in the Corps decision on the permit—another reason to have as many people with a diversity of concerns testify as possible.⁷⁷⁶

Note that another comment period of not less than 10 days is allowed after the close of the public hearing for the submission of written comments.⁷⁷⁷ Use this time to follow up on arguments raised by the applicant, or statements made by the Corps that can be rebutted—comments submitted in this period will be included in the administrative record.

What information should be publicly available that I can use on in pulling together comments?

The Corps and FERC are required to make certain information publicly available. For example, the Clean Water Act (the legal authority for the 404 permit) states that the permit application shall be made available to the public, but in practice that can be difficult to locate. However, because Louisiana requires that projects in the coastal zone file a joint application with the Louisiana Department of Natural Resources (LDNR) (which is responsible for issuing a coastal use permit), the project’s Corps application and supporting documents are readily available through the LDNR website.⁷⁷⁸ Note that if an application is truly not available to the public during the public comment period, this should be raised as a deficiency in the public comments.

In addition, Corps regulations state that the administrative record of the permit action includes:

*the request or requests for the hearing and any data or material submitted in justification thereof, materials submitted in opposition to or in support of the proposed action, the hearing transcript, and such other material as may be relevant or pertinent to the subject matter of the hearing. The administrative record shall be available for public inspection with the exception of material exempt from disclosure under the Freedom of Information Act.*⁷⁷⁹

The Corps is also required to make certain factual determinations about the potential short-term and long-term effects of the proposed action (see Sections 6.B.3–6.B.4 on the 404(b)(1) Guidelines).⁷⁸⁰ These determinations likely will not be available during the comment period, but should be made available in time for litigation in the form of a Record of Decision, which should be made part of the Administrative Record and published eventually on FERC’s docket. Note that these documents may be very hard to find, even if you have requested notification of the permit decision. It is good practice to FOIA the Corps and contact the Corps project manager / other known personnel directly as soon as you hear that the permit has issued so that you can obtain the permit and any supporting

⁷⁷⁴ 33 C.F.R. § 327.8(b).

⁷⁷⁵ See generally 33 C.F.R. § 327.8 (“Conduct of Hearings”).

⁷⁷⁶ 33 C.F.R. § 327.9.

⁷⁷⁷ 33 C.F.R. § 327.8(g).

⁷⁷⁸ Louisiana Office of Coastal Management, *Search for Coastal Use Permit*, <http://reports.dnr.state.la.us/sonris/cmdPermit.jsp?sid=PROD>.

⁷⁷⁹ 33 C.F.R. § 327.5(b).

⁷⁸⁰ 40 C.F.R. § 230.11 (required factual determinations).

documents as soon as possible.⁷⁸¹ This is another reason to regularly check the Corps' permits page⁷⁸² and LDNR's website⁷⁸³ for any insight and updates as to the availability of these documents.

With the permit and ROD in hand, review the Guidelines and compare these with the Corps' documentation and any EIS that has issued to ensure that the Corps has addressed each required issue. This includes, as discussed above: the three step avoid / minimize / mitigate process, individual and cumulative effects on the aquatic ecosystem and organisms; cumulative and secondary effects on the aquatic ecosystem; information about the fill disposal site and impacts to water bottoms; likelihood and effects of introduced contaminants, increased turbidity, suspended solids, water circulation, fluctuation, and salinity.⁷⁸⁴ Many of these analyses must be made considering the effects both individually and cumulatively.

Do not rely on the Corps documents alone. The Corps will often rely on FERC's NEPA analysis instead of conducting its own, so scrutinize the DEIS and FEIS documents available on FERC's docket (and often available publicly with a simple web search). It may be that the environmental review for any other Corps approvals (e.g., section 408 permitting) may be specifically referenced or implicitly incorporated into the section 404 environmental review. If any analysis looks incomplete, cross-check which other permissions the applicant may have needed—the missing information may be in those documents. (The Corps project manager may be a good resource to help track this down.) Also look at what the applicant has said publicly to investors, local governments, other agencies, and the public at large. Advocates can start looking for this information by simply Googling industry news articles about the project,⁷⁸⁵ going to the applicant's website about the project, Googling the applicant's corporate and shareholder presentations, and looking at the applicant's SEC filings. Inconsistencies should be brought to the Corps attention quickly by submitting the underlying material during the comment period or at a hearing. This can become fodder for litigating the permit later.⁷⁸⁶

FOIA should always be considered as a tool in challenging LNG terminals. Indeed, sometime a FOIA request is necessary to even find out if the permit has been issued. In theory, well-timed FOIA requests for information from the Corps should yield additional information about the permitting process, such as correspondence between the Corps and applicant.⁷⁸⁷ But the Corps has not always been willing to cooperate with FOIA requests, and in 2019 a court found that the Corps had been

⁷⁸¹ And if for whatever reason the record of decision hasn't been disclosed prior to litigation, request this from the other side (e.g., the applicant and/or the Corps) as courtesy as soon as possible.

⁷⁸² U.S. Army Corps of Engineers, *USACE Jurisdictional Determinations and Permit Decisions*, <https://permits.ops.usace.army.mil/orm-public#> (look at both Pending IP and Final IP tabs). In some cases, permits have simply been removed from the "pending" tab without being added as "final"; this is a clue that the permit may have issued!

⁷⁸³ State of Louisiana Department of Natural Resources, *Coastal Use Permit Status Report & Notice of Permit Decisions*, <http://www.dnr.louisiana.gov/index.cfm/page/1153>. Another source for information is LDNR's data portal "Sonris": <https://www.sonris.com/>.

⁷⁸⁴ 40 C.F.R. § 230.11 (required factual determinations).

⁷⁸⁵ Such industry websites include rigzone.com, hydrocarbons-technology.com, nsenergybusiness.com, spglobal.com, naturalgasintel.com.

⁷⁸⁶ Sierra Club used this strategy to uncover discrepancies in what an applicant told an agency versus its shareholders about the Rio Grande LNG terminal's capacity by simply going to the applicant's website about the Rio Grande LNG facility and reading shareholder presentations. Although 404 litigation is still on-going, it is a good example of the type of research advocates should be pursuing. See Sierra Club, *New Disclosure Reveals Rio Grande LNG Misled Regulators About Capacity of Proposed Fracked Gas Export Terminal*, May 30, 2019, <https://www.sierraclub.org/press-releases/2019/05/new-disclosure-reveals-rio-grande-lng-misled-regulators-about-capacity>.

⁷⁸⁷ For example, 33 C.F.R. § 325.2(a)(3) directs the Corps to give the applicant the opportunity to respond to public comments if necessary for the Corps to make a public interest determination. The applicant's response is likely in writing, and would not exist before the close of the comment period, so the public would not otherwise have access to it.

following an unlawful practice of improperly withholding documents related to pending Section 404 permits, including application files.⁷⁸⁸

But just because the Corps has failed to comply with FOIA in the past does not mean that advocates should not FOIA the Corps for information. Indeed, this is all the more reason to do so! In addition, advocates should consider renewing their FOIA requests throughout the permitting process to make sure that all relevant documents have been disclosed. A legal practitioner experienced with FOIA can help navigate this process.

Where do I find guidance on how to FOIA the Corps?

The Corps Headquarters provides general information on how to submit a FOIA request here: <https://www.usace.army.mil/FOIA.aspx>.⁷⁸⁹ Advocates must submit FOIA requests to the specific District responsible for the project.

The Corps provides a sample FOIA request online;⁷⁹⁰ and other examples can be found with a quick web search online.⁷⁹¹ Advocates should add additional detail to the Corps' sample request to specifically describe the type of information requested and consider making a broad request for "all correspondence" at the same time as narrower requests for certain document, to increase the odds that the Corps will produce at least some documents quickly.

Although there are no up-front costs for to make a FOIA request, the Corps will charge certain fees (which can be hundreds or thousands of dollars) to categories of requesters or when the request is voluminous and time-consuming. An advocate should include a request for fee waiver in the FOIA request (see example FOIA requests and fee waivers in the Appendix⁷⁹²), as advocates challenging LNG terminals are requesting information to increase the public understanding of the operations of the Corps—a category of request that should qualify for a fee waiver. (The Corps states that fee waivers are limited to situations in which a requester can show that disclosure of the requested information is in the public interest because it is likely to contribute significantly to public understanding of the operations and activities of the government and is not primarily in the commercial interest of the requester.)⁷⁹³ But if the Corps refuses to grant a fee waiver, most advocates should expect to be charged for search time in excess of two hours, and duplication costs of pages in excess of 100 pages. A list of the Corps current fees is found here: <https://www.usace.army.mil/FOIA/Fees/>.

The Corps states that upon receipt of a FOIA request, the Corps "ordinarily" will send a letter to the requester acknowledging the request and advise if any additional information is required before

⁷⁸⁸ Britain Eakin, *Federal Judge Slams Army Corps Over Permit Secrecy*, Courthouse News Service, Mar. 29, 2021, <https://www.courthousenews.com/federal-judge-slams-army-corps-over-permit-secrecy/> (describing the rulings in *Missouri Coalition for the Environment v. U.S. Army Corps of Engineers*, Civ. Action No. 18-663 (TJK) (D.D.C. 2019) <https://www.courthousenews.com/wp-content/uploads/2019/03/army-corps-permit.pdf>).

⁷⁸⁹ The FOIA regulations applicable to the Corps are codified at 32 C.F.R. § 286.

⁷⁹⁰ U.S. Army Corps of Engineers, *Sample Request Letter*, <https://www.usace.army.mil/FOIA/Sample-Request-Letter/>

⁷⁹¹ See also Columbia Riverkeeper's FOIA Request to Corps re Morrow Pacific Coal Export, Nov. 2, 2012,

<https://www.columbiariverkeeper.org/sites/default/files/2013/08/2012.11.2-FOIA-to-Corps-re-Morrow-Pacific.pdf>.

⁷⁹² Specifically, Atchafalaya Basinkeeper FOIA requests and correspondence made on May 30, 2017 (App. 37); April 22, 2019 (App. 38); and December 10, 2020 (App. 39).

⁷⁹³ U.S. Army Corps of Engineers, *FOIA Fees*, <https://www.usace.army.mil/FOIA/Fees/> (last visited Apr. 1, 2022). The Corps encourages requesters to state the maximum amount of fees they are willing to pay for the information—if no fee information is included, the Corps assumes that the requester is willing to pay all appropriate fees of up to \$250.

processing the request.⁷⁹⁴ The Corps is directed to fulfill FOIA requests within twenty days of the correct office receiving the request. But the Corps' 2014 annual FOIA report (the latest one available on the Headquarters' website⁷⁹⁵) shows that only what it classifies as "simple" requests are fulfilled in this time.⁷⁹⁶ It's possible that the Corps would classify requests about LNG terminal permitting as "complex"—at which point the average turnaround time has been 47 days.⁷⁹⁷ Note that this delay is longer than the typical comment period—another reason to monitor the FERC docket and AJDs to get early notice that the Corps has started the permitting process. Be aware that it has been the experience of some advocates that the Corps will frequently ask for or unilaterally extend the timeframe for its response—if the extension would be beyond the comment period and the FOIA documents are necessary to draft comments, also ask the Corps to extend the comment period. But be prepared to file comments even without the FOIA documents!

If a FOIA request is taking longer than twenty days, advocates should contact the local FOIA Requester Service Center for the FOIA Office to which the request was submitted.⁷⁹⁸

- For coastal Louisiana, that would be the New Orleans District: foia-mvn@usace.army.mil (Phone: 504-862-2264 Fax: 504-862-2827).
- For coastal Texas, that would be the Galveston District: foia-swg@usace.army.mil (409-766-3193 and 409-766-3165).

Note that the Corps can withhold certain information from disclosure if it falls within a certain FOIA exemption category; if it does so, it should cite the specific exemption to explain its decision to withhold documents.⁷⁹⁹ The Corps has abused these exemptions in the past and has been reprimanded for withholding certain application materials under what's known as "the deliberative process privilege" to non-agency (i.e., applicant) materials.⁸⁰⁰ The practical implication of these past abuses is that advocates who do not receive the materials they have requested should promptly ask the Corps why materials have been withheld, and under what exemption. If an advocate suspects that the Corps is improperly withholding information, the advocate should consult a lawyer versed in FOIA to determine next steps.

⁷⁹⁴ U.S. Army Corps of Engineers, *Freedom of Information Act Page*, <https://www.usace.army.mil/FOIA.aspx> (last visited Mar. 31, 2022).

⁷⁹⁵ U.S. Army Corps of Engineers, *Annual Reports*, <https://www.usace.army.mil/FOIA/Annual-Reports/>.

⁷⁹⁶ Simple requests are those that the Corps anticipates will involve a small volume of material or which will be able to be processed relatively quickly. Complex requests typically seek a high volume of material or require additional steps to process such as the need to search for records in multiple locations. See FOIA Online, *Glossary*, <https://foiaonline.gov/foiaonline/action/public/glossary> (last visited Mar. 31, 2022).

⁷⁹⁷ U.S. Army Corps of Engineers, *Annual Freedom of Information Act Report* (2014), 6, https://www.usace.army.mil/Portals/2/docs/FOIA-FY14_Annual_Report.pdf.

⁷⁹⁸ See <https://www.usace.army.mil/FOIA/Offices/> (which includes a list of FOIA office contact information for all Districts).

⁷⁹⁹ 5 U.S.C. § 552(b) (describing categories of information that are exempted from FOIA disclosure).

⁸⁰⁰ Eakin, *supra* note 788.

Some advocates challenging other types of industrial projects rely on a monthly FOIA request to their District to ensure that no information, project, or step in the permitting process is missed. This could be a good strategy for advocates that expect to challenge many LNG facilities in the same Corps District: to send monthly FOIA requests to the Corps for all documents relating to LNG permitting activities in the District.

PRACTICE TIP: Submitting and following up on FOIA requests

It can be helpful to submit separate FOIA requests at the same time, one broad and one (or more) narrow. The broad request could seek “all correspondence between [APPLICANT] and the Corps related to the pre-application and permitting process for [THE PROJECT, WITH THE CORPS PROJECT NUMBER], in which [APPLICANT] is seeking permits under [LIST PERMITS SOUGHT.” The narrow request(s) would ask for specific documents needed (e.g., permit application documents; application modifications, if any; compensatory mitigation plan, the permit decision, etc.). The FOIA office is more likely to provide a quicker response for a narrow, specific requests, while broader more comprehensive requests may be assigned to a “complex” track which will likely translate to greater wait time while the Corps gathers and reviews responsive records.

In addition, while waiting for a FOIA response, be mindful to:

- keep track of each request;
- ensure receipt confirmation and assignment of a tracking number so you can follow up with the FOIA officers for status updates; and
- familiarize yourself with the timeframes of the FOIA office for timelines and the FOIA office’s duties in corresponding with requestors regarding findings, exceptions or exemptions claimed (e.g., the deliberative process privilege exemption for pre-decisional documents), records produced, and rights to administrative appeals.

It is also good to think about what records you expect to receive in response to your requests, such that when records are produced, you can respond with specific documents that were not included that you think should have been, and why.

Examples of FOIA requests and follow-up correspondence that Atchafalaya Basinkeeper has sent the Corps’ New Orleans District are attached in the Appendix. See May 30, 2017 (Appendix 37); April 22, 2019 (Appendix 38); and December 10, 2020 (Appendix 39).

Examples of other FOIA requests and follow-up correspondence that Atchafalaya Basinkeeper has sent to other agencies (e.g., in search of correspondence the agency had with the Corps, or otherwise) are in the Appendix, namely: FOIA correspondence with **EPA** on May 3, 2019 (Appendix 40); March 30, 2017 (Appendix 41); April 4, 2017 (Appendix 42); FOIA correspondence with **PHMSA** (Appendix 43); FOIA correspondence with **Louisiana Department of Wildlife and Fisheries** (Appendix 44).

Where can I find examples of comments filed against LNG terminals?

Sierra Club and others filed Section 404 and Section 10 comments in their challenge to the proposed Annova LNG export plant to be located in Brownsville, Texas. Copies of the comments are found here:

- January 29, 2019:
<https://www.sierraclub.org/sites/www.sierraclub.org/files/blog/DOW%20et%20al%20Annova%20LNG%20404%20application%20comments%20FINAL.pdf> (Also in Appendix 46).

In addition, Appendix 45 includes an informal outline of issues that might arise (similar to those described in Sections 6.B.8 and 6.B.9 above), along with citations in support. Be sure to add site-specific facts that support the issues raised, and if you have the support of a legal practitioner at this stage, they should doublecheck that the legal citations to past cases and other laws are binding in the project's jurisdiction.

Where can I find an example of 404 comments filed in a pipeline challenge?

Although there is not perfect overlap between the issues that arise in pipeline and terminal challenges, advocates who want to stop LNG terminals should also review example comments challenging all aspects of LNG projects. Because pipelines are long and not water-dependent, they may be more vulnerable to a 404 challenge.

- Appalachian Mountain Advocates and others filed Section 10 and Section 404 comments in their fight against the Mountain Valley Pipeline project in Virginia and West Virginia (filed May 28, 2021). A copy of those comments is attached at Appendix 51.
- Atchafalaya Basinkeeper, Gulf Restoration Network and others filed Section 404 comments in their fight against the Bayou Bridge Pipeline project in the Louisiana Gulf Coast region (filed Nov. 2, 2016 (Appendix 48); Jan. 30, 2017 (Appendix 49), and Jan. 31, 2017 (Appendix 47)).

Note that these comments are illustrative and comprehensive, but they may include arguments that ultimately did not succeed in subsequent litigation. Once a challenge moves to the litigation stage, it is important to consult an experienced attorney to understand which arguments have the best chance of success and should be presented to a reviewing court.

What role do other agencies play in the Corps permitting process?

The Clean Water Act (CWA) provides EPA with discretionary authority to oversee the Corps' implementation of permit requirements. Two CWA sections advocates should know about are 404(q) (how EPA raises concerns with the Corps' permitting process) and 404(c) (how EPA can veto a proposed permit if the 404(q) process fails to resolve its concerns). U.S. Fish and Wildlife Service also has 404(q) powers to raise concerns with the Corps' permit. EPA's and FWS's roles should be understood by all advocates challenging LNG terminals and is discussed below.

How can EPA's discretionary 404(q) role be leveraged in a 404, 103 or 10 challenge?

Section 404(q) of the Clean Water Act directs the Corps to coordinate with the other federal agencies involved in 404 permits. This includes EPA. The Corps and EPA wrote down their 404(q) coordination duties in a 1992 memorandum that is still valid today.⁸⁰¹ Under this 404(q) memo, EPA

⁸⁰¹ CWA Section 404(q) Memorandum of Agreement Between EPA and the Department of the Army, Aug. 11, 1992, <https://www.epa.gov/cwa-404/cwa-section-404q-memorandum-agreement-between-epa-and-department-army-text>.

not only has the right to comment on pending Corps applications, but the EPA Administrator in each EPA Region (for Louisiana and Texas, this would be the Administrator of Region 6⁸⁰²) has the ability to “elevate” individual permits that it believes will have substantial and unacceptable impacts to “aquatic resources of national importance” (ARNI)⁸⁰³ and ensure that in those cases the 404(b)(1) Guidelines have been followed.⁸⁰⁴ “Elevation” takes decision-making away from the Corps’ District office and forces additional review at the Washington headquarters of both agencies.⁸⁰⁵ In this process, EPA can point out specific failures of the Corps to follow the regulations governing 404 permits—for example, EPA may also direct the Corps to consider specific water quality concerns that the Corps might otherwise try to skirt by relying on the state’s water quality certification process.⁸⁰⁶ And if EPA and the Corps cannot resolve their differences over the proposed permit, EPA may veto the permit once the Corps issues it.⁸⁰⁷

Under EPA and the Corps’ 404(q) Memorandum, EPA’s elevation of concerns it has about impacts to aquatic resources of national importance is highly regimented, and EPA may lose the opportunity to elevate concerns if each step in the 404(q) Memorandum is not precisely followed. For LNG projects in Texas or Louisiana (*i.e.*, those in EPA Region 6) the process is as follows (advocate tips in italics):⁸⁰⁸

1. The Region 6 Administrator must submit a written letter during the public’s notice and comment period⁸⁰⁹ for the Corps permit stating that in the opinion of EPA the project may result in substantial and unacceptable impacts to aquatic resources of national importance.

Advocate tip: contact EPA Region 6⁸¹⁰ as soon as it is clear that an applicant will need a Corps permit (e.g., when the applicant files its FERC application for a certification) to ensure that EPA plans on timely commenting on the Corps application during the comment period and begin

⁸⁰² As of December 2021, this is Regional Administrator Earthea Nance. EPA Press Office, *EPA Announces Appointments of Regional Administrators for Regions 6, 7, and 9*, Dec. 9, 2021, <https://www.epa.gov/newsreleases/epa-announces-appointments-regional-administrators-regions-6-7-and-9>.

⁸⁰³ There is no regulatory or statutory definition of ARNI. In practice, EPA has discretion to determine what constitutes an ARNI. Little direct guidance as to the scope of this term exists beyond the EPA’s factsheet on the Section 404(q) dispute resolution process (<https://www.epa.gov/sites/default/files/2015-05/documents/404q.pdf>), although it can be inferred that special aquatic sites generally might fall into the definition of ARNI, if of national importance:

An Aquatic Resource of National Importance (ARNI) is a resource based threshold used to determine whether a dispute between EPA and the Corps regarding individual permit cases are eligible for elevation under the 1992 MOA. Factors used in identifying ARNIs include: economic importance of the aquatic resource, rarity or uniqueness, and/or importance of the aquatic resource to the protection, maintenance, or enhancement of the quality of the Nation’s waters. Past 404(q) elevations have identified the Chesapeake Bay, vernal pools, bottomland hardwoods, sub-alpine fens, bogs, and coastal marshes as ARNIs.

⁸⁰⁴ EPA-Corps MOU, *supra* note 801, Part IV(1). In 2002 EPA reaffirmed that only individual permits that have issues implicating aquatic resources of national importance (“ARNI”) may be elevated. See *Designation of Aquatic Resources of National Importance Under Clean Water Act Section 404(q) Memorandum of Agreement with the Army Corps of Engineers*, <https://www.epa.gov/sites/default/files/2015-03/documents/404qarnimemo2002.pdf> (“[C]ases that would meet the resource threshold would be those cases that would cause resource damage similar in magnitude to cases evaluated under Section 404(c) of the CWA. Elaboration on potential resources of concern under Section 404(c) can be found in our regulations at 40 C.F.R. 230 and 231”).

⁸⁰⁵ 404(q) EPA-Corps MOU, Part II.

⁸⁰⁶ The Corps has a history of not thoroughly examining water quality impacts, especially in its public interest review. But if EPA objects to that behavior, the Corps must respond. And of course, EPA can point out the Corps’ failures even without invoking EPA’s elevation authority. That is, even if EPA decides not to use its 404(q) authorities, its direction to the Corps to consider water quality aspects must be taken seriously by the Corps. See 33 C.F.R. 320.4(d).

⁸⁰⁷ See Section 6.D.3, describing § 404(c).

⁸⁰⁸ Note that the EPA and Corps may try to resolve issues via meetings and informal letters each step of the way.

⁸⁰⁹ EPA is empowered to request an extension of this comment period, up to a maximum comment period of 60 days. EPA-Corps MOU, *supra* note 801, Part II(4).

⁸¹⁰ EPA publishes a list of the 404 permitting liaisons at EPA here: <https://www.epa.gov/cwa-404/cwa-section-404-epa-regional-contacts>. Currently, the official Region 6 contact (which includes Louisiana and Texas) is Maria L. Martinez (Email: Martinez.Maria@epa.gov; Phone: 214-665-2230) in Dallas, Texas.

presenting the potential concerns that might arise during the Corps permitting process, along with supporting material to justify. If you wait until the Corps' public notice issues, there will not be enough time to work with EPA before its comments are due.

2. Within 25 calendar days after the end of the comment period, the Region 6 Administrator must submit a more detailed letter explaining why in EPA's opinion the discharge will have a substantial and unacceptable impact on aquatic resources of national importance, and why the permit must be modified, denied, or conditioned, which EPA's reasoning;

Advocate tip: Concerns sent to EPA early in the process should contain all of the details and supporting information that EPA would need to include in this letter.

3. If the Corps District Engineer believes that the permitting process should still proceed (either after modifications to the permit or as is), the Corps forwards the draft permit and a Notice of Intent to Proceed to EPA;⁸¹¹

Advocate tip: this draft permit will likely not be publicly available, so maintain contact with EPA during the Corps' internal review process to keep tabs on when EPA might receive a draft permit; it is likely that the Corps and EPA will be conducting informal discussions during this time to resolve their difference. Work with contacts at the Corps to help address concerns, if possible.

4. Within 15 calendar days of receipt of Region 6's receipt of the Corps' draft permit and notice of intent to proceed, Region 6 must notify the Corps District Engineer of its intent to elevate review of the issues to a higher level, namely the Assistant Secretary of the Army for Civil Works.

Advocate tip: Mobilize public support for the EPA's decision to elevate a permit. The Corps and EPA will likely be working together informally to resolve their differences and may be taking cues from public and political opinion.

If this step is reached, the District Engineer then elevates the matter accordingly, and the entire permit is held in abeyance (i.e., paused—no construction may begin) while review is on-going.⁸¹² Ultimately, if EPA's concerns are not addressed, it has the power to veto the permit entirely, although this is exceedingly rare (see Section 6.D.3, discussing 404(c)). But the 404(q) process has effects, even if EPA does not veto the permit: the practical implications of encouraging EPA's involvement is that EPA provides a second pair of eyes on the permitting process and can help ensure that all appropriate regulations are followed and necessary conditions are added before a permit issues.

EPA's power here is not just theoretical⁸¹³—for example, in 2005, EPA Region 6 requested that a project located in the Galveston District be elevated for headquarters review.⁸¹⁴ After EPA Headquarters became involved, it was able to resolve—apparently through informal discussions—the

⁸¹¹ Note that the public does not ordinarily have access to this draft permit; it may not even be obtainable with a FOIA request.

⁸¹² EPA-Corps MOU, *supra* note 801, Part IV(3)(e).

⁸¹³ See EPA, *Chronology of CWA Section 404(q) Actions*, <https://www.epa.gov/cwa-404/chronology-cwa-section-404q-actions> (last visited Mar. 31, 2022) (listing projects in which EPA Regional Administrators requested elevated review of the Corps' proposed permits).

⁸¹⁴ EPA, *Request for Review of Galveston District Permit #22516, Fort Bend County Levee Improvement District 15*, May 10, 2005, <https://www.epa.gov/sites/default/files/2015-05/documents/lid15-elevation-request.pdf>.

disagreement with the District and the issued permit contained a more robust mitigation plan than the Corps originally proposed.⁸¹⁵ EPA also expressed broad concerns that the Corps had a pattern of misapplying CWA section 404(b)(1) Guidelines, in particular, the Corps’ “characterization of an appropriate project purpose and the evaluation of project impacts, including consideration of all indirect, secondary, and cumulative adverse effects to waters of the United States.”⁸¹⁶ It is unclear the exact nature of these concerns, and unclear whether EPA concerns have been since assuaged—advocates challenging terminals in Texas and Louisiana may consider reaching out to Region 6 personnel to investigate.

What if EPA comments but doesn’t follow the full 404(q) process?

Sometimes EPA comments on the Corps’ process without clearly following the 404(q) steps above (e.g., without invoking concerns for “aquatic resources of national importance” or without following through on subsequent steps). Even though they may not fit into the 404(q) process, these comments still can force the Corps to take a harder look at the project it is permitting. If the Corps does not respond to EPA’s comments in a persuasive way and fails to convincingly address the issues EPA raises, its failure to do so may persuade a court to reject the permit once it issues.⁸¹⁷

An example of strong comments that EPA might issue can be found in the gas pipeline context, in EPA Region 3’s recently issued comments critical of the Corps’ analysis of the impacts of the Mountain Valley Pipeline.⁸¹⁸ In that letter, EPA “identified a number of substantial concerns with the project as currently proposed, including”:

- “whether all feasible avoidance and minimization measures have been undertaken,
- deficient characterization of the aquatic resources to be impacted,
- insufficient assessment of secondary and cumulative impacts and potential for significant degradation, and
- the proposed mitigation”⁸¹⁹

Because of these concerns (which stemmed from even just the temporary impacts to watersheds), EPA recommended modifications to the permit application and project, and recommended that the permit not be issued until its modifications and its recommended special conditions had been addressed and incorporated into the project. In the Mountain Valley Pipeline case, EPA specifically requested that the applicant be required to:

- update its alternatives analysis in light of certain changes to the project;
- explain why certain construction methods were selected;
- redo its analysis for what is practicable in avoiding or minimizing impacts to aquatic resources;

⁸¹⁵ EPA, *Region 6 Request for Review of Proposed Section 404 Permit Levee Improvement District 15, Fort Bend County, Texas*, June 13, 2005, <https://www.epa.gov/sites/default/files/2015-05/documents/lid15-response.pdf>.

⁸¹⁶ *Supra*. EPA went on to explain how a mischaracterization of project purpose could contaminate the three step avoid / minimize / mitigate process: “I am particularly concerned because the characterization of project purpose is critical to an effective analysis of potential off-site alternatives and to the consideration of opportunities to minimize on-site impacts.”

⁸¹⁷ And more so than if the same concerns were raised by an advocacy group.

⁸¹⁸ See App. 50 (EPA’s May 27, 2021 comments to the Corps on the Mountain Valley Pipeline project (LRH-2015-00592-GBR, LRP-2015-798, NAO-2015-0898)). Even if these comments do not fit the strict requirements of the 404(q) memo’s steps, they are quite valuable as the Corps must address EPA’s concerns.

⁸¹⁹ App. 50, 1.

- conduct a baseline assessment on the aquatic resources that will be impacted;
- adopt a restoration plan with post-construction monitoring and adaptive management; and
- reassess the compensatory mitigation for the project.⁸²⁰

If the Corps fails to persuasively address each of these issues (even if not raised through the 404(q) process), it does so at its peril, and the permit is in jeopardy of being overturned by a reviewing court.

In sum, advocates are encouraged to consider whether the regional EPA administration is open to looking critically at the Corps' analysis of LNG terminals. EPA's involvement can result in conditions attached to the permit that reduce the project's overall environmental impact. To be successful in leveraging EPA's oversight of the Corps, advocates should familiarize themselves with the 404(b)(1) Guidelines and the 404(q) procedures, as the deadlines for and format of EPA's involvement is very specific if the goal is to formally elevate a permit. Advocates need a solid understanding of the Guidelines and 404(q) especially because they may need to help coach EPA to frame its critique in light of the project's "substantial and unacceptable impacts aquatic resources of national importance."⁸²¹ And although EPA's intervention in the Corps decision-making process may delay the permit's issuance and require more environmental review, it may be necessary where an applicant fails to conduct its due diligence and propose a project whose impacts are unacceptable under the 404(b)(1) Guidelines and the Corps' public interest review—and if the impacts are too great, EPA's intervention in the Corps' process may be necessary to make that clear.⁸²²

What is the 404(c) EPA veto, and is it useful for LNG terminals?

Section 404(c) specifically authorizes EPA to restrict, prohibit, deny, or withdraw the use of an area as a disposal site for dredged or fill material if the discharge will have unacceptable adverse effects on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas.⁸²³ EPA's section 404(c) veto can be used if elevation through the 404(q) process fails to resolve EPA's concerns with the Corps' proposed permit.

However, EPA's veto power under Section 404(c) has been so seldom used (only 13 times since 1972) that it is unlikely to be exercised to stop an LNG terminal.⁸²⁴ Despite this, an advocate should be aware of the broad power that this section grants EPA, as the threat of a veto gives outsized weight to comments that the EPA makes on Corps permits.

EPA's flow-chart of the steps in its veto process is shown below, and summarized as follows:⁸²⁵

⁸²⁰ App. 50, 4-9 (technical comments).

⁸²¹ EPA-Corps MOU, *supra* note 801, Part IV(3)(a).

⁸²² For an example of how EPA's intervention ultimately resulted in a project's death, see App. 52, EPA Region 3's March 23, 2009 comments on the proposed 404 permit for the Reylas Surface Mine. In those comments EPA even threatened to exercise its rarely used 404(c) veto power.

⁸²³ 33 U.S.C. § 1344 (Clean Water Act Section 404(c)).

⁸²⁴ EPA, *Clean Water Act Section 404(c) "Veto Authority"* (2016), <https://www.epa.gov/sites/default/files/2016-03/documents/404c.pdf>. This number may increase to 14 in the coming months—as of December 2021, EPA has reinitiated its 404(c) veto process for the Pebble Mine project in Bristol Bay, Alaska. See Taryn Kiekow Heimer, *EPA Sets Schedule for Bristol Bay Protections*, NRDC, Nov. 18, 2021, <https://www.nrdc.org/experts/taryn-kiekow-heimer/epa-sets-schedule-bristol-bay-protections>. For the latest information, see EPA's Bristol Bay website: <https://www.epa.gov/bristolbay>.

⁸²⁵ EPA, *Veto Authority*, *supra* note 824.

Section 404(c) “Veto” Process

Intent to Issue Notice of Proposed Determination

The EPA Regional Administrator notifies the Corps and the project proponent of his or her intention to issue a public notice of a Proposed Determination to withdraw, prohibit, deny, or restrict the specification of a defined area for discharge of dredged or fill material.



Notice of Proposed Determination

If the Regional Administrator is not satisfied that no unacceptable adverse effects will occur, a notice of the Proposed Determination is published in the *Federal Register*. The Proposed Determination begins the process of exploring whether unacceptable adverse effects will occur.



Public Comment Period

(generally between 30 and 60 days)

A public hearing is usually held during the comment period.



Recommended Determination or Withdrawal

(within 30 days of the public hearing or, if no public hearing is held, within 15 days of the end of the comment period)

The Regional Administrator prepares a Recommended Determination to withdraw, prohibit, deny, or restrict the specification of a defined area for disposing of dredged or fill material and forwards it along with the administrative record to the EPA Assistant Administrator for Water. Alternatively, he or she withdraws the Proposed Determination.



Corrective Action

(within 30 days of receipt of the Recommended Determination)

The EPA Assistant Administrator contacts the Corps and project proponent and provides them 15 days to take corrective action to prevent unacceptable adverse effects.



Final Determination

(within 60 days of receipt of the Recommended Determination)

The EPA Assistant Administrator affirms, modifies, or rescinds the Recommended Determination and publishes notice of the Final Determination in the *Federal Register*.

Under Section 404(c), the EPA Regional Administrator first notifies the Corps and applicant of its intent to issue a public notice of a Proposed Determination to withdraw, prohibit, deny, or restrict the specification of a defined area for discharge of dredged or fill material. Then, the notice of Proposed Determination is published in the Federal Register, and EPA begins the public process of determining whether unacceptable adverse effects indeed will occur. The public comment period typically lasts between 30 and 60 days; a public hearing is often held as well. Shortly thereafter, the Regional Administrator prepares a Recommended Determination or withdraws the Proposed Determination. If the Recommended Determination is issued (because of anticipated unacceptable adverse effects), the EPA Assistant Administrator contacts the Corps and applicant, who then have 15 days to take action to prevent such effects. Lastly, the EPA Assistant Administrator affirms, modifies, or rescinds the Recommended Determination and publishes notice of the Final Determination in the Federal Register.

The most recent of the 13 404(c) vetoes was issued by EPA Region 3, in 2011, regarding a proposed surface mine.⁸²⁶ These vetoes have typically been reserved for very large projects with a lot of public and political opposition to them. It is unclear if the construction of LNG terminals—especially in industry-friendly Texas and Louisiana—would raise sufficient concerns at EPA for EPA to follow through on a veto. For more information about 404(c) vetoes and the strategy involved in 2011 veto, Earthjustice and Appalachian Mountain Advocates were both involved in that challenge.⁸²⁷

What other agencies consult on Corps permits, and what leverage can they exert?

The Corps is required to consult with Fish and Wildlife Service and the National Marine Fisheries Services when resources under their jurisdiction are impacted (e.g., when endangered species or fisheries are impacted), and with the state wildlife agency,⁸²⁸ which is also invited to provide comments to the Corps on a 404 permit.⁸²⁹ The Corps is required to “give full consideration to the views of those agencies on fish and wildlife matters in deciding on the issuance, denial, or conditioning of individual or general permits.”⁸³⁰ The U.S. Fish and Wildlife Service in particular is statutorily required to comment on 404 Army Corps permits and authorizations with regard to its opinion on expected impacts on fisheries resources, habitat, wildlife refuges, and endangered species.⁸³¹

Like the EPA, the U.S. Fish and Wildlife Service also has the ability to elevate specific cases or policy issues as described in its 404(q) memorandum with the Corps.⁸³² At its core, elevation means that to

⁸²⁶ This number may increase to 14 in the coming months—as of December 2021, EPA has reinitiated its 404(c) veto process for the Pebble Mine project in Bristol Bay, Alaska. See Heimer, *Bristol Bay Protections*, *supra* note 824. For the latest information, see EPA’s Bristol Bay website: <https://www.epa.gov/bristolbay>.

⁸²⁷ Liz Judge, *Federal Court Upholds EPA Veto of Spruce Mountaintop Removal Mine*, Earthjustice, Sept. 30, 2014, <https://earthjustice.org/news/press/2014/federal-court-upholds-epa-veto-of-spruce-mountaintop-removal-mine>.

⁸²⁸ 33 C.F.R. § 320.3(e) (describing the requirements of the Fish and Wildlife Coordination Act).

⁸²⁹ 16 U.S.C. § 460 *et seq.*

⁸³⁰ 33 C.F.R. § 320.4(c).

⁸³¹ 33 U.S.C. § 1344(m). The duty for FWS to file comments is mandatory. Comments must be received no later than 90 days after FWS receives notice of a permit application. Note that a disagreement between FWS and the Corps will not necessarily stop the permit from issuing. It can however be evidence used in litigation to undercut the Corps’ arguments. See *Shrimpers v. Army Corps of Eng’rs*, No. 20-60281 (5th Cir. July 23, 2020) Pet.’s Br. At 59-61 (noting how both EPA and FWS disagreed with the Corps’ decisions to the amount of mitigation the Corps should be requiring for pipeline-caused impacts), http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200723_docket-20-60281- brief.pdf.

⁸³² CWA Section 404(q) Memorandum of Agreement Between the Department of the Interior and the Department of the Army, Dec. 1992, https://www.fws.gov/sites/default/files/documents/memorandum-of-agreement-on-clean-water-act-section-404q_0.pdf.

resolve disputes between the regional director of FWS and the District engineer, the agencies' headquarters become involved to resolve the dispute. The steps in the FWS's 404(q) process are basically identical to those in the EPA's 404(q) process (See Sections 6.D.1 & 6.D.2, EPA-Corps 404(q) process). And like EPA's 404(q) powers, FWS can only elevate individual permits in "cases that involve aquatic resources of national importance."⁸³³ As discussed previously, this term is not defined in the memorandum or regulations, but generally has corresponded to special aquatic sites that the commenting agency (here, FWS) believes are of national importance. Note that unlike EPA's 404(c) veto powers, FWS has no such powers, meaning that the Corps can ultimately issue the permit even if FWS disagrees.

It is unclear whether any advocates have yet successfully leveraged FWS involvement to elevate Corps proceedings for Headquarters review⁸³⁴ (much less if there have been any elevations in LNG permitting decisions), but it is a possible avenue that could be explored. Even FWS comments that do not follow the 404(q) format can be helpful in that the Corps is required to address these comments, and if it fails to adequately resolve the issues, its failure may be persuasive grounds for a court to overturn an issued permit.

Beyond its duty to consult with FWS, the Corps' regulations also encourage it to consult other agencies that may be knowledgeable in certain areas relevant to the individual permit at issue. The public notice should indicate which other agencies are involved, but an advocate should keep an eye out for other agencies that should be consulted based on expected impacts from the facility.

Does 404 also require a separate 401 certification?

Yes. Like any federal permit that the facility will need, impacts authorized under Section 404 of the CWA also require state water quality certification under Section 401 of the CWA. For more information on 401 permits see Chapter 7.

What happens after the Corps makes a permitting decision?

After the permit issues—the most likely outcome in Texas and Louisiana—the next step an advocate will likely have an active role in is litigation in a federal circuit court (namely, in the Fifth Circuit for Texas and Louisiana terminals). Note that it may be necessary to FOIA the Corps, ask the Corps project manager and any other relevant personnel directly, and even call the District's head of regulatory to know that a permit has issued!⁸³⁵ And at this point, it's highly advisable to get advice from experienced litigators before proceeding.

If a 404 permit issues, do I need to administratively appeal before going to federal court?

No. The Corps would not consider an advocate challenging the permit to be an "affected party" with a right to administratively appeal the Corps' decision on a permit.⁸³⁶ "Affected parties" are narrowly

⁸³³ 404(q) Memo Interior/Army, *supra*, 7.

⁸³⁴ Unlike EPA, the FWS does not appear to publish online a list of cases that it has elevated for review.

⁸³⁵ And to obtain the record of decision for the permit.

⁸³⁶ The statute governing appeals allows appeals only by an "affected party," which is defined to be: "a permit applicant, landowner, a lease, easement or option holder (*i.e.*, an individual who has an identifiable and substantial legal interest in the property) who has received an approved JD, permit denial, or has declined a proffered individual permit." 33 C.F.R. § 331.2. Recently, the state of Alaska attempted to administratively appeal a denial of a 404 permit, arguing that it fit within the definition of "affected person" with a "substantial and identifiable legal interest in the property," even though it was not the party that had requested the permit. The Corps rejected this interpretation and also denied the State's request to participate in the appeals process based on any legal interest it might have in the property. Referring to its regulations, the Corps stated that other "non-affected" parties like the State would be invited to participate only if the administrative record needed

limited to those who have “received an approved JD, permit denial, or has declined a proffered individual permit.”⁸³⁷ Instead, advocates must wait until any administrative appeal has concluded or the time for appeal has passed (60 days after the Corps acts and issues the applicant a Notice of Appeal Process form).⁸³⁸ Only after the conclusion of any administrative process would the advocate proceed to federal court. It may not be apparent whether an appeal is taking place—an advocate may need to contact the Corps District directly or submit a FOIA request.

Is it likely that an applicant will appeal the Corps’ decision?

Probably not. First of all, the most likely outcome is that the Corps will issue a permit, so the only point of an appeal by an applicant would be if the permit had conditions attached to it that the applicant really disagreed with. A review of the appeals posted on the Galveston and New Orleans Districts’ websites shows that for previous LNG terminal projects in Texas and Louisiana, only one LNG applicant has appealed a Corps decision—an approved jurisdictional determination made for Cheniere LNG.⁸³⁹ It’s not entirely clear why more LNG applicants have not appealed Corps decisions, but likely because these permits are not being denied, and any conditions imposed have been manageable for the applicant (particularly in light of the historical lack of enforcement of these conditions by certain Districts, including the New Orleans District).⁸⁴⁰ However, it is possible that as more 404 challenges are successfully brought, an applicant frustrated with the Corps’ proffered permit may choose to appeal (of course, a denial can be appealed, but denials are exceedingly rare).

What roles do advocates play in the administrative appeals process?

Participation in the appeals process is typically limited to the applicant, the applicant’s agent, and Corps staff.⁸⁴¹ The Corps can invite “any” other appropriate parties to participate for purposes of “clarify[ing] elements of the administrative record.”⁸⁴² In theory, this could include an advocate—especially if the advocate is an adjacent property owner who could help clarify the record (a category of parties expressly contemplated in the regulations as potentially helpful), but in practice this is very unlikely. So an advocate’s official role in the administrative review is basically to wait it out; however, advocates might track the process with FOIA requests and contact with the district office personnel, and could use this time to continue with media campaigns and to exert political pressure wherever

clarification by those other parties. See Ltr from the Corps’ Pacific Ocean Division to Alaska Assistant Atty General re Pebble Mine Request for Appeal Denial, Feb. 24, 2021,

https://www.alaskajournal.com/sites/alaskajournal.com/files/state_of_alaska_rfa_-_response_letter_signed_24feb21.pdf.

⁸³⁷ 33 C.F.R. § 331.2.

⁸³⁸ U.S. Army Corps of Engineers, *Determining the Timeliness of Requests for Appeal (RFA)*, Regulatory Guidance Letter, Jan. 25, 2006, https://www.mvd.usace.army.mil/Portals/52/docs/regulatory/app_g_rgl06-01_.pdf.

⁸³⁹ U.S. Army Corps of Engineers, Southwestern Division, *Table of Appeals*, <https://www.swd.usace.army.mil/Missions/Civil-Works/Regulatory/Regulatory-Appeals/Table-of-Appeals/> (last visited Mar. 31, 2022 (indicating that in February of 2004, Cheniere LNG did attempt to appeal a jurisdictional determination, but that it was not accepted).

⁸⁴⁰ See e.g., U.S. Army Corps of Engineers, Mississippi Valley Division, *MVD Table of Appeals*, <https://www.mvd.usace.army.mil/Missions/Regulatory/Appealed-Decisions/> (last visited Mar. 31, 2022) (indicating that the last time a New Orleans permit denial was appealed was in 2010 (and not from an LNG project)); see also, U.S. Army Corps of Engineers, Southwestern Division, *Table of Appeals*, <https://www.swd.usace.army.mil/Missions/Civil-Works/Regulatory/Regulatory-Appeals/Table-of-Appeals/> (last visited Mar. 31, 2022) (indicating that in February of 2004, Cheniere LNG did attempt to appeal a jurisdictional determination, but that it was not accepted)

⁸⁴¹ 33 C.F.R. § 331.7(e)(3).

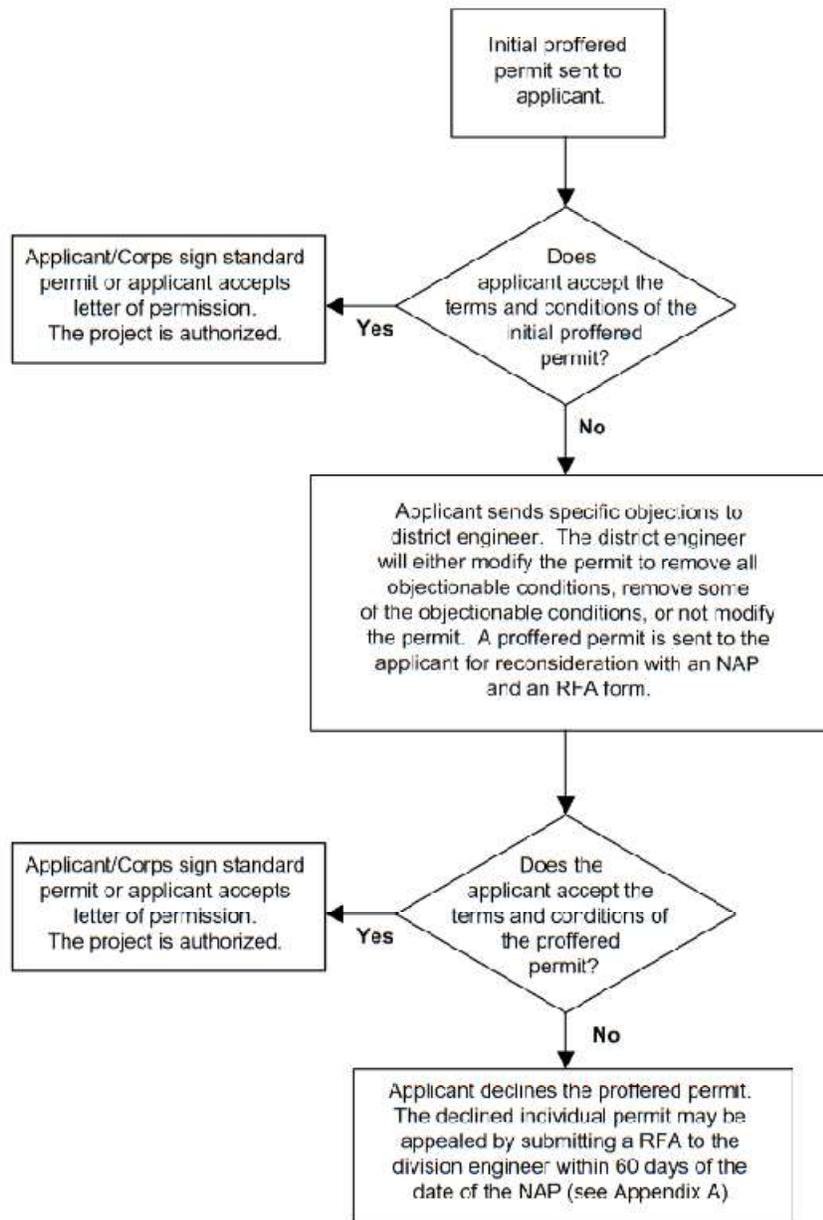
⁸⁴² 33 C.F.R. § 331.7(e)(3) (examples in the rules of other parties that the Corps may invite are: “technical experts consulted by the Corps, adjacent property owners or Federal or state agency personnel”). In 2017 in the New Orleans District in particular, the Corps reported not having a single boat that it could use to investigate violations of permit conditions in the Atchafalaya Basin, which for most of the year is necessary for the enforcement of permit conditions. App. 47 at 4-5 (Comments on Proposed Bayou Bridge Pipeline, MVN-2015-02295-WII, WQC 160921-03, filed Jan. 31, 2017).

possible. It would also be a great opportunity to request and receive the Record of Decision via FOIA to share with legal advocates to prepare a petition to challenge the permit.

What is the process for an applicant that chooses to appeal a proffered permit?

Below is a flowchart of an applicant’s options upon being presented with a proffered permit.⁸⁴³ Note that even before the official appeals process, the Corps is directed to work with the applicant to resolve the objections that an applicant has to the proffered permit.

Applicant Options with Initial Proffered Permit



⁸⁴³ U.S. Army Corps of Engineers, *Applicant Options with Initial Proffered Permit*, <https://www.mvd.usace.army.mil/Portals/52/docs/regulatory/app-b.pdf> (last visited Mar. 31, 2022). The administrative appeals process is codified at 33 C.F.R. § 331 et seq. and certain Divisions summarize the appeals process on their websites in more

As mentioned previously, only someone who “received an approved JD, permit denial, or has declined a proffered individual permit” can administratively appeal a Corps decision.⁸⁴⁴ LNG applicants conceivably might appeal the 404 or section 10 permit decisions,⁸⁴⁵ or the underlying approved jurisdictional determination for the site.⁸⁴⁶

The appellant has 60 days from the Corps final decision on the initial permit application⁸⁴⁷ to file a request for appeal (RFA).⁸⁴⁸ If the RFA has merit, the Corps reconsiders its decision under a substantial evidence (as to facts) and arbitrary/capricious or abuse of discretion standard of review and decides whether the decision should be upheld or remanded.⁸⁴⁹ The entire process typically takes a maximum of 150 days.⁸⁵⁰ Appeal decisions are not precedential,⁸⁵¹ but some are published on Corps websites.⁸⁵²

Depending on the outcome of the appeal, only advocates who participated initially may receive notice of the altered decision, or—if the change is substantial—a new public notice should issue.⁸⁵³ This is another reason to be involved in the permitting process from the beginning.

Once a decision is made on an appealed action, the Corps issues a permit as described in 33 C.F.R. § 331.10.⁸⁵⁴ At this point, advocates may then appeal directly to the Federal Circuit where the project is located.⁸⁵⁵ Although the statute of limitations for claims under 15 U.S.C. § 717r(d)(1) is long—four or six years—an advocate is likely going to want to bring a challenge quickly to prevent construction of the project before the permit challenge is heard.

One consideration as to timing, of course, is the process of other permit challenges being brought against the proposed facility, and the resources on hand to bring those challenges. It is best to consult with an experienced litigator to understand when to challenge an issued permit or a

accessible (yet non-binding) language. See e.g., <https://www.mvd.usace.army.mil/Missions/Regulatory/Appeals-Process/>. Another resource on the topic of administrative and judicial review of Corps permits is found here: <http://www2.law.mercer.edu/elaw/wetlands/chapter%2010%20word.pdf>.

⁸⁴⁴ See 33 C.F.R. § 331.2 (“Affected party means a permit applicant, landowner, a lease, easement or option holder (i.e., an individual who has an identifiable and substantial legal interest in the property) who has received an approved JD, permit denial, or has declined a proffered individual permit.”).

⁸⁴⁵ For example, applicants occasionally appeal proffered permits if they disagree with the conditions imposed or the scope of work authorized. See e.g. *Remand of Proffered Permit to New Orleans District*, MVN-2005-2099-WW, Nov. 16, 2008, <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll5/id/1331> (appeal granted because the New Orleans District failed to adequately consider the project’s purpose in limiting the scope of the permit). This was not an LNG applicant.

⁸⁴⁶ For example, if the Corps has decided via an approved jurisdictional determination that their land contains more aquatic resources that are within the Corps’ jurisdiction (such as waterbodies, wetlands, or navigable waters) than the applicant believes is proper. Recall that more jurisdictional waters means the applicant will need to conduct more compensatory mitigation elsewhere.

⁸⁴⁷ 33 C.F.R. § 331.10 (explaining what constitutes the final Corps decision for appeal purposes based on the different possible scenarios).

⁸⁴⁸ U.S. Army Corps of Engineers, *Determining the Timeliness of Requests for Appeal (RFA)*, Regulatory Guidance Letter, Jan. 25, 2006, https://www.mvd.usace.army.mil/Portals/52/docs/regulatory/app_g_rgl06-01_.pdf.

⁸⁴⁹ 33 C.F.R. § 331.9(b).

⁸⁵⁰ Appendix A. <https://www.mvd.usace.army.mil/Portals/52/docs/regulatory/app-a.pdf>. A site visit may delay this to a maximum of twelve months from receipt of an acceptable RFA. 33 C.F.R. § 331.8.

⁸⁵¹ 33 C.F.R. 331.7(g).

⁸⁵² The Mississippi Valley Division, which covers the Gulf Coast of Louisiana (the New Orleans Division) publishes a list of appealed decisions and outcomes, <https://www.mvd.usace.army.mil/Missions/Regulatory/Appealed-Decisions/>; the Southwestern Division, which covers the Galveston District, publishes a similar table <https://www.swd.usace.army.mil/Missions/Civil-Works/Regulatory/Regulatory-Appeals/Table-of-Appeals/>.

⁸⁵³ 33 C.F.R. § 331.10(b).

⁸⁵⁴ 33 C.F.R. § 331.10 (explaining what constitutes the final Corps decision on an appealed permit or jurisdictional determination based on the different possible scenarios).

⁸⁵⁵ 15 U.S.C. § 717r(d)(1).

jurisdictional determination in court. A granted 404 permit is not suspended simply because it is being judicially reviewed. The Corps may decide to *voluntarily* suspend a permit if it decides that it should reconsider the permit in light of new circumstances.⁸⁵⁶ Federal courts have in the past granted preliminary injunctions to suspend the Corps permits during the course of litigation, however the court must conclude that there is irreparable harm and a likelihood of advocate success before it will stop progress on the project while the litigation goes forward.⁸⁵⁷ Note that showing irreparable harm from the permit issuing is very fact-specific and can be difficult—an experienced attorney can help navigate these issues.

What are best practices for litigating 404 permits?

If a 404 permit issues, an advocate can sue the Corps under the Administrative Procedures Act (APA), 5 U.S.C. § 706(2). The Corps' actions are reviewed under the APA standard of review: whether the Corps' actions, findings, or conclusions were “arbitrary, capricious, an abuse of discretion, or not otherwise in accordance with law.”⁸⁵⁸ The Natural Gas Act, 15 U.S.C. § 717r(d)(1), gives jurisdiction to the Circuit in which the cause of action arose: in Louisiana and Texas, this is the Fifth Circuit, generally regarded to be a difficult court to litigate environmental cases in.⁸⁵⁹

Note that an issue may be appealable even if you didn't raise it during the permitting process.⁸⁶⁰ For example, if an issue was brought to the Corps' attention during the comment period by another commentor or an agency, you may raise it in litigation even if you originally overlooked the issue during the administrative proceedings,⁸⁶¹ although best practice is to raise issues during comments yourself: both to avoid wasting funds litigating whether the issue was raised⁸⁶² and to ensure that all

LITIGATION TIP: READ ALL COMMENTS!

Courts have allowed parties to raise *any* issues that were brought to the Corps' attention, even if raised by a different party or an agency. It's a good practice to read all comments as they are filed, but especially before litigation—others may have identified problems that you overlooked!

⁸⁵⁶ While the first judicial challenge to Rio Grande LNG's permits was being briefed, the Corps suspended its issued permit in light of changes the applicant had proposed to the terminal and pipeline. See *Shrimpers v. Corps*, No. 20-60281 (Brief for Respondent) at 1 (5th Cir. Aug. 13, 2020), http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200813_docket-20-60281-brief.pdf. The Corps reissued the permit in September 2021 and as of December 2021 advocates have refiled their challenge in the Fifth Circuit.

⁸⁵⁷ Sometimes even the threat of a preliminary injunction is enough for the applicant (now permittee) to agree to not move forward with construction without an official court order suspending the permit.

⁸⁵⁸ *Sierra Club v. U.S. Army Corps of Eng'rs*, 909 F.3d 635, 643 (4th Cir. 2018) (quoting 5 U.S.C. § 706(2)(A)).

⁸⁵⁹ The Bayou Bridge litigation opinions can be helpful to review, even though the Fifth Circuit largely sided with the Corps: *Atchafalaya Basinkeeper v. U.S. Army Corps of Eng'rs*, 894 F.3d 692 (5th Cir. 2018) <https://casetext.com/case/basinkeeper-v-us-army-corps-of-engrs-5>. Also keep in mind that the Fifth Circuit has held that there are no citizen suit protections for 404 permits once one has issued, making an APA challenge one of the few hooks for advocates. See *Atchafalaya Basinkeeper v. Chustz*, 682 F.3d 356, 357 (5th Cir. 2012) <https://casetext.com/case/atchafalaya-basinkeeper-v-chustz>.

⁸⁶⁰ For example, if the issue did not arise until after the comment period closed, if it was obvious, or if someone else raised it. See *Sierra Club, Inc. v. Bostick*, 787 F.3d 1043, 1048-51 (10th Cir. 2015) (discussing “obviousness” and “otherwise brought to the agency's attention”) <https://casetext.com/case/sierra-club-inc-v-bostick-1>.

⁸⁶¹ “If an issue was brought to the attention of the Corps during the public comment period, that issue may be challenged in judicial proceedings, by the original objector or any another person.” *Sierra Club, Inc. v. Bostick*, No. CIV-12-742-R, 14 (W.D. Okla. Dec. 30, 2013) (aff'd, 787 F.3d 1043 (10th Cir. 2015)) <https://casetext.com/case/sierra-club-8>.

⁸⁶² For example, a court might decide that the issue raised during comments isn't the same as the one now litigated. See e.g., *St. Johns Riverkeeper, Inc. v. U.S. Army Corps of Eng'rs*, 462 F. Supp. 3d 1256, 1297 (M.D. Fla. 2020) (rejecting advocate's argument that litigation should be allowed on an issue because although “both [third-party] comments notify the Corps of the need to consider how an increase in storm surge caused by the proposed Project could impact flooding, neither comment suggests that this analysis requires the Corps to analyze how and to what extent prior deepening projects have already increased storm surge”).

supporting documents on that topic have been entered into the administrative record! (The administrative record limits what you can raise.)

Once an advocate reaches the litigation stage, it's imperative to seek advice from legal practitioners who have brought such challenges before, who can help guide the decision of what to present. A few hours of input on the front end can help avoid otherwise unanticipated bad consequences, both for the case at hand and for future challenges to Corps decisions.

Where can I find examples of legal briefing on 404 permits issued to LNG terminals?

Community groups and Sierra Club are litigating the 404 permit issued to the Texas Rio Grande LNG facility and its Rio Bravo pipeline in the Fifth Circuit. After briefing began, the Court stayed the case in light of changes to the facility that caused the Corps to suspend and reconsider the issued permit, which was reissued in September 2021. Advocates have since initiated a challenge to the reissued permit, but as of December 2021, no briefing has been filed—the following is the briefing on the first permit:

- Petitioner's opening (App. 53): http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200723_docket-20-60281- brief.pdf
- Respondent's brief (App. 54): http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200813_docket-20-60281- brief.pdf
- Petitioner's reply brief (App. 55): http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2020/20200901_docket-20-60281- reply.pdf

What should I know about the Section 10 Rivers and Harbors Permit for activities in navigable waters?

The Army Corps often combines its review of Rivers & Harbors Act Section 10 permits with the related Clean Water Act Section 404 permit. EPA and FWS can comment on both permits and is empowered by the 404(q) memoranda to weigh in on the Corps' process. The timing and method of participation is identical to the process for a 404 permit; the major difference is that the 404(b)(1) Guidelines do not apply to section 10 permits.

I'm new to Section 10 permits, what are these permits and the Rivers & Harbors Act in general about?

The Rivers & Harbors Act regulates the discharge of refuse into navigable waters, the excavation or filling of navigable waters, and the building of structures in navigable waters.⁸⁶³ This includes any construction, excavation or deposition of materials in navigable waters, or affecting the course, condition, location or capacity of navigable waters. Construction can include, for examples, piers, wharfs, breakwaters, bulkheads, jetties, weirs or transmission lines.

⁸⁶³ 33 U.S.C. § 403 (Section 10 of the Act). And if the project additionally involves the alteration, occupation or use of a Corps civil works project—such as federally-maintained navigation channels or federal levees—permission is also required under the Rivers and Harbors Act, § 14, based on a determination that the activity will not be injurious to the public interest or affect the Corps project's ability to meet its authorized purpose. 33 U.S.C. § 408.

It applies to waters that are subject to the ebb and flow of the tide or are presently used, or have been used in the past, or may be susceptible to use in the future to transport interstate or foreign commerce.⁸⁶⁴ It's expected that most LNG terminals would need such a permit.

Section 10 of the Rivers & Harbors Act contains three separate clauses that prohibit certain types of obstructions of navigable waters:

- The first clause of section 10 flatly prohibits the creation of “any obstruction not affirmatively authorized by Congress, to the navigable capacity of any water of the United States.”
- The second clause prohibits the building of any structure in navigable waters without the Corps' permission.
- The third clause makes it unlawful to alter or modify “the course, location, condition, or capacity” of any navigable water of the United States without authorization from the Corps.⁸⁶⁵

The Corps has broad authority to grant or deny a permit and to determine what constitutes an “obstruction.” The threshold for what is an obstruction has been low. The types of structures deemed obstructions by the Corps include docks, houseboats, sunken vessels, and riprap (material used to reinforce shorelines). Courts will generally not question the Corps' decision as long as the Corps is regulating navigable waters.

Thus, while advocates are encouraged to timely participate in a Section 10 challenge and review the site-specific facts closely with Section 10 in mind, there are likely more fruitful avenues available for challenging an LNG terminal, including challenging the 404 permit.

What Section 10 regulations guide the Corps' decision-making process?

Pursuant to the Corps' Clean Water Act and Rivers and Harbors Act Section 10 implementing regulations, the “decision whether to issue a permit will be based upon an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest.”⁸⁶⁶ This is the same “public interest” review framework used in 404 permitting. The public interest review is intended to be broad, capturing all relevant issues that could impact the environment, human health and natural resources. The Corps states:

Evaluation of the probable impact which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonable may be expected to accrue from the proposal must be balanced against its reasonable foreseeable detriments. The decision whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur, are therefore determined by the outcome of this general balancing process. That decision should reflect the national concern for both protection and utilization of important resources.

⁸⁶⁴ 33 C.F.R. § 322.2(a).

⁸⁶⁵ 33 U.S.C. § 403.

⁸⁶⁶ 33 C.F.R. § 320.4(a)(1).

Navigable waters are waters that are affected by the ebb and flow of tides and/or might be used for interstate or foreign commerce (either past, present or future). As a practical matter, this includes most flowing water: the ocean, shipping channels, rivers, and streams.

33 C.F.R. § 320.4(a)(1). The same non-exhaustive list of 21 factors that may be relevant for each individual project must be weighed for a Section 10 permit:

“conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.”

33 C.F.R. § 320.4(a)(1). Consistent with the mandate that the Corps consider “all those factors that become relevant,” this non-exhaustive list of factors includes issues beyond those directly related to the impacts of in-water work. *Id.* An advocate could use this language to argue that the public interest analysis must consider all impacts from a project—not just those that result directly from permitted activities. The Corps must complete a public interest review before it can issue a section 10 permit.

I want to file a Section 10 challenge, where can I find example comments?

The Corps often analyzes Section 10 permits at the same time as Section 404 permits, and thus the public notice that the Corps issues will be for both permits.⁸⁶⁷ An advocate should be able to compose and submit its comments on all Corps permits together—the public notice should state the permits on which comment is sought. For examples of comments, see Section 6.C.13 (404 comments on terminals).

⁸⁶⁷ See e.g., U.S. Army Corps of Engineers, *Public Notice on Permit Application No. SWG-2015-00114*. Galveston District, Sept. 19, 2021, https://www.swg.usace.army.mil/Portals/26/docs/regulatory/PN%20Sept/PN_201500114.pdf?ver=2019-09-19-142915-063 (public notice for the 404 and section 10 permits for the Rio Grande LNG project and associated Rio Bravo pipeline, summarizing the compensatory mitigation project, the Corps’ review process, and the responsibilities of other agencies); see also U.S. Army Corps of Engineers, *Draft Compensatory Wetland Mitigation Plan for the Rio Grande LNG and Rio Bravo Pipeline*, Sept. 11, 2019, https://www.swg.usace.army.mil/Portals/26/docs/regulatory/PN%20Sept/DraftCMP_201500114.pdf?ver=2019-09-19-143149-297.



Chapter 7

401 CERTIFICATION

CHAPTER SEVEN: CLEAN WATER ACT SECTION 401 STATE WATER QUALITY CERTIFICATIONS

Overview

What is a Section 401 Water Quality Certification?

Clean Water Act (CWA) Section 401 provides states and tribes with a powerful tool to protect the quality of their waters from adverse impacts resulting from federally licensed or permitted projects.

Specifically, Section 401 of the Clean Water Act lets states enforce their water quality standards, a floor for acceptable water quality, and other requirements of state law to ensure that federally licensed projects are consistent with the state’s or tribe’s goals for a healthy environment. Any applicant for a federal license or permit—such as a FERC license (see Chapter 4), Clean Water Act § 404 permit (see Chapter 6), section 10 Rivers and Harbors Act permit (see Chapter 6 Section F), or federal NPDES⁸⁶⁸ permit (not covered in this guide; usually delegated to the states so not a “federal” permit anyway)—seeking to conduct activity that may result in a discharge into the state’s inland waters or territorial seas, **must** obtain a Clean Water Act § 401 “Water Quality Certification” (401 WQC) or waiver from the state or tribe with authority over the proposed project site.⁸⁶⁹ (Whether a DOE license also requires a certification or waiver is discussed in Section 7.D.1) In this way, the state’s power to protect its waters and communities is preserved.

The State (or tribal authority if relevant),⁸⁷⁰ has the direct authority to **grant, deny, condition or waive** its approval of these licenses and permits. If a state fails to act on a Section 401 application in a timely manner, it will have **waived** its authority under the Clean Water Act, and the project may seek federal permits without a Section 401 certification.⁸⁷¹ (Section 7.B.7 discusses waiver, which can create uncertainty and cascading problems for applicants.)

CAUTION

Of all of the certifications and permits covered in this guide, the Clean Water Act section 401 water quality certifications are the most *in flux* as of January 2022.

Before challenging a 401 certification, make sure to refer to the latest rules; this guide focuses on past experience and the Clean Water Act statute itself, which is not expected to change.

EPA’s new rules are expected in 2023!

In the meantime, as of Dec. 2021, EPA has provided additional guidance as to the status quo for Section 401:

<https://www.epa.gov/cwa-401/qa-2020-rule-vacatur>.

⁸⁶⁸ National Pollutant Discharge Elimination System permit.

⁸⁶⁹ See 33 U.S.C. § 1341 (can be accessed for free here: <https://www.law.cornell.edu/uscode/text/33/1341>).

⁸⁷⁰ If EPA has not delegated Clean Water Act authority to a tribe, EPA itself will make the Clean Water Act Section 401 certification for lands controlled by the tribe. Most locations for LNG terminals will just involve state actors; references to the state in this chapter should be understood to include tribal authorities or EPA where relevant.

⁸⁷¹ 33 U.S.C. § 1341(a)(1).

If the state **denies** the application for a 401 Water Quality Certification, the federal agency cannot issue the permit or license.⁸⁷² If the state chooses to **condition** its approval, then the federal agency can either accept and incorporate those conditions into the federal permit or deny the permit.⁸⁷³

Thus, through Section 401 certifications, states could prevent or modify proposed LNG projects located onshore or near shore that may affect the achievement or maintenance of their water quality goals. The efficacy of challenging an applicant's 401 WQC is highly state-dependent but in all cases a challenge can help raise public and political awareness of a project and its flaws.

What is in flux about the 401 WQC rules and why does it matter?

The rules implementing Clean Water Act section 401 are in flux.⁸⁷⁴ This makes it difficult to predict the best avenues for advocate involvement. However, section 401 itself is unlikely to be amended by an act of Congress any time soon—and EPA has already hinted the direction it will take in updating the implementing rules—meaning that understanding history of section 401 and the longstanding federal rules is still helpful:

The Clean Water Act (with section 401 included) was made into law by Congress in 1972. Section 401 describes the broad contours of rights and responsibilities that the states, tribes, federal government and private actors have in policing water quality, but a lot of the substance of those powers was left to EPA to decide how to implement. EPA originally simply used the rules it had adopted in a similar context one year earlier (“the 1971 rules,” codified at 40 C.F.R. Part 121) as a framework for state’s implementation of section 401. EPA continued to use these rules for almost half a century—until, in 2020, EPA replaced them with a new set of rules (“the 2020 rules”).

The 2020 rules were challenged in court as soon as they were finalized, and in October 2021, a court held that they should be vacated. This made the 1971 rules operational again. But even before the court vacated the 2020 rules, EPA announced that it intended to rethink them—and to issue new rules in 2023 that are not simply a return to the 1971 scheme.⁸⁷⁵ These rules are addressed in more detail in Section 7.B.3.

Although EPA has given some hints on the new rule’s scope, has solicited one round of public comments already, and has published a set of questions & answers about the interim scheme,⁸⁷⁶ the legal landscape of 401 law will continue to be unsettled until at least the new round of rules is finalized.

⁸⁷² 33 U.S.C. § 1341(a).

⁸⁷³ 40 C.F.R. § 124.55(a). The Clean Water Act allows a state granting a § 401 certification to set requirements necessary to ensure that the project complies with both federal Clean Water Act requirements and “any other appropriate requirement of State law.” 33 U.S.C. § 1341(d).

⁸⁷⁴ There is a bill in Congress to amend section 401 but it is not expected to pass. See “S. 1761 — 117th Congress: Water Quality Certification Improvement Act of 2021,” GovTrack. <https://www.govtrack.us/congress/bills/117/s1761> (predicting a 3% chance of being enacted into law).

⁸⁷⁵ EPA, *Notice of Intention to Reconsider and Revise the Clean Water Act Section 401 Certification Rule*, 86 Fed. Reg. 29,541, 42 (June 2, 2021) (“Reconsideration of 401 Rule Notice”), <https://www.federalregister.gov/documents/2021/06/02/2021-11513/notice-of-intention-to-reconsider-and-revise-the-clean-water-act-section-401-certification-rule> (“EPA does not intend to replace the 401 Certification Rule with the 1971 regulation.”).

⁸⁷⁶ EPA, *Clean Water Act Section 401 Water Quality Certification Questions and Answers on the 2020 Rule Vacatur*, Dec. 17, 2021, <https://www.epa.gov/system/files/documents/2021-12/questions-and-answers-document-on-the-2020-cwa-section-401-certification-rule-vacatur-12-17-21-508.pdf>.

Why challenge a 401 WQC?

No matter what the new rules say, there are two main benefits that will remain and that come from paying attention to and challenging 401 WQCs:

- The addition of a state actor to check federal action. The 401 WQC requirement allows the state to protect its water quality when federal permitting agencies fail or refuse to address the unique environmental concerns at each site. Advocates who are finding it difficult to convince federal regulators of their environmental concerns may find state regulators more understanding, and more likely to scrutinize potential projects and ensure that neighboring communities and the environment are protected by adding necessary conditions to a permit, or by stopping bad projects entirely by declining to certify the project.
- Broader availability of conditions on permits. Section 401 authorizes states to include conditions on its certifications. These conditions then must become conditions on the federal permit.⁸⁷⁷ These conditions can include “effluent limitations and other limitations, and monitoring requirements’ that are necessary to assure that the applicant for a federal license or permit will comply with applicable provisions of CWA Sections 301, 302, 306, and 307, and with ‘any other appropriate requirement of State law.’”⁸⁷⁸ The final phrase “any other appropriate requirement of State law” gives states substantial power to condition permits—if states are so inclined to protect their citizens and environment.

Of course, successful 401 WQC advocacy requires a state regulator willing to protect human health and the environment—which is not always present at the same level of enthusiasm in all states. In addition, although some issues that can be raised about the certification process do not require an in-depth knowledge of the water quality standards in place near the proposed site, because of the highly technical and site-specific nature of water quality standards, there can be a significant barrier to entry for the typical commentor in raising technical concerns. A water quality expert is recommended if funds allow. Regardless, participating can help educate those that are still reticent, raise public awareness, and motivate public and political scrutiny of a project.

Who issues 401 WQCs?

Section 401 authorizes the state or tribe with jurisdiction over the location of the proposed discharge to issue 401 WQCs. If no state or tribe has jurisdiction, EPA steps in. For almost all LNG projects, the state (acting through a state agency) will be the relevant decisionmaker.



In Louisiana this is the **Louisiana Department of Environmental Quality** (LDEQ), whose 401 certification powers are most often triggered by Corps permits.⁸⁷⁹ Louisiana’s regulations on 401 certifications can be found at LAC

⁸⁷⁷ 33 U.S.C. § 1341(d).

⁸⁷⁸ Reconsideration of 401 Rule Notice, 86 Fed. Reg. 29,541, 42 (June 2, 2021), <https://www.federalregister.gov/documents/2021/06/02/2021-11513/notice-of-intention-to-reconsider-and-revise-the-clean-water-act-section-401-certification-rule> (quoting 33 U.S.C. § 1341(d)). The Clean Water Act sections at issue are as follows: Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance) and 307 (Toxic and Pretreatment Effluent Standards).

⁸⁷⁹ LDEQ’s 401 WQC splash page can be found here: <https://deq.louisiana.gov/page/quality-certifications>.

33: IX. Chapter 15.⁸⁸⁰ LDEQ typically treats an application for a Corps permit as an application for 401 certification. LDEQ publishes WQCs it has issued to LNG terminals online.⁸⁸¹ As of January 2022, the point person at LDEQ for questions about the Water Quality Certification process is Elizabeth Hill at (225) 219-3225, DEQ-WaterQualityCertifications@la.gov.

In Texas, **the Railroad Commission (RRC)** and **the Texas Commission on Environmental Quality (TCEQ)** share responsibility for issuing WQCs.⁸⁸² Their jurisdiction is divided based on whether the activity being permitted is related to oil and gas operations, meaning that for most LNG activities, the RRC is the responsible agency.⁸⁸³ The RRC's online 401 WQC guidance is far less robust and the process is much less transparent than TCEQ's or LDEQ's.⁸⁸⁴



Note that even though these state organizations decide on certifications for a given project, EPA is the federal agency that issues the guidelines the states must follow for certifications. (Federal guidelines which, as mentioned, are currently in flux.)

What are avenues for advocate involvement?

The lack of transparency in state 401 certification processes can make it difficult for advocates to participate, and 401 law in general gives states a lot of discretion to avoid including the public in its process. Despite these barriers, there are several avenues for involvement:

- Read and research your specific state's procedures. This guide highlights the relevant actors and some procedures for Texas and Louisiana but is not designed as an all-encompassing guide. Read the statute, rules, and guidance the state certifying office has, and reach out early to the contacts at the state in charge of the process and in charge of public involvement for guidance.
- Comment.⁸⁸⁵ If there is a public notice and comment period for certifications, advocates should timely comment. If it is unclear when the public and notice comment period is, include 401

⁸⁸⁰ LDEQ publishes its regulations as word documents and posts links to its website. LDEQ, *Water Quality Certifications*, <https://deq.louisiana.gov/page/quality-certifications> (linking to "Regulations for issuing Water Quality Certifications can be found at LAC 33:IX.Chapter 15:" https://deq.louisiana.gov/assets/docs/Legal_Affairs/ERC/33v09WQ.docx); See also <https://casetext.com/regulation/louisiana-administrative-code/title-33-environmental-quality/part-ix-water-quality/subpart-1-water-pollution-control/chapter-15-water-quality-certification-procedures>.

⁸⁸¹ LDEQ, *EDMS Advanced Search*, <https://edms.deq.louisiana.gov/edmsv2/advanced-search>. Search by the project's AI number, then "WQC" in "Description" should return most if not all documents.

⁸⁸² 16 TAC § 3.30 (Memorandum of Understanding between the Railroad Commission of Texas (RRC) and the Texas Commission on Environmental Quality (TCEQ)); 16 TAC § 3.30(a) ("This rule is a statement of how the agencies implement the division of jurisdiction.") See also 16 TAC § 3.93 (RRC's WQC rules); 30 TAC Chptr. 279 (TCEQ's WQC rules).

⁸⁸³ One LNG developer, NextDecade, indicated that TCEQ has jurisdiction over 401 certifications for return water for dredged material placement. See Rio Grande LNG FEIS Volume I at 4-55 – 4-56, April 2019, <https://www.energy.gov/sites/default/files/2019/04/f62/eis-0519-final-rio-grande-lng-2019-vol-1.pdf>. (Return water is the excess water that drains from saturated dredged soils once they have been removed from water and are placed on land.) This appears to be separate from the certifications Texas LNG developers request from RRC, as neither NextDecade (with Rio Grande LNG) nor Texas LNG has appeared to report requesting a 401 certification from TCEQ for these projects. If a Texas applicant proposes dredge sites, it is worth pressing the applicant and regulators (FERC, TCEQ, and RRC) on whether the applicant needs to request a 401 certification from TCEQ for return waters as well, or whether some general certification already covers this activity.

⁸⁸⁴ For example, TCEQ has a 401 Certification tracker (<https://www6.tceq.texas.gov/cmpts/index.cfm>) as does LDEQ (<https://edms.deq.louisiana.gov/edmsv2/advanced-search>); RRC does not.

⁸⁸⁵ The appendix includes example comments: e.g., App. 57, Jordan Cove Comments (Aug. 8, 2018) <https://oregonshores.org/sites/default/files/sites/default/files/media->

comments during the comment period for each federal permit or license that is sought. These comments can be drafted as a separate section of the comments on the federal permit.

- Request and participate in any hearing. The 401 certification procedures for many states do not require that a hearing be held but make it discretionary. For a hearing request to be successful, it is important to mobilize a lot of public and private support for one and to request one during the comment period for the federal license and any comment period that has been specifically set for the certification.
- Appeal administratively, if able. Some state agencies allow only the applicant to appeal a denied or conditioned certification (e.g., Texas). That may not be the case in all states and it may be a necessary step before litigating in a federal court. Review the process in your state early to avoid surprises.
- Litigate. Litigating a state agency's decision will require that you follow the state-specific process for appeals. Because of the Natural Gas Act's rules giving appellate jurisdiction of LNG orders to the federal courts, it is likely that appeals of agency action will need to be filed in the relevant federal circuit court, not the state courts.⁸⁸⁶
- Participate in the drafting of EPA's new 401 certification rule. EPA is revising its rules on the responsibilities states have in reviewing certification requests. The first comment period closed in 2021, but comments will be taken on the draft rule once it issues.
- Advocate politically for improved processes. States that do not have transparent 401 procedures may need state-level changes to be pushed. For example, in Texas, the RRC has authority over certifications for LNG projects. Its process is woefully deficient compared to even TCEQ's, despite the fact that LNG projects can have a large impact on water quality and the environment. One important area for advocacy is with the public and political branches to align the best of TCEQ's processes (the steps that provide the most transparency) with that of the RRC's.

Unless a state is opposed to a project, it is not very likely that a challenge to 401 WQCs will absolutely stop a project.⁸⁸⁷ An advocate should participate timely in the process, but if resources are very scarce, more value is likely to be found elsewhere.

How is this chapter organized?

Section 7.A overviews 401 certifications. Section 7.B describes the requirements of the Clean Water Act itself and the federal rules that are currently in place and identifies resources that advocates can use to learn more about water quality standards. Section 7.C provides information about the state

[library/miscellaneous/401_coalition_comments_8.6.18.pdf](#); App. 58, Cameron LNG comments by Gulf Restoration Network (May 27, 2016) <https://edms.deq.louisiana.gov/app/doc/view?doc=10211686> (includes 404 comments as well).

⁸⁸⁶ See 15 U.S.C. § 717r(b) & (d). To determine which circuit court has jurisdiction, experienced legal counsel should be consulted. For example, the regional circuit court where the facility is proposed would have jurisdiction to review a 401 certification that was issued, conditioned or denied. 15 U.S.C. § 717r(d)(1) (the Fifth Circuit for Louisiana and Texas). But questions of waiver might first be appealed to FERC before going to a circuit court. See e.g., *N.Y. State Dep't of Env'tl. Conservation v. Fed. Energy Regulatory Comm'n*, 991 F.3d 439, 444-46 (2d Cir. 2021). Any adverse order from FERC could then be appealed to **either** the regional circuit court **or** the D.C. Circuit. 15 U.S.C. § 717r(b). But if FERC's appeal process was not used, it might be argued that the D.C. Circuit is the only court that would have jurisdiction if the certification was waived (through 717r(d)(2), for a state agency's failure to act on a permit required under federal law). This is why it is important to consult with experienced legal counsel for each new set of facts.

⁸⁸⁷ States that have blocked projects with their 401 powers include: "**Washington** denied certification for a proposed coal export terminal in 2017, **New York** denied certification for a natural gas pipeline in 2018, and **Oregon** denied certification for a liquefied natural gas export facility in 2019." (emphasis added) <https://eelp.law.harvard.edu/2021/01/section-401-of-the-clean-water-act-from-trump-to-biden/>. Gulf Coast states, with their heavy support for industry, are likely less sympathetic.

certification processes in Texas and Louisiana. Section 7.D discusses issues that will likely be relevant no matter what the scope of new federal regulations and provides links to sample comments.

What are the applicant and the state’s responsibilities to comply with federal law on Section 401 WQCs?

What an applicant and a state must do to comply with its section 401 responsibilities is shaped by the Clean Water Act, but the details depend on the state and federal regulations in place. As of January 2022, the federal regulations are in flux. Some aspects of certifying agencies’ responsibilities are clear, however. For example, the CWA requires that water quality certifications certify that the licensed activity protects water quality and complies with state laws. Section 7.B.1 describes the water quality standards that must be reviewed; Section 7.B.2 addresses some activities that might impact water quality.

What are the water quality standards that a state certifies (or waives) compliance with?

Water quality standards include three elements: (1) one or more “**designated uses**” of a waterway;⁸⁸⁸ (2) numeric and narrative “**criteria**” specifying the water quality conditions, such as maximum amounts of toxic pollutants, maximum temperature levels, and the like, that are necessary to protect the designated uses;⁸⁸⁹ and (3) an **antidegradation policy** that ensures that uses dating to 1975 are protected and high quality waters will be maintained and protected.⁸⁹⁰ Compliance with water quality standards requires protection of all three of these components.

Typical *designated uses* include:
 (1) Protection and propagation of fish, shellfish and wildlife; (2) Recreation;
 (3) Public drinking water supply;
 (4) Agricultural, industrial, navigational and other purposes.

Note that LNG terminals and associated dredge and fill activities likely will affect waters used for recreation and aquatic life, more so than for drinking, but each project is different.

Water quality standards are very site-specific, and can at first glance seem difficult to navigate. However, that should not dissuade advocates from diving in or commenting. To help the public and state agencies navigate this technical topic, EPA created the Water Quality Standards Academy: a series of online course and occasional webinars designed to teach the basics of water quality standards: <https://www.epa.gov/wqs-tech/water-quality-standards-academy>. EPA also publishes a more formal handbook of water quality standards guidance that explains water quality standards: <https://www.epa.gov/wqs-tech/water-quality-standards-handbook>. Advocates should review these materials before contemplating a certification

⁸⁸⁸ The water quality standards regulation requires states, territories and authorized tribes to specify goals and expectations for how each water body is used (“designated uses”). Typical designated uses include: (1) Protection and propagation of fish, shellfish and wildlife; (2) Recreation; (3) Public drinking water supply; (4) Agricultural, industrial, navigational and other purposes. See EPA, *What are Water Quality Standards?*, <https://www.epa.gov/standards-water-body-health/what-are-water-quality-standards> (last visited Mar. 31, 2022).

⁸⁸⁹ States, territories and authorized tribes adopt water quality criteria to protect the designated uses of a water body. Water quality criteria can be numeric (e.g., the maximum pollutant concentration levels permitted in a water body) or narrative (e.g., a criterion that describes the desired conditions of a water body being “free from” certain negative conditions). States, territories and authorized tribes typically adopt both numeric and narrative criteria.

⁸⁹⁰ See 33 U.S.C. §§ 1313(c)(2), 1313(d)(4)(B); 40 C.F.R. Part 131, Subpart B.

challenge; because EPA already provides these and other training materials, this guide does not include an in-depth explanation of the water quality standards that a state must certify will be met.

In addition to the Water Quality Standards Academy, EPA has compiled lists online of the standards that it has approved for all states.⁸⁹¹ Many waterbodies have explicit standards set for them; advocates should be able to find this information by searching the state’s lists for specific water bodies or conducting a web search.⁸⁹² Water quality standards are set for parameters like dissolved oxygen, temperature, pH, turbidity, toxics, and pathogens, and often have different acceptable values for acute and chronic levels. Numeric criteria for a parameter might be measured in micrograms per liter; narrative criteria are more descriptive and tend to be used when numeric criteria are insufficient, e.g., requiring surface waters to be free from floating oils, discoloration, and odor.⁸⁹³

Although commentors do not need to be experts on water quality to raise valid concerns about how an LNG project’s construction and operation could affect water quality, it can be helpful to consult with a local water quality expert. That expert should be familiar with the water quality standards in the area (uses and criteria), or at a minimum be familiar with the state’s standards where the project is located.

How might water quality be affected by the project?

There are many parts of an LNG project that might affect water quality. For example, discharges of pollutants or soil could occur during construction of the terminal, pipelines, and temporary construction roads or piles. Runoff from built structures may enter wetlands or point-source discharges may enter waterways. Discharges and runoff often increase how turbid (cloudy) the water is and how many toxics and pathogens are in the water. High turbidity can also cause dissolved oxygen levels to decrease as the suspended solids block light to underwater vegetation, which photosynthesize less and release less oxygen into the water. All of these factors can make it more difficult for fish and shrimp to survive—these creatures need clear, non-toxic water with sufficient oxygen levels to live!⁸⁹⁴ And if the waterways being affected by these discharges have a *designated use of protection* and propagation of fish and shellfish, then these impacts are even more relevant for the state to review. These are the sorts of concerns that commentors can and should raise—even without seeking an expert’s help.

A state should also consider the potential water quality impacts of the proposed project **as a whole** in its 401 certification analysis, not just the significant effects of a discharge itself.⁸⁹⁵ For example, if a terminal’s operation will degrade the ability of surrounding waters to serve as fish and shrimp habitat because of the increased dredging and ballast water discharge, that might be considered in a section 401 review as it impacts the use of the waterway. The dredging activities at an LNG terminal will

⁸⁹¹ EPA, *State-Specific Water Quality Standards Effective under the Clean Water Act (CWA)*, <https://www.epa.gov/wqs-tech/state-specific-water-quality-standards-effective-under-clean-water-act-cwa> (last visited Mar. 31, 2022).

⁸⁹² For example, standards have been set for the waters near the Rio Grande LNG and Texas LNG sites. See 2018 Texas Surface Water Quality Standards (Updated Mar. 18, 2021)(Lower Laguna Madre and Brownsville Ship Channel), 97, <https://www.epa.gov/sites/default/files/2020-01/documents/twxqs-2018.pdf>.

⁸⁹³ EPA, *Key Concepts Module 3: Criteria*, <https://www.epa.gov/wqs-tech/key-concepts-module-3-criteria> (providing examples of numeric and narrative criteria).

⁸⁹⁴ Interstate Commission on the Potomac River Basin, *Water Ways: Stream Ecology and Monitoring: High School Version*, Aug. 2017, <https://www.potomacriver.org/wp-content/uploads/2017/09/WaterWays-ChemistryInfoCardsHS.pdf>.

⁸⁹⁵ *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700, 712 (1994); 40 C.F.R. § 121.2(a)(3) (requiring the state to find “a reasonable assurance that the **activity** will be conducted in a manner which will not violate applicable water quality standards”) (emphasis added).

likely affect dissolved oxygen and turbidity when underwater soils are disturbed. Especially if the channel has a history of heavy industrial use, toxins may be dislodged from the soil when dredging takes place.

What federal regulations are in place interpreting Section 401 and its requirements?

On-going revision of the regulations means that this is a complicated question—an advocate will need to check the Administration’s current position, which is typically updated on EPA’s website about 401 certifications: <https://www.epa.gov/cwa-401/overview-cwa-section-401-certification>. The current regulations in place were drafted in 1971; new regulations are expected in 2023.⁸⁹⁶

It’s generally agreed that the 1971 rules grant the states significant leeway in issuing, conditioning, denying, or waiving certifications. The 1971 rule is codified at 40 C.F.R. Part 121 and sets out: (i) the minimum procedural content of a certification to facilitate EPA’s administrative processes; (ii) the procedures for determining the effects of a license upon other, non-certifying states; (iii) the procedures the EPA Administrator employs to certify an application for a project under exclusive federal jurisdiction; and (iv) the procedures for EPA consultations on obtaining a license or permit. The 1971 rules can be found here: <https://www.govinfo.gov/content/pkg/CFR-2010-title40-vol21/pdf/CFR-2010-title40-vol21-part121.pdf> (because of the recent changes, normal public sources of the rules may still reference the now-defunct 2020 rules). EPA’s Q&A guidance on this interim set of rules (as of December 2021) is found here:

<https://www.epa.gov/system/files/documents/2021-12/questions-and-answers-document-on-the-2020-cwa-section-401-certification-rule-vacatur-12-17-21-508.pdf>.

The 1971 rules define “license[s] or permit[s]” that require certifications to be “any license or permit granted by an agency of the Federal Government to conduct any activity which may result in any discharge into the navigable waters of the United States.”⁸⁹⁷ It leaves the contents of the application and the contents of the certification largely up to the discretion of the states and federal permitting agencies.⁸⁹⁸ The 1971 rules do not require that the certifying agency look at the underlying application for the federal permit—as long as it can state that there is “a reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards,” it may rely on “other information” furnished by the applicant.⁸⁹⁹ The takeaway from this is that until the new rules are implemented, each state and federal agencies’ regulations will dictate what the certification process requires.

Note that other federal agencies, like FERC and the Corps, have their own rules about compliance with section 401.⁹⁰⁰ Rules that agencies other than EPA make about section 401 will **not** receive deference from a reviewing court, because EPA is charged with administering the Clean Water

⁸⁹⁶ Thomas E. Santoro, *et al.*, *EPA Asks Court to Leave Controversial Clean Water Act Section 401 Rule in Place Until New Rule Expected in Spring 2023*, Arnold & Porter, Jul. 8, 2021, <https://www.arnoldporter.com/en/perspectives/blogs/environmental-edge/2021/07/epa-asks-court-to-leave-controversial-cwa-rule>.

⁸⁹⁷ 40 C.F.R. § 121.1(a) <https://www.govinfo.gov/content/pkg/CFR-2010-title40-vol21/pdf/CFR-2010-title40-vol21-part121.pdf>.

⁸⁹⁸ 40 C.F.R. § 121.2 (certification) § 121.3 (application), <https://www.govinfo.gov/content/pkg/CFR-2010-title40-vol21/pdf/CFR-2010-title40-vol21-part121.pdf>.

⁸⁹⁹ 40 C.F.R. § 121.2(a)(2) & (3), <https://www.govinfo.gov/content/pkg/CFR-2010-title40-vol21/pdf/CFR-2010-title40-vol21-part121.pdf>.

⁹⁰⁰ See e.g., 18 C.F.R. § 157.22(b) (defining the reasonable request period for 401 certifications for FERC licenses to be “one year from the certifying agency’s receipt of the request”); 33 C.F.R. § 325.2(b)(1) (Corps procedures for section 401 water quality certifications).

Act.⁹⁰¹ In the event of a conflict, EPA’s rules will prevail. These other federal rules are helpful in understanding how best to challenge the certification for each federal license. As part of its rulemaking process that will culminate in its own new rules EPA is considering whether it should suggest updates to other federal agencies’ 401 rules as well.

What federal rules have been in place previously?

For almost 50 years, the 1971 regulations were unchanged. But in 2020, the first update to the certification rules were made (“the 2020 rules”): the Trump Administration overhauled the rules and regulations implementing Section 401 to curtail state authority to condition its certification orders. This “Certification Rule” went into effect on September 11, 2020. These rules were challenged in the United States District Court for the Northern District of California and vacated on October 21, 2021.⁹⁰²

This decision was in part due to the fact that earlier in the year, the Biden EPA stated that it planned to revise the 2020 regulations and requested that the court remand the rule, citing a number of concerns about its legitimacy.⁹⁰³ EPA indicated that it does not intend to return to the prior regulations, but that it instead will issue new regulations.⁹⁰⁴ (As mentioned previously, the scope of those new regulations will likely continue to be unclear until at least 2022, when a draft proposal is published for comment.)

What should I know about the now-defunct 2020 rules?

The 2020 rule solidified the one-year deadline to certify or reject projects and restricted what a state could consider when judging whether to certify: namely only water quality effects from specific discharges, not issues like climate change impacts or water quantity.⁹⁰⁵ The 2020 rule also restricted the conditions that states and tribes may impose, limiting them to point source discharges into waters of the United States and no longer allowing conditions related to nonpoint source discharges or discharges into nonfederal waters.⁹⁰⁶

The 2020 rule contained other limitations on state power—but the main takeaway for advocates is how the anticipated 2023 rule is a reaction away from the 2020 version. Comparing the 2020 incarnation with EPA’s new proposal can be helpful in predicting the scope of the 2023 version, as Section 7.B.6 summarizes.

⁹⁰¹ See e.g., *NY State Dept. of Environmental Conserv. v. FERC*, 884 F.3d 450, 455 (2nd Cir. 2018) (“We review FERC’s interpretation of the Clean Water Act, a statute that it does not administer, *de novo*.”)

⁹⁰² *In re Clean Water Act Rulemaking*, No. C 20-04636 WHA (consolidated) (Order re motion for remand without vacatur) (N.D. Cal. Nov. 11, 2021) <https://coastalreview.org/wp-content/uploads/2021/11/401-decision.pdf>.

⁹⁰³ Thomas E Santoro, et al., *EPA Asks Court to Leave Controversial Clean Water Act Section 401 Rule in Place Until New Rule Expected in Spring 2023*, Arnold & Porter, July 8, 2021, <https://www.arnoldporter.com/en/perspectives/blogs/environmental-edge/2021/07/epa-asks-court-to-leave-controversial-cwa-rule>.

⁹⁰⁴ *Supra*.

⁹⁰⁵ Brad Plumer, *E.P.A. to Modify Trump-Era Limits on States’ Ability to Oppose Energy Projects*, New York Times, May 27, 2021, <https://www.nytimes.com/2021/05/27/climate/epa-clean-water-act.html>; see also Peter Kalicki, *Section 401 of the Clean Water Act from Trump to Biden*, Harvard Environmental & Energy Law Program, Jan. 25, 2021, <https://eejp.law.harvard.edu/2021/01/section-401-of-the-clean-water-act-from-trump-to-biden/>.

⁹⁰⁶ Kalicki, *supra*.

What might the 2023 rules look like?

As of December 2021, the best clues about the new rule come from EPA's notice of intent to review the rules. In that notice, EPA highlighted several key issues it wants to explore, including:⁹⁰⁷

- Efficacy of pre-filing meetings that the 2020 rule required and whether those should be made a permanent feature of the rules;
- The 2020 definition of a "certification request," which may be too limiting on state and tribal ability to get information they may need before the CWA Section 401 review process begins;
- The definition of a "reasonable period of time" for state action. EPA has expressed concern that the 2020 rule does not allow state and tribal authorities a sufficient role in setting the timeline for reviewing certification requests and limits the factors that federal agencies may use to determine the reasonable period of time. EPA also has indicated it is considering whether other stakeholders besides federal agencies (e.g., advocates commenting on a project) have a role in defining and extending the time period for state action;
- The scope of certification. The 2020 rule limits the scope of certification, which includes both the scope of certification review under CWA Section 401(a) and the scope of certification conditions under CWA Section 401(d), to: "assuring that a **discharge** from a Federally licensed or permitted activity will comply with water quality requirements." 40 C.F.R. § 121.3. (emphasis added). The rule defines "water quality requirements," as the "applicable provisions of [sections] 301, 302, 303, 306, and 307 of the Clean Water Act, and state or tribal regulatory requirements for **point source discharges** into waters of the United States." *Id.* at 121.1(n) (emphasis added). EPA is concerned that the 2020 rule's narrow scope of certification and conditions may prevent state and tribal authorities from adequately protecting their water quality if they are only allowed to consider discharges;
- The need for federal review of certification actions. The 2020 rule prescribed that all certification actions must include specific information and that **federal** agencies were required to review these actions for compliance. EPA has expressed concern with these requirements, specifically whether it is appropriate for federal agencies to review certifying authority actions for consistency with procedural requirements or any other purpose. EPA appears to be concerned that these requirements would result in a state or tribe's certification or conditions being permanently waived as a result of non-substantive and easily fixed procedural concerns identified by the federal agency;
- Enforcement roles of state and federal agencies, including whether the Clean Water Act citizen suit provision applies to section 401;
- Modifications and "reopeners" of certifications. EPA is concerned that the 2020 rule's prohibition of modifications may limit the flexibility of certifications and permits to adapt to changing circumstances;
- Neighboring jurisdictions process (Section 401(a)(2)); including whether additional guidance is needed for agencies to implement this section of the statute, which allows neighboring states to

⁹⁰⁷ EPA, Reconsideration of 401 Rule Notice, 86 Fed. Reg. 29,541, 29,543-44 (June 2, 2021), <https://www.federalregister.gov/documents/2021/06/02/2021-11513/notice-of-intention-to-reconsider-and-revise-the-clean-water-act-section-401-certification-rule>.

get conditions placed on a federal permit or license that would violate the water quality of those neighboring states; and

- Whether other agencies need to update their 401 regulations: Whether concomitant regulatory changes should be proposed and finalized simultaneously by relevant federal agencies (e.g., the Army Corps of Engineers, Federal Energy Regulatory Commission) so that implementation of revised water certification provisions would be more effectively coordinated and would avoid circumstances where regulations could be interpreted as inconsistent with one another.

What happens if the state fails to act within a one-year period or otherwise waives its rights?

One of the disadvantages of a 401 certification challenge is that states are not compelled to weigh in on whether a project will impact state water quality—states may simply decline to act on a certification request (“waiving” its rights) and then an applicant can proceed with its project without obtaining a certification. However, there are nuances about waivers that may still give advocates grounds to challenge under 401, as discussed below.

Waiver can be express or by the passage of time. For example, a state that has not acted on a certification request “within a reasonable period of time (which shall not exceed one year) after receipt of such request”⁹⁰⁸ will be deemed to have waived its right to certify. Exactly when this time period begins (e.g., what qualifies as “receipt” or “request”) has been heavily litigated and is subject to different interpretations by courts—some construe it strictly, even if the initial request is incomplete, and others suggest that an applicant could withdraw and resubmit an application to increase the one-year period.⁹⁰⁹ EPA may weigh in on this question when it releases its new rules in 2023.

Waiver and the one-year clock—at least for certification of the FERC license—cannot happen without the applicant’s active request for a certification **for the activities covered by the particular federal license**. FERC addressed this issue in the Jordan Cove LNG challenge. The applicant only applied for a 401 certification from ODEQ (the state agency) in support of the federal section 404 and section 10 permits from the Corps, which only concerned dredge and fill activities related to the terminal. The applicant never specifically applied for a 401 certification for its FERC license. FERC found that the state agency “could not have waived its authority to issue certification for a request it never received”—in other words, for the FERC license at least, the one-year clock for state action had not begun.⁹¹⁰

In addition, states that waive 401 certification authority may create problems for the Corps permitting process. Some Corps districts rely on the 401 certification to show that its permits will comply with state water quality standards (under 33 C.F.R. § 320.4(d)), and do not conduct any substantive review of their own. If the Corps does this when a state has **waived** its rights, the Corps permits may be vulnerable to challenge. For more information, see Chapter 6, Section B.9 “*Will there be a violation of State Water Quality Standards?*”

⁹⁰⁸ 33 U.S.C. § 1341(a)(1).

⁹⁰⁹ Beveridge & Diamond PC., *New Interpretation of Shot Clock Rules? Fourth Circuit Weighs In On Clean Water Act’s One Year Deadline for State Water Quality Certifications Under Section 401* (July 13, 2021), <https://www.jdsupra.com/legalnews/new-interpretation-of-shot-clock-rules-4695641/> (explaining the different conclusions the Second and Fourth Circuits have on what this time period is, and whether it can be extended by the applicant resubmitting an application).

⁹¹⁰ *Jordan Cove Order Denying Petition for Declaratory Order*, 174 FERC ¶ 61,057 at ¶ 35 (Jan. 19, 2021) <https://www.ferc.gov/sites/default/files/2021-01/C-16-CP17-494-003.pdf>.

Because waiver is a particularly nuanced aspect of section 401 challenges, advocates working on projects in states where waiver might be an issue should consult with experienced counsel to determine the best strategies for these challenges. If you decide it is best for a state to affirmatively act on a certification request, it can be helpful to work with the state to determine precisely when the applicant requested certification and then encourage the state to act on the request well before the “reasonable period of time” has elapsed.

What are state-specific rules on WQCs for LNG projects in Texas and Louisiana?

In addition to navigating the federal requirements for 401 certifications, the state agencies that certify projects have their own rules they must follow that govern public participation and the application and appeals process. This guide highlights some high-level points to consider when working with Louisiana and Texas certifications. An experienced 401 practitioner from the relevant state should be consulted before beginning any 401 challenge. Section 7.C.1 overviews Louisiana’s process; section 7.C.2 overviews Texas’s process.

What is Louisiana’s DEQ’s process for certification?

Louisiana’s 401 WQC rules are found at LAC 33: IX. Chapter 15.⁹¹¹ In general, LDEQ (which has responsibility for certifications for Corps permits and NPDES permits) is fairly transparent about its 401 process,⁹¹² but as a state heavily invested in oil and gas Louisiana’s agencies should not be expected to be as sympathetic to environmental concerns as a state like Oregon.

In addition to reading Louisiana’s official rules on water quality certification cited above, advocates are encouraged to review the National Renewable Energy Laboratory’s summary of Louisiana’s certification process, which can be found here: <https://openei.org/wiki/RAPID/Roadmap/14-LA-d> (updated in 2020).

Some takeaways from Louisiana’s 401 WQC rules are that:

- **Applications.** Applicants may submit a duplicate of the proposed federal permit application in lieu of a separate application for state certification *Id.* § 1507. There is no separate 401 online application; in the New Orleans district, the district forwards the applicant’s Corps application to LDEQ on behalf of the applicant; LDEQ treats this application as a request for 401 certification.
- **Procedural review of Application.** An application is deemed complete if the administrative authority (LDEQ) does not indicate otherwise by a written response to the applicant within 30 days. *Id.* § 1507(C)(1)
- **Substantive Review of Applications.** All applications are reviewed for compliance with State Water Quality Standards, the approved Water Quality Management Plan for the water body affected by the activity, and applicable state water laws, rules, and regulations. *Id.* § 1507(C)(3).
- **Public Notice.** Within 10 days after the review process is completed by the administrative authority (LDEQ), the applicant will be sent a public notice to publish. The applicant must publish the public notice once in the official journal of the state (*the Advocate*) and once in at least one or

⁹¹¹ An online copy of these regulations are available here: https://deq.louisiana.gov/assets/docs/Legal_Affairs/33v09-201605-Water-Quality.pdf.

⁹¹² Its website contains a FAQ and summary page, with links to an online portal of documents. See e.g., <https://deq.louisiana.gov/page/quality-certifications>; <https://deq.louisiana.gov/faq/category/14> (last visited Mar. 31, 2022).

more (as directed by LDEQ) local newspapers or journals of general circulation in each parish in which the activity is to be conducted. *Id.* § 1507(D).

- Comment Period. A period of **only 10 calendar days** after the date of publication is typically allowed for public comment. *Id.* § 1507(D)(1)(b). A request for public hearing should be made during this time.
- Other Public Notice Requirements. The administrative authority (LDEQ) must send a copy of the public notice to any person who requests one. *Id.* § 1507(D)(2).
- Public Hearings. Public hearing(s) are appropriate when there is significant public opposition to a proposed certification and the case involves significant economic, social, or environmental issues. LAC 33: IX. § 1507 E(1)(c). They may be held when the original certification is requested or if it is proposed to be modified or revoked. *Id.* § 1507(E)(1)(a). If a hearing is granted, LDEQ must publish public notice in *the Advocate* and in a newspaper or journal that circulates in the parish where the activity will take place at least 30 days before the hearing. *Id.* § 1507(D)(3). Hearings are held before the administrative authority at a location convenient to the nearest population center affected by the proposed certification, unless the administrative authority specifically designates some other location. *Id.* § 1507(E)(3)&(4).
- Post-Hearing Comment Period. Following any hearing will be a 30-day period for written comments, which will become part of the official record.
- Certification Denial. If the certification is denied, the applicant typically may make a request for a hearing, in writing, to the administrative authority (LDEQ) within 10 days after notification of denial, unless it was decided at a prior hearing that the proposed activity would violate the Clean Water Act, the Louisiana Environmental Quality Act, or any regulations thereof. *Id.* § 1507(E)(2).
- Overall Timing. The timing from application to certification decision may be as short as 60 days. *Id.* § 1507(F)(1)
- Memorialization of the Outcome. A grant of certification must be memorialized in a letter of no objection sent to the applicant and to the applicable federal agency. A denial, modification or revocation must also be sent to the applicant and appropriate federal agency. § 1507(F)(3)

Historically, the LDEQ has declined to exercise its waiver authority, instead reviewing certification requests on the merits.⁹¹³ LDEQ has a system to track 401 WQC requests and certifications: the Electronic Document Management System (EDMS). EDMS can be accessed through the following link: <http://edms.deq.louisiana.gov>. The EDMS system is searchable by Agency Interest (AI) number.

An example certification that LDEQ has issued for an LNG project can be found here: <https://edms.deq.louisiana.gov/app/doc/view?doc=8826955> (Cameron LNG Rationale for Decision (Water Quality Certification) (May 2, 2013)).

⁹¹³ As of 2011, that is. Association of State Wetland Managers, *401 Certification Program Summary, Louisiana*, (July 2011), 2, https://www.aswm.org/pdf_lib/401_cert/louisiana_case_study.pdf.

What is Texas's RRC's process for certifications?

In general, advocates should expect the RRC to be very lenient in issuing certifications; historically Texas has either granted or waived certification.⁹¹⁴ The RRC's rules on 401 certifications for Corps and NPDES permits are codified at 16 TAC § 3.93.⁹¹⁵ Its website provides little additional guidance for advocates, beyond the following:⁹¹⁶

Public Notice. For certifications underlying Corps permits (like section 404 and section 10), the Corps generally provides public notice of the certification process in the same document as the underlying Corps permit (e.g., the 404 permit). But that “public notice” has not been very clear in the past that comments on the 401 certification are being solicited at the same time as the Corps permit.⁹¹⁷ Advocates should just presume that the 401 comment period is identical to the 404 comment period, and submit certification comments at that stage to the RRC, the agency issuing the notice for the federal license (e.g., the Corps or EPA for the NPDES permit), and in the FERC docket, for good measure.

Notice for requests for certifications for other federal permits (like a FERC license) is not expressly contemplated by the RRC's rules at 16 TAC § 3.93. It is likely that an applicant would be required to provide public notice itself (instead of relying on the agency), which then must be sent to a number of recipients, including:

(A) the owners of land adjacent to the tract upon which the activity is proposed to take place, and where the activity may result in a discharge to a watercourse other than the Gulf of Mexico or a bay, the surface owners of each waterfront tract between the potential discharge point and 1/2 mile downstream of the potential discharge point, excluding owners of those waterfront tracts within the corporate limits of an incorporated city, town, or village;

LESSONS FROM THE OTHER TEXAS AGENCY CERTIFYING UNDER 401

TCEQ is responsible for reviewing requests for 401 WQCs that don't involve oil and gas project. It is more transparent in its process and review, publishing guidance documents online whereas RRC has published none readily accessible. One point of advocacy could be pushing RRC to become at least as transparent as TCEQ when issuing certifications.

Not everything TCEQ does is ideal, however. For example, TCEQ doesn't necessarily provide notice when it expects to *wave* its certification rights. That circumvents public participation and should not be copied!

⁹¹⁴ As of 2011, that is. Association of State Wetland Managers, *401 Certification Program Summary*, Texas, July 2011, 2. https://www.aswm.org/pdf_lib/401_cert/texas_case_study.pdf (lumping TCEQ and RRC certifications together).

⁹¹⁵ An online version of the code can be found here, just notice that it continues onto the next page (“Cont'd”): [https://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=93](https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=93).

⁹¹⁶ The National Renewable Energy Laboratory's summary of Texas's RRC's certification process is similarly sparse, <https://openei.org/wiki/RAPID/Roadmap/14-TX-d> (last visited Mar. 31, 2022).

⁹¹⁷ See U.S. Army Corps of Engineers, *Rio Grande LNG 404 public notice*, Oct. 18, 2018, <https://www.swg.usace.army.mil/Portals/26/docs/regulatory/PN%20Oct/PN.201500114.pdf?ver=2018-10-18-164107-543> (mentioning 401 only once in passing that the “Texas Railroad Commission will determine if the project is consistent with the goals and policies of the CMP and will review this application under Section 401 of the CWA to determine if the work would comply with State water quality standards” without providing guidance on where to submit 401 comments or that that the RRC is soliciting comments at all).

*(B) the mayor and health authorities of any city or town in which the proposed activity will be located or that is within 1/2 mile downstream of the potential discharge;*⁹¹⁸

This is a long list of recipients; it is unclear whether Texas applicants have ever complied with these requirements in the past—advocates challenging projects are encouraged to reach out to these individuals and entities to determine if notice is being properly served.

Comments and Public Meetings. The RRC acknowledges the public’s right to submit comments regarding a request for certification, setting the comment period as 30 days after the notice is mailed.⁹¹⁹ Barring other directions on the notice, comments should be submitted to the Assistant Director of Environmental Services, Railroad Commission, 1701 North Congress Avenue, P.O. Box 12967, Austin, Texas 78711-2967.⁹²⁰ The RRC **is required to** consider all written comments related to the water quality impacts of the proposed activity that are timely submitted.⁹²¹ The Commission must also hold a public meeting on the request for certification if the Commission determines that a public meeting is in the public interest.⁹²² The RRC is directed to consider applicable water quality standards, including the enforceable goals and policies of the Texas Coastal Management Program (CMP), and potentially include monitoring requirements as conditions if it certifies the request.

Outcome of Certification. A final determination on a request for certification of an NPDES or Corps permit typically is issued within 15 days of the close of the public comment period unless the federal agency and RRC find that a longer time is appropriate. If the RRC doesn’t act within the time set (15 days or longer, if agreed to) then the RRC will be deemed to have waived certification. The RRC must provide the final notification to any person who requests it,⁹²³ meaning advocates should be able to confirm if a 401 certification has been issued. The final determination should include a statement of basis explaining the RRC’s decision (including in cases of waiver).⁹²⁴ If certification is denied, the operator may request a hearing. In addition, if the certification is granted with conditions, but the operator disagrees with the conditions, the operator can request a hearing. Any request for a hearing must be filed within 15 days after the commission issues its final determination.⁹²⁵ On its website, RRC states that a protestant cannot request a hearing on a water quality certification,⁹²⁶ meaning an advocate’s next step would be litigation in federal court.

Note that it can be very difficult to find the RRC’s documentation of its certifications; as such, no example of a certification LNG project is included in this guide. Advocates in Texas are encouraged to push the RRC to increase its transparency—the TCEQ has a tracking system for 401 certifications, which the RRC could adopt at a minimum:

https://www.tceq.texas.gov/permitting/401certification/401certification_tracking.html.

⁹¹⁸ 16 TAC Part 1 § 3.93(d)(2)(A)&(B).

⁹¹⁹ 16 TAC Part 1 § 3.93(d)(3)(D).

⁹²⁰ 16 TAC Part 1 § 3.93(d)(3)(D).

⁹²¹ 16 TAC Part 1 § 3.93(e)(1).

⁹²² Texas Railroad Commission, *State Water Quality Certification*, <https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/discharges/water-quality/>.

⁹²³ 16 TAC Part 1 § 3.93(g)(2).

⁹²⁴ 16 TAC Part 1 § 3.93(g)(2)(E) and § 3.93(g)(3).

⁹²⁵ 16 TAC Part 1 § 3.93(g)(5).

⁹²⁶ That language is not in the administrative code. Compare 16 TAC Part 1 § 3.93(g)(5) with RRC, *Rule 93 Questions and Answers*, <https://www.rrc.texas.gov/about-us/faqs/oil-gas-faqs/swr-93-faqs/>.

What are possible issues to raise in a 401 WQC challenge?

The success of a 401 WQC challenge depends largely on which state has jurisdiction because section 401 itself places few requirements on states to actively review a project’s impact on water quality—waiver is usually an option.⁹²⁷

DOES A DOE LICENSE REQUIRE CERTIFICATION?

As of January 2022, there has been little official guidance (either from agencies or from courts) as to whether DOE’s license triggers the need for a 401 certification or waiver, and to-date there are no known instances of applicants requesting certifications for DOE licenses. However, it may be that certification for the DOE license must be requested, under the following logic:

Clean Water Act § 401 requires an applicant to provide the federal agency licensing a project a water quality certification when the activity “may result in any discharge into [] navigable waters.” 33 U.S.C. § 1341(a).

If DOE’s license to export gas “may result in any discharge into [] navigable waters,” then it too would require a state certification or waiver, even if the activities licensed by DOE overlap with another federal license (much as they are needed for both the Corps and FERC permits). And in fact, DOE does authorize such activities: DOE licenses the export—*i.e.*, transport via vessel—of gas overseas—during which there is potential for routine discharges (*e.g.*, vessel greywater, sewage, bilge water, cooling water, weather deck runoff, ballast water, etc.) or accidents that could potentially discharge gas or other pollutants.

Advocates interested in this should consult with experienced section 401 attorneys to determine if, when, and how this issue should be raised.

In Oregon, the Jordan Cove challengers had success using 401 WQCs to challenge that project in two ways—first, Oregon denied the Section 401 certification that the applicant requested; and second, FERC found that the applicant had failed to apply for other 401 WQCs that would have covered the remainder of the project, and thus the applicant failed to apply for all necessary certifications.⁹²⁸ However, Oregon is more sympathetic to environmental interests than other states. Meanwhile, the Department of Environmental Quality (LDEQ) in Louisiana and the Railroad Commission (RRC) in Texas exercise this power and may be less sympathetic to environmental concerns.

Regardless, if there are resources to challenge 401 certifications, make the challenge. There are a few common issues that may arise across LNG projects, some of which are summarized below:

⁹²⁷ Some states’ section 401 regulations, like Louisiana’s, do not list waiver as an option when the state agency is presented with a certification request. See LAC 33: IX. § 1507(F)(1) (“[a]ll applications for the certification shall be granted or denied within 60 days after the application is deemed complete . . .”). Whether the lack of a waiver option is enforceable is a matter of state law. If a state has waived its rights and you suspect state law might prohibit such an action, consult with an attorney experienced with the water quality laws in your state to determine the next best steps.

⁹²⁸ Alex Schwartz, *Procedural error spells serious setback for Jordan Cove*, H&N, Jan. 19, 2021, https://www.heraldandnews.com/news/local_news/procedural-error-spells-serious-setback-for-jordan-cove/article_c02f3a86-89ea-5cc2-82b5-3a605c622e83.html.

Has the applicant requested all 401 WQCs necessary?

Check to see if the applicant has requested 401 certifications for all federal licenses required for the project. FERC has held that LNG project applicants are “required to request section 401 water quality certification for **both** the Corps authorization **and** the Commission authorizations.”⁹²⁹ Yet at least one project has failed to do so—with big consequences. The applicant in Jordan Cove failed to request 401 certifications for all aspects of the project. The applicant only applied for a 401 certification through ODEQ (the state agency) in support of the federal section 404 and section 10 permits from the Corps, which only concerned dredge and fill activities related to the terminal. The applicant never specifically applied for a 401 certification for its FERC license. FERC found that the applicant’s failure to do so meant that the applicant had not met its 401 certification requirement.⁹³⁰ ODEQ had not waived its right to certification simply because it was aware that the applicant was also seeking a FERC license.⁹³¹

Scrutinize the WQCs that have been issued for a project. Do they cover just the activities that the Corps permits? Or do they include the licenses needed for the whole project, e.g., from FERC (and potentially DOE, see text box)? If not, point that out. If they do, is the agency’s decision based either on the actual federal application and project analysis (e.g., FERC’s EIS documents) or “sufficient information” for the agency to have a “reasonable assurance” that the project will not violate water quality standards? If not, the state’s decision may be vulnerable to challenge on the grounds that it is arbitrary and capricious.

Is the agency interpreting its 401 responsibilities correctly?

Most state agencies charged with 401 responsibilities act as if it is the state agency’s burden to find a likely violation of state law before it can deny a 401 WQCs. However, this flips the burden—it is the applicant who should show that it merits the WQCs. Oregon is one state whose state regulations explicitly place the burden on the applicant, as the advocates challenging the Jordan Cove project’s 401 certification explained in their comments.⁹³²

Does the application contain the mandatory minimum information?

Each state and federal agency describes the minimum information that an applicant must include in its application. Review the applicable state and federal regulations on 401 certifications; if anything is missing, point this out (see Section 7.C for Louisiana and Texas regulations). If other information relevant to water quality is missing, raise that as a concern.

Is there a “reasonable assurance” that the project will comply with the state’s antidegradation implementation policy?

EPA’s 1971 regulations require that each certifying agency make a “reasonable assurance” that water quality standards will be met—keep in mind that this standard may change in the future. But in general, question whether the project will degrade the quality of state waters. If monitoring is not

⁹²⁹ *Jordan Cove Order Denying Petition for Declaratory Order*, 174 FERC ¶ 61,057 at ¶ 35 (Jan. 19, 2021), <https://www.ferc.gov/sites/default/files/2021-01/C-16-CP17-494-003.pdf> (emphasis added).

⁹³⁰ *Jordan Cove Order*, *supra*.

⁹³¹ *Jordan Cove Order*, *supra*, ¶ 34.

⁹³² See App. 57 (Jordan Cove comments) at 9 (relying on the 1971 rules and Oregon’s regulations) https://oregonshores.org/sites/default/files/sites/default/files/media-library/miscellaneous/401_coalition_comments_8.6.18.pdf.

proposed, point that out—section 401 requires that certifications must include monitoring necessary to ensure that water quality is maintained.⁹³³ A water quality expert can be helpful here.

Is there a “reasonable assurance” that the narrative and numeric criteria will not be violated?

EPA’s 1971 regulations require that each certifying agency make a “reasonable assurance” that water quality standards will be met—keep in mind that this standard may change in the future. But in general, question whether the project will not violate the numeric and narrative criteria set to protect the waterways and wetlands around the proposed project site, both during construction and operation. There will likely be acute and chronic standards for each water quality parameter. A local water quality expert can be helpful here, especially in examining the assumptions underlying the application. Monitoring should also be suggested as a condition to ensure water quality is protected,⁹³⁴ with the data made publicly and easily accessible.

Are there other conditions that should be in place?

Section 401 grants broad powers to the state to condition its certifications.⁹³⁵ It is possible that the state will grant the certification no matter what the project’s effects are, so it is important to recommend conditions that can add protections for nearby communities and the environment. This could be anything that protects water quality or ensures that any other appropriate requirement of state law is met (e.g., monitoring, methods of construction and maintenance to reduce discharges). A water quality expert can help identify additional conditions that could be useful.

Is there a potential that the federal agency granting the permit or license will act before the certification is completed?

Section 401 states that: “no [federal] license or permit shall be granted until the certification required by this section has been granted or waived.” 33 U.S.C. § 1341(a)(1) (emphasis added). Yet FERC routinely ignores this mandate, issuing its own certification order before the state has an opportunity to exercise its 401 powers. When the FERC-certified project is a pipeline, this can result in real harm to communities that may have their lands acquired through the eminent domain powers a FERC certificate bestows, even if the state would have eventually stopped the project by denying the 401 certification.⁹³⁶ Even though 401 comments will be directed to the state agency (with no authority over FERC), it can be worth it to raise this issue in 401 comments, since these comments should be filed with the federal permitting agency as well. (In this way, this issue isn’t overlooked.)

Where can I find examples of 401 WQC comments filed against an LNG terminal?

Section 401 is an under-utilized tool for challenging LNG projects so there are not very many examples of comments addressed to LNG terminals specifically. Jordan Cove is one such project (see comments below). It can be helpful to consider 401 comments on other infrastructure projects

⁹³³ 33 U.S.C. § 1341(d) (“Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 1311 or 1312 of this title, standard of performance under section 1316 of this title, or prohibition, effluent standard, or pretreatment standard under section 1317 of this title, and with any other appropriate requirement of State law set forth in such certification[.]”).

⁹³⁴ 33 U.S.C. § 1341(d) (requiring that monitoring be a part of certifications).

⁹³⁵ See *City of Arlington v. FCC*, 569 U.S. 290, 307 (2013); PUD No. 1, 511 U.S. at 723 (Stevens, J., concurring) (“Not a single sentence, phrase, or word in the Clean Water Act purports to place any constraint on a State’s power to regulate the quality of its own waters more stringently than federal law might require.”).

⁹³⁶ See Delaware Riverkeeper, *People’s Dossier of FERC Abuses: Undermining State Authority* (2019), <https://www.delawareriverkeeper.org/ongoing-issues/peoples-dossier-ferc-abuses-undermining-state-authority>.

in the coastal zones of the relevant state. The most helpful will likely be those from the directed to the same state agency with certifying authority as will be implicated in the proposed project.

- Jordan Cove Energy Project (Oregon)

Oregon Shores Conservation Coalition and others filed Section 401 comments in their challenge to the Jordan Cove LNG export plant proposed for Coos County, Oregon. The groups succeeded in convincing the Oregon Department of Environmental Quality that the project should not be certified. Their comments are found here:

- March 13, 2015: <https://law.lclark.edu/live/files/19121-2015-03-13-coalition-comments-jordan-cove-lng-401> (Also included in App. 56)
- August 8, 2018 comments filed with the Oregon Department of Environmental Quality: https://oregonshores.org/sites/default/files/sites/default/files/media-library/miscellaneous/401_coalition_comments_8.6.18.pdf (Also included in App. 57)



Chapter 8

STATE AIR PERMITS

CHAPTER EIGHT: CLEAN AIR ACT PERMITTING

Overview

What is the Clean Air Act and what approvals are required?

LNG export facilities are substantial sources of air pollution. For instance, Cheniere Energy calculates that, when completed in the next year or so, its Sabine Pass LNG facility will emit up to 6,500 tons of nitrogen oxides (“NO_x”) and 5,200 tons of carbon monoxide (“CO”), ranking in the top two or three largest sources of these emissions in the state of Louisiana. As such, LNG export facilities easily qualify as major sources of air pollution under the Clean Air Act and must obtain appropriate Clean Air Act construction and operating permits. This chapter sets out what permits are required and a general overview of the Clean Air Act as it applies to LNG export facilities.

The primary goal of the Clean Air Act is to achieve compliance with National Ambient Air Quality Standards (NAAQS), which are federal standards set by EPA establishing the allowable concentration in the air for six “criteria” pollutants: ground-level ozone (or smog) (regulated as volatile organic compounds (VOCs) and NO_x⁹³⁷), particulate matter (PM) (regulated as PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO) and lead. For example, and in vastly simplified terms, the current NAAQS for ozone is a maximum of 0.070 parts per million (ppm); if the concentration of ozone is above that for a given area, that area is in “nonattainment;” areas below the standard are in “attainment.”

Although EPA sets the NAAQS, states have primary responsibility for achieving compliance with the NAAQS. They do so by establishing “state implementation plans” (SIPs), which are legal requirements that govern, in relevant part, how new and existing sources of air pollution are regulated. SIPs must be approved by EPA, and once approved, they become federally enforceable, meaning that they can be enforced by EPA and members of the public via the Clean Air Act’s citizen suit provision. Note that most SIP requirements are *state regulations* that have been approved by EPA. Though a state might revise its state regulations, such revision does not alter what is in the SIP unless and until the regulation is approved by EPA.

Among other things, SIPs must implement preconstruction permit programs in accordance with the Act’s New Source Review (NSR) provisions. For now, it suffices to say that NSR permits implement limits on emissions of criteria pollutants and serve to assure sources will not cause or contribute to NAAQS exceedances.

Critically, the permitting requirements applicable to a new source will be vastly different if the source will be a “major,” or large, source, versus a “minor” source. Various emission thresholds determine major versus minor status; moreover, otherwise major sources may opt to be “synthetic” minor sources by accepting limits that must keep their potential emissions below the applicability threshold. “Minor” sources are subject to “minor NSR,” however the Clean Air Act and federal regulations say very little about what a state’s minor NSR program must include, other than to require that minor NSR programs must assure NAAQS compliance and that the public must have an opportunity to comment on draft minor NSR permits. In sharp contrast, major sources are subject to

⁹³⁷ Ground level ozone in the atmosphere is formed by a reaction of VOCs and NO_x in the presence of sunlight. As such, there are not specific air quality standards (“NAAQS”) for VOCs or NO_x, except for NO₂, but VOCs and NO_x are regulated due to their contribution to ozone formation.

detailed federal statutory and regulatory requirements. As noted above, LNG export facilities are large sources and will typically be permitted as major sources.

More specifically, “major” NSR requirements differ depending on whether the area where a proposed source will be located is attaining the NAAQS. Pollutants for which an area is in nonattainment are subject to Nonattainment New Source Review, or “NNSR.” Pollutants for which the area is in attainment are subject to “Prevention of Significant Deterioration,” or “PSD.” PSD always applies to at least some of the pollutants emitted because no area is in nonattainment for all of the NAAQS. NNSR *only* applies to those pollutants for which the area in which the source is proposed to be located is nonattainment; in other words, a source that is subject to NNSR for one or more nonattainment pollutants will remain subject to PSD for attainment pollutants.

Although the NAAQS and SIPs can fairly be called the backbone of the Clean Air Act, there are numerous other pollution control requirements under the Act that may apply to a new LNG source. Those programs are briefly described below and expanded in depth later:

- **EPA’s Technology Based Standards.** The Act and EPA’s regulations establish two similar technology-based standards applicable to new sources. These standards differ from NSR in that they apply to individual units or processes within a proposed facility and are standardized across an industry or beyond; for instance, all new emergency generators are subject to the same standards regardless of where they are located (i.e. emergency generators at a hospital in Los Angeles and emergency generators at an LNG plant in Louisiana will be subject to the same standards).
 - **New Source Performance Standards (NSPS).** NSPS, found at 40 C.F.R. part 60, are the standards implemented for criteria pollutants. For instance, and of relevance to LNG facilities, all new stationary combustion turbines must meet the NSPS emission limits for criteria pollutants like PM as set out in Subpart KKKK of the NSPS rules (40 C.F.R. § 60.4300). LNG facilities may trigger several other NSPS Subparts, discussed below.
 - **National Emission Standards for Hazardous Air Pollutants (NESHAP).** Where NSPS focuses on criteria pollutants, NESHAP regulates hazardous air pollutants (HAPs). HAPs are pollutants listed by Congress or EPA as especially toxic and/or carcinogenic even in small quantities and are not regulated by NAAQS and SIPs (other than lead, which is both a criteria pollutant and a HAP). As to LNG facilities, several NESHAPs are applicable, for instance, stationary combustion turbines are subject to a NESHAP (40 C.F.R. § 63, Subpart YYYY). Standards promulgated after 1990 are referred to as “Maximum Achievable Control Technology” or “MACT” standards.
- **Title V Operating Permits.** Frustrated with endemic non-compliance and complex, disparate permitting schemes, Congress in 1990 enacted Title V of the Clean Air Act, which established a federal operating permit program requiring every major source and some smaller sources to obtain a permit that comprehensively spells out all of the source’s Clean Air Act obligations. This is the Title V permit, and despite the frequent description as a “federal” operating permit, states again typically take the lead in this permitting, although EPA exercises direct oversight. Critically, a Title V permit must identify each Clean Air Act requirement that applies to a source and require monitoring, recordkeeping, and reporting sufficient to assure compliance with all such requirements. Title V permits are typically only required after a facility has begun operating, but

several states—including Louisiana and Texas—have certain Title V requirements that must be met either before construction or before operations can commence, so Title V permitting will be addressed by this guide.

Who Implements the Clean Air Act? States vs. EPA

The Clean Air Act is an oft-cited example of “cooperative federalism” in that “air pollution control at its source is the primary responsibility of States and local governments, but that federal leadership is essential for the development of cooperative Federal, State, regional, and local programs to prevent and control air pollution.”⁹³⁸ In practice, this means that most work related to LNG air permits will be at the state level. For example, most LNG air permits will be drafted and issued by state agencies, in accordance with regulations issued by those same agencies; those regulations, however, typically follow EPA’s regulations, and EPA usually must approve state regulations before they are legally in force as part of the overall Clean Air Act structure.

In Texas, the key agency with authority to issue Clean Air Act permits is the Texas Commission on Environmental Quality (TCEQ), and in Louisiana, it is the Louisiana Department of Environmental Quality (LDEQ). In addition to permitting, state agencies also frequently take the lead in compliance oversight and enforcement.

Despite the emphasis on state implementation, there are several important ways that advocates can seek EPA’s intervention in permitting a new LNG facility. As discussed below, EPA retains explicit oversight of all Title V operating permits and must object to defective permits, although because Title V permits are *operating* permits as opposed to *construction* permits, this oversight may not be especially powerful when confronted with a new LNG facility seeking permission to construct. EPA also holds informal oversight over the NSR permitting programs implemented by states; EPA can review draft NSR permits and offer comments to state permitting authorities, and has legal authority to stop a facility’s construction if the facility has not complied with NSR preconstruction permitting requirements.

Finally, note that some offshore LNG facilities may be permitted directly by EPA. This is discussed further in Section 8.D.

Why challenge an LNG export plant’s Clean Air Act permits?

A motivated advocate is likely to identify defects in a facility’s air permit application as well as its draft permit. There are numerous incentives for an applicant to cut corners: skimping on proposed pollution controls will save money, for instance. And even well-intentioned state agencies are generally understaffed, so permit writers may not have the time or incentive to deeply review a complex air permit application to assure the proposed facility will comply with the Act. That said, advocates should understand that it is extremely difficult—though not impossible—to defeat a proposed facility’s application for an air permit. Simply put, a state agency will issue an air construction permit once the applicant has demonstrated that the proposed facility will meet all applicable federal and state requirements. In most cases, it is at least possible for an applicant to make that demonstration, even if it fails to do so on the first try. For example, if an applicant receives pushback regarding the adequacy of its proposed pollution controls, it can redesign the facility. If the applicant fails to demonstrate that its emissions will not cause or contribute to a NAAQS violation, it

⁹³⁸ 42 U.S.C. § 7401(a).

can accept additional limits that constrain its operations in a way that would avoid such violation. Nonetheless, a challenge to a facility's air permit often succeeds in forcing an applicant to take significant additional measures to ensure that its emissions do not adversely impact air quality, including utilizing more effective (and often much more expensive) air pollution controls, performing additional air quality modeling, preparing a more robust analysis of environmental impacts, and being made subject to more rigorous air pollution monitoring requirements. Occasionally, when faced with having to pay the full cost of Clean Air Act compliance, an applicant will withdraw its application or simply fail to move forward with construction after receiving a final permit.

Finally, air permit challenges can be a useful organizing tool for advocates. Well-attended public hearings with key community leaders voicing opposition, large numbers of public comments detailing public concerns about a project, and legal challenges can generate substantial publicity and demonstrate widespread community opposition to a proposed facility. Even if a state agency like TCEQ ultimately issues the air permit, other entities that may hold discretion over approving a new facility may be more likely to vote against a project given the widespread public concern regarding air pollution issues.

How is this chapter organized?

This chapter describes the portions of the Clean Air Act most relevant to LNG export facilities, followed by helpful resources and advice on how to approach reviewing an LNG air permit.

- Section 8.B examines major NSR Permits that most LNG facilities will need;
 - Subsection 8.B.9 should be highlighted as it details particular major NSR issues likely to arise in LNG permitting;
- Section 8.C details *minor* rather than major NSR, which may apply to some smaller LNG plants or supporting projects;
- Section 8.D discusses air permitting for offshore facilities;
- Section 8.E looks at hazardous and toxic air pollutants (HAPs and air toxics) and the NESHAP and state air toxics requirements that apply to LNG facilities;
- Section 8.F briefly describes the applicable New Source Performance Standards;
- Section 8.G examines Title V federal operating permits;
- Section 8.H provides an overview how to prepare effective comments on air permits and gives advice on how to review a complex permitting record;
- Section 8.I details the air pollution and air pollution control technology relevant to LNG export facilities, and
- Section 8.J lists resources for learning more about all of the above topics, how to find important information and documents, and other helpful resources.

Major New Source Review Construction Permits

Who needs a major NSR permit?

Perhaps the single most important Clean Air Act question a new facility must confront is whether it will be a major NSR source or a minor (including synthetic minor source, discussed below). The costs and hurdles of building a major source are far more substantial than minor sources, and many types

of sources will even try to design their facility specifically to avoid major NSR. For our purposes, however, most LNG export facilities are so high-emitting that they have no choice but to be permitted as major NSR sources. That said, we provide a brief overview of NSR applicability determinations here.

EXISTING RESOURCE: EPA'S (DRAFT) NSR MANUAL

This chapter provides an overview of NSR permitting and specific issues relevant to LNG facilities. Advocates looking to learn more about NSR issues should look at EPA's NSR Workshop Manual, released as a draft in 1990 and never finalized. Although the Manual is not considered legally binding, it is recognized as a good resource for EPA's interpretation of NSR requirements. Many of those interpretations have been included in other EPA's documents or decisions that are binding, such as decisions by EPA's Environmental Appeals Board or in Title V petition orders. Be aware, however, that EPA has made changes to its rules and guidance since 1990, including extensive regulatory revisions promulgated in 2002 that altered the methodology for determining whether a facility modification triggers NSR.

The manual is currently available at: <https://www.epa.gov/nsr/nsr-workshop-manual-draft-october-1990>.

In the context of LNG export facilities, major NSR applicability is determined by two factors: location and the planned facility's potential emission rates for the six criteria pollutants (PM, NO_x, CO, SO₂, VOCs, and Lead). Location is important because areas that are in nonattainment have lower thresholds for major source applicability than areas that are in attainment.

In attainment areas, and as applicable to LNG facilities, a major source is any new facility that has the "potential to emit" (PTE, more on this below) 250 tons or more of any criteria pollutant per year.⁹³⁹ In nonattainment areas, the default major source threshold is 100 tons per year of any pollutant that is causing the nonattainment (for instance, VOCs and NO_x are both precursors of ozone, so if any area is in nonattainment for ozone, either VOCs or NO_x could individually trigger the major source threshold). Further, there are more stringent thresholds depending on the severity and type of the nonattainment.

Potential to emit, or PTE, is term of art with specific, legal meaning defined in several places across the Act and in regulations. The relevant definition for NSR is set out as follows: "**Potential to emit** means the maximum capacity to emit a pollutant under [the source's] physical and operational design."⁹⁴⁰ Further, "any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed" can be included in calculating PTE if it is legally and practicably

enforceable, such as a permit limit on production throughput that is accompanied by adequate monitoring to ensure compliance with the limit.⁹⁴¹

⁹³⁹ For larger LNG export facilities that have turbines with a combined heat input rating of 250 MMBtu/hr or greater, the PSD threshold is actually 100 tpy, however, practically speaking, those larger facilities will have emissions that exceed either threshold. See 40 C.F.R. § 52.21(b)(1)(i)(a).

⁹⁴⁰ 40 C.F.R. § 52.21(b)(4).

⁹⁴¹ EPA, *Guidance on Limiting Potential to Emit in New Source Permitting*, at 6 (June 13, 1989).

Finally, **modifications** can also require a major NSR permit. For sources that are already major and in attainment areas, the thresholds are set out below:

- Carbon monoxide: 100 tons per year (tpy)
- Nitrogen oxides: 40 tpy
- Sulfur dioxide: 40 tpy
- Particulate matter: 25 tpy of particulate matter emissions. 15 tpy of PM₁₀⁹⁴²emissions
- PM_{2.5}: 10 tpy of direct PM_{2.5}emissions; 40 tpy of sulfur dioxide emissions (as a precursor to PM_{2.5}); 40 tpy of nitrogen oxide emissions unless demonstrated not to be a PM_{2.5}precursor
- Ozone: 40 tpy of volatile organic compounds or nitrogen oxides
- Lead: 0.6 tpy
- Fluorides: 3 tpy
- Sulfuric acid mist: 7 tpy
- Hydrogen sulfide (H₂S): 10 tpy
- Total reduced sulfur (including H₂S): 10 tpy
- Reduced sulfur compounds (including H₂S): 10 tpy

The thresholds for a modification to trigger Nonattainment NSR are generally the same as the PSD thresholds—except that lower thresholds apply in serious, severe, and extreme nonattainment areas.⁹⁴³

Finally, with respect to facility modifications, advocates should be aware that there are myriad ways for a facility to escape having its modification be classified as “major” even if the modification in question would, at first look, appears to result in a significant emission increase. For example, a facility can utilize a process called “netting” whereby sources may make modifications that would otherwise need a major source NSR permit by claiming credits for prior emission reductions at the same facility. The rules governing how to determine whether a facility modification is subject to major NSR are complex and beyond the scope of this guide. Advocates who believe that a facility modification has been improperly excluded from major NSR are strongly encouraged to consult with an experienced Clean Air Act attorney.

How do I know when a major NSR permit application has been submitted for a proposed LNG export plant?

As a general rule, it may be difficult to know when a major NSR permit application for a new proposed LNG plant has been submitted to a permitting agency. Although there are requirements for public notice and comment once an agency has prepared a draft permit it proposes to issue, many states have no notice requirements for the public to learn when an application has merely been submitted, although Texas is a notable exception, as explained below.

⁹⁴² PM₁₀ refers to particulate matter 10 microns or smaller in diameter. PM_{2.5}, mentioned below, refers to particles 2.5 microns or smaller in diameter.

⁹⁴³ See 40 C.F.R. § 51.165(a)(1)(x).

The lack of notice on applications is problematic because reviewing lengthy and complex applications can be daunting even for experienced Clean Air Act attorneys, so the more time available to review and organize in advance of the draft permit, the better.

Fortunately, there are ways advocates can learn of and obtain new applications. If an advocate is aware of a proposed new LNG export facility, perhaps from other, non-Clean Air Act, permitting processes, or from the industry itself, here's what they should do:

- Monitor online databases. Many states, including both Louisiana and Texas, maintain reasonably up-to-date online portals where documents, including permit applications, are uploaded (see Section 8.J.1). Be aware, however, that these databases may not be complete or updated sufficiently, so reliance on such databases alone may not be adequate to catch all new facilities.
- File public records requests.
- Talk to the agency. Most agency staff are willing to at least tell members of the public if an application has been received and how to obtain it. Often, they will direct you to file a public records request, but on occasion, a staff member will provide you with an electronic copy by email.

Texas Notice of Application: Texas does issue public notices when TCEQ receives a major source NSR application, but only after TCEQ has determined the application is administratively complete, and TCEQ has up to 90 days after receipt of an application to make this determination. The public notice is specifically referred to as the "Notice of Receipt of Application and Intent to Obtain Air Permit." Advocates can use TCEQ's website⁹⁴⁴ to search for all public notices for a given time period, county, zip code, and so on. See the section below on public notice requirements for information on how to sign up for mailing lists to receive such notices.

Will I have an opportunity to comment on a proposed plant's major NSR permit application?

In most states the only formal opportunity to comment on a proposed plant's major NSR permit application will be once the agency has reviewed the application and drafted a permit. However, although the draft permit itself is the subject of the comment period, defective or incomplete applications that result in deficient permits are fair game for comments filed on the draft permit. In fact, reviewing and commenting only on the draft permit is likely to miss significant issues; reviewing the facility's application(s) is vital to spotting issues in the permit. For instance, a permit application may mention the possibility of the facility being equipped with more effective pollution controls, but the permit may require lesser controls because the applicant successfully argued that the more effective controls are not legally required. If you review the application and become aware of the issue, you might be able to successfully rebut the applicant's arguments and persuade the permitting agency to require the more effective controls.

Some states, including Texas, do provide a formal public comment period on major NSR permit applications. TCEQ allows for public comments and requests for public meetings as soon as it deems a new application "administratively complete" (see below Section 8.B.6.i). The "completeness determination" typically occurs many months before a draft permit is issued. Note that the deadline

⁹⁴⁴ TCEQ, *Search for Public Notices*, <https://www14.tceq.texas.gov/epic/eNotice/index.cfm>.

for comments or meeting requests is not finalized at this stage, but rather will be set once TCEQ issues a subsequent public notice and opportunity for comment on the draft permit.

Regardless of whether the state provides a formal opportunity to comment on a permit application, nothing prevents you from providing the permitting authority with comments informally. Especially prior to the State finding that the application is “administratively complete,” if you discover that an application is missing critical information (which is often the case) you should consider asking state officials to find that the application is incomplete. An incompleteness finding delays the deadline by which the state must act on the application and, as a practical matter, likely delays the point at which agency staff begin preparing a draft permit.

Be aware that in most cases, an applicant will submit its protocol for modeling the proposed facility’s impacts on ambient air quality (the “modeling protocol”) long before submitting its permit application—most likely about six to ten months beforehand. There is no formal opportunity to comment on the modeling protocol, but to the extent that you find out that a protocol has been submitted, it is helpful to submit any comments on the protocol early in the permitting process before the modeling is undertaken. While you can certainly comment on deficiencies in the modeling protocol when you comment on the draft permit, it will be difficult at that late stage to persuade the State to require the applicant to make substantial changes to its modeling protocol and redo its modeling.

To effectively comment on a modeling protocol, you almost certainly will want to enlist a modeling expert. One area that might be useful to focus on is the applicant’s protocol for compiling the emissions inventory to be used for modeling the proposed facility’s ambient air quality impacts. To correctly model compliance with the NAAQS, an applicant must partake in a two-step process—a process considered controversial by environmental advocates, discussed in Section B.9.i.d. First, an applicant will screen the project’s emissions to determine whether they exceed “Significant Impact Levels” (SILs), and only if the emission exceed the SILs will an applicant need to model both the project’s emissions and those of nearby sources.⁹⁴⁵

Often, at this second step, applicants try to take shortcuts, simply relying on state emissions inventories that may only include estimated actual emissions and often are woefully inaccurate. Early in the process, you could advocate for the state to require the applicant to undertake a more rigorous analysis of actual emissions in the area, which the applicant can identify by taking the time to review individual permits to determine each facility’s allowable emissions. An expert could advise you as to the specific nuances of the state in which you are operating and the particular information sources that an applicant proposes to utilize in putting together the regional emissions inventory to be used for modeling.

When is a Permit Application Complete?

It is important to understand the significance of the administrative completeness (or sometimes “technical completeness”) determination. Major NSR applications are vast documents and must contain many types of information. It is common for an applicant to submit an incomplete application. Agencies therefore usually do not start the permitting “clock” until they complete an initial review of the application to ensure it at least contains the minimal types of information that will enable the

⁹⁴⁵ 40 C.F.R. Part 51, Appendix W, § 9.2.3.

agency to review and prepare a draft permit. If an applicant fails to supplement an incomplete application, the agency will not take any further action on the application.

Below, and in broad strokes, are the minimal requirements for a complete major NSR permit application relevant to a new LNG export facility in Louisiana; most other state's requirements will be similar:

- The facility's physical location (with high specificity) and process description;
- The facility's projected emissions rates;
- The bases for estimating emission rates (i.e. emission factors, process throughput, and other detailed calculations);
- List of applicable Clean Air Act requirements;
- Co-location determination: are there any other facilities that really should be permitted jointly with this one? Or is this potentially a modification of an existing source?
- Control technology determination(s), i.e. what emissions level reflects the use of best available control technology (BACT) (required for attainment-area pollutants) or lowest achievable emissions rate (LAER) (required for nonattainment area pollutants) and why?
- Air quality analysis, including air dispersion modeling to demonstrate compliance with NAAQS;
- Additional impacts analysis (impacts to soils, vegetation, and visibility);
- Signed certificate of compliance with applicable requirements;
- Certificate of a Registered Professional Engineer.

It is vital to note that the mere fact that an agency has determined that an application contains all of the necessary information **does not** mean the application is actually complete. The completeness determination by an agency is a high-level review, and advocates should be on the lookout for omissions of key information that is necessary to inform the permit writer and the public of how the facility will be built and operated. For example, a "complete" application may omit technological or economic information necessary to justify BACT determinations. A permit issued based on an incomplete application is likely defective and vulnerable to legal challenge.

Even after a permit application has been deemed complete, agencies may realize they need additional information, and will make formal or informal requests for additional information. Likewise, it is common for applicants to realize they need to make changes to the application and to submit application amendments.

In a perfect world, the NSR permit application would be a single, self-contained document with all of the necessary information in one place. In reality, however, the "application" may really consist of numerous documents, amendments, and even communications like emails. Advocates should therefore view the "application" as more of an administrative record rather than a single document.

How much time does a permitting authority have to act on a major NSR permit application?

In most states, including Texas and Louisiana, the deadlines applicable to permit processing are found in their SIPs—specifically, in state NSR regulations that have been approved by EPA.⁹⁴⁶ Although these deadlines are legal requirements, in practice states frequently miss these deadlines. The relevant regulations for Texas and Louisiana are set out below:

Texas Major NSR Permitting Schedule (30 TAC § 116.114)

1. Upon receipt of an application, TCEQ has 90 days to inform the applicant whether the application is complete or deficient. If it is deficient, the clock stops until the applicant provides the missing information; if it is complete, then the schedule continues.
2. If the application is deemed complete initially, then TCEQ has 180 days to issue a preliminary decision in the form of a draft permit or permit denial; if the initial application was not initially deemed complete but was supplemented, TCEQ has 150 days from the date the permit was eventually deemed complete to make a preliminary decision.
3. The rules do not set out explicit deadlines for issuing permits when public comments are received; in practice, substantive comments can cause the agency to miss the aforementioned dates.

Louisiana Major NSR Permitting Schedule and Deadlines (LAC 33:III.509(Q))

1. Upon receipt of an application, LDEQ has 60 days to notify the applicant whether the application is complete or deficient (note that if LDEQ fails to timely notify the applicant one way or the other, the application is deemed complete). If the application is deficient, the applicant must respond to the notice of deficiency to supplement the application within 30 days.
2. Louisiana's rules are somewhat ambiguous on what happens once an application is deemed complete. Specifically, the rules state that "[w]ithin one year after receipt of a complete application, [LDEQ] shall make a preliminary determination whether construction shall be approved..."⁹⁴⁷ The ambiguity arises because it is unclear whether the one-year deadline is triggered as of the date of receipt or the date the completeness determination is made.
3. Regardless, once a preliminary determination is made, LDEQ will make the draft permit and determination available for public notice and comment. As in Texas, there are no specific deadlines for when the final permit must issue if comments are received.

How do I know when a draft major NSR permit is available for public comment?

Once you know an application has been submitted, it is comparatively easy to know when a draft major NSR permit is available for public comments. At a minimum, all states must provide for public notice and comment on draft major NSR permits, and most states maintain mailing lists (often via email and regular mail) that advocates may sign up for to receive notices and other updates. Most agencies also have online websites listing recent public notices.

⁹⁴⁶ If a state is operating under "delegated" EPA authority (a list of such states is provided at Section 8.B.12), or EPA is directly acting as the permitting agency (likely offshore permitting, Section 8.D), then a one-year deadline to issue or deny applies. See more information here: <https://www.epa.gov/sites/default/files/2015-07/documents/timely.pdf>.

⁹⁴⁷ LAC 33:III.509(Q)(2).

a. Texas Public Notice Requirements for Major NSR Permits

Texas' public notice requirements for Major NSR permits can be found at 30 TAC § 39, Subchapters H & K.⁹⁴⁸ Specifically, Texas' SIP requires public notice and comment at several stages of the permitting process:

- Notice of Receipt of Application and Intent to Obtain Permit, 30 TAC § 39.418: once TCEQ determines that an application is complete, TCEQ shall mail the determination and the Notice of Receipt of Application and Intent to Obtain Permit to those on the mailing list (see below for details on mailing lists). Notice must also be published in a local newspaper and on sign postings at the site, pursuant to 30 TAC Chapter 39K.
 - Comment deadline: TCEQ's public notice deadlines can be confusing, so it's best practice to look at the public notice itself to ascertain when TCEQ has set the deadline. In general, however, for major NSR permits, the deadline will be 30 days after publication of the *Notice of Application and Preliminary Determination*, set out below. This means there will be a long but unspecified period where the *Notice of Receipt* is open for public comment.⁹⁴⁹
- Notice of Application and Preliminary Determination, 30 TAC § 39.419: "After technical review is complete for applications subject to the requirements [of major NSR, both PSD and NNSR], the executive director shall file the executive director's draft permit and preliminary decision, the preliminary determination summary and air quality analysis, as applicable, with the chief clerk and the chief clerk shall post these on the commission's website."
 - Comment deadline: 30 days after **newspaper publication** of the public notice.⁹⁵⁰ This can be problematic for advocates, as the publication of the notice in a local newspaper is left to the applicant, meaning the exact start and end time of the notice period can be hard to ascertain. Specifically, the notice must be published "in a newspaper of general circulation in the municipality in which the facility is located or is proposed to be located or in the municipality nearest to the location or proposed location of the facility."⁹⁵¹ Advocates can call the applicant at the number listed in the public notice to ascertain whether publication has occurred. Alternatively, proof of publication is also usually posted on TCEQ's Commissioner's Integrated Database, but this may not be posted until days or weeks after publication, meaning advocates lose valuable time.
 - Also note that in some instances, applicants must also publish a newspaper notice in an alternative language; this is determined by whether the nearest elementary or middle school to the facility is implementing a bilingual education program.⁹⁵² If newspaper notice is required in more than one language, the alternative language notice may be in a different newspaper than the English-language notice; in this instance, the 30-day deadline runs from whichever notice was published last.

TCEQ Mailing lists: advocates may sign up for two types of mailing lists in Texas. First, TCEQ maintains mailing lists specific to each proposed facility, so if you know the name of a proposed

⁹⁴⁸ Shortcut to the SIP: <https://www.epa.gov/sips-tx/current-texas-sip-approved-regulations#39H>.

⁹⁴⁹ See 30 TAC § 55.152.

⁹⁵⁰ 30 TAC § 55.152(a)(1).

⁹⁵¹ 30 TAC §39.603(d).

⁹⁵² For a quick guide to bilingual public notice requirements, see TCEQ's "Easy Steps to Determine if Public Notice in an Alternative Language is Required," <https://www.tceq.texas.gov/assets/public/permitting/air/Bilingual/alternatelanguagechecklist.pdf>.

facility, you may request to be added to that mailing list. Alternatively, TCEQ also maintains mailing lists on a county basis; for instance, you can ask to receive all public notices for facilities in Harris County. Requests for either type of mailing list must be made in writing to chiefclk@tceq.texas.gov. In practice, these notices are also posted on TCEQ's website at: <https://www14.tceq.texas.gov/epic/eNotice/>.

b. Louisiana Public Notice Requirements for Major NSR Permits

Louisiana's public notice requirements for PSD sources can be found at LAC 33:III.509(Q). Confusingly, Louisiana's regulations do not set out specific public notice requirements for nonattainment NSR permits, but practically speaking any LNG export facility located in a nonattainment area (and only one parish on the coast of Louisiana is in nonattainment—St. Bernard Parish) is likely to trigger PSD or minor NSR permitting requirements (which will also require public notice and comment, discussed in Sections 8.B.3 and 8.C.2, respectively).

Louisiana's rules also do not establish a specific time period for public comment periods on draft PSD permits, however the public notice document will set forth a precise deadline. Based on a review of public notices, LDEQ typically provides for around 35 days of public comment. Note that if the time period is less than 30 days, it is unlawful.⁹⁵³

LDEQ maintains both a regular mailing list and an electronic mailing list, to sign up visit <https://internet.deq.louisiana.gov/portal/SUBSCRIBES/PUBLICNOTIFICATION> or contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at DEQ.PUBLICNOTICES@LA.GOV or by contacting the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337). Likewise, public notices are posted to LDEQ's website at: <https://deq.louisiana.gov/public-notices>.

How much time will I have to comment on a draft major NSR permit? Can I get an extension?

Permitting authorities must provide at least 30 days of public notice and comment on draft Major NSR permits,⁹⁵⁴ and in practice 30 days is typically what states choose to implement. Note that if the 30-day period ends on a weekend or holiday, most states will roll the deadline to the next working day, but it is imperative that you confirm this in writing with the permitting authority. It is also vital to check whether the deadline is 5 pm, midnight, or some other unnecessarily arbitrary time (at least one state has a 4:30 pm deadline, which seems designed to trip up unsuspecting advocates). In Louisiana and Texas, as of this writing, the deadline is midnight.

Extensions are granted at the discretion of the permitting authority. In practice, agencies are usually willing to grant an extension request when there is significant public interest, the facility or permit is particularly complex, or other extenuating circumstances exist. Regardless, it doesn't hurt to ask. Requests for extensions are typically made by a brief letter sent to the appropriate contacts at the agency setting out the reasons that a request would benefit the public or is otherwise warranted. Unfortunately, it is often the case that extension requests aren't granted until the end of the initial comment period, and you don't want to rely on the agency granting your request. Thus, even if you request an extension, be prepared to submit at least a basic set of comments by the initial comment deadline.

⁹⁵³ 40 C.F.R. § 52.21(q) states that PSD permits must follow the public notice and comment requirements of 40 C.F.R. § 124, which, in turn, includes a requirement for at least 30 days of public comment. 40 C.F.R. § 124.10(b)(1).

⁹⁵⁴ 40 C.F.R. § 124.10(b)(1).

Additionally, in many states, requesting a public hearing (discussed below) may also result in an extension of the deadline for written comments. In Texas, for instance, if a public hearing is granted during or after the close of the public comment period, TCEQ typically reopens or extends the written comment deadline until the date of the public hearing.

Is there an opportunity for a public hearing on a draft major NSR permit?

Permitting authorities must hold a public hearing when there is “a significant degree of public interest.”⁹⁵⁵ Many states choose to hold public hearings on all major NSR permits, but others will only do so when requested, including both Louisiana and Texas (discussed below).

So, what are public hearings and why or when should advocates request one?

- **Public Hearing Format:** The legal purpose of a public hearing is to provide members of the public with an opportunity to present oral comments to the permitting agency that will be entered into the administrative record for the permit action. The agency must document all oral comments that it receives. The agency is obligated to consider and respond to any substantive and significant comments in deciding what action to take on the permit application.

The exact format of the public hearing will vary from state to state, but a typical public hearing will contain similar elements. Often the state agency will make a brief presentation before the public hearing begins in which it will describe the proposed facility, the draft permit, and, typically, the agency’s rationale for why the permit will protect public health and the environment.

Sometimes this presentation will be followed by a question-and-answer session, but not always.

Note that if the agency gives a presentation and/or hosts a Q&A session, the official “public hearing” does not begin until after that is over. Once the hearing officially begins, all meeting attendees can provide oral comments on the draft permit if they wish to do so. It is important to confirm when the hearing officially begins so that you know that your oral comments will be in the administrative record. Also, though oral comments will be incorporated into the administrative record, it is good practice to bring a written copy of whatever you plan to say in your oral comments and hand them to the stenographer before you speak. Though not required, this will ensure that your comments are properly recorded and make it more likely that you will receive a substantive response from the agency when it takes final action on the permit application. Preserving a record of your comment is important because, in most cases, you can only challenge an agency’s final decision based on issues that were raised in public comments on the draft permit.

- Typically, someone who wishes to make an oral comment at a public hearing must sign up on a speaker list when they arrive at the hearing. The public notice announcing the hearing should provide instructions for how to sign up. If you anticipate that there will be a lot of people at a hearing, tell advocates that they should sign up or arrive early if they want to speak near the beginning.

⁹⁵⁵ For a discussion of what qualifies as a “significant decree of public interest,” see *In re Sierra Pacific Indus. (Anderson Processing Facility)*, PSD Appeal Nos. 13-01, 13-02, 13-03 & 13-04, Order Remanding in Part and Denying Review in Part (EAB, July 18, 2013) (available on the website of EPA’s Environmental Appeals Board at https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/05819647854bacb0852578db004a8fe9/1432397d2de2b8f885257bac005d9283!OpenDocument&Highlight=2,sierra.industries).

- Who will be there? The agency will typically bring a handful of representatives, including usually the individual(s) responsible for reviewing the application and writing the permit, as well as managers and public relations and/or environmental justice representatives. The applicant will usually send representatives to speak or even present, and sophisticated corporations also tend to invite numerous supporters, such as local politicians, representatives from the local chambers of commerce, and company employees, to vouch for the benefits of the project. Finally, of course, are members of the public. To get the most out of a public hearing, be sure to enlist as many advocates as possible to attend. You can assist those who are willing to speak by arming them with suggested talking points if they are interested. If you have a lot of people attending who are opposed to the facility but won't be speaking, make sure that one of the speakers asks members of the audience to raise their hands if they oppose the project, and have the speaker describe what portion of the audience is opposed, etc. Aside from encouraging community members to attend, you should also consider whether any elected officials would be willing to attend the hearing and express opposition to the project. Finally, if you think that you will have a sufficient number of advocates present, you should notify the media and be prepared to speak with them. You might hold a press event prior to the hearing at a location that provides a good visual background, e.g., protesters on the steps of city hall.
- What is the value of a public hearing? Generally speaking, the types of issues covered by this guide that relate specifically to the draft permit are best made in writing; oral comments are usually limited to around three to five minutes, making a presentation on legal or technical arguments concerning the permit difficult. However, public hearings can be useful for several reasons:
 - Showing that the community is paying attention and seeking a just and stringent permit;
 - Providing members of the community who are uncomfortable preparing written comments with an opportunity to present their concerns orally;
 - Focusing the agency's attention on key legal or technical arguments made in written comments;
 - If Q&A is allowed prior to the hearing, that can be a valuable opportunity to delve into how the agency has reviewed and processed the permit. For instance, if you have found vulnerabilities in the permit record, why not ask if the agency has considered the issue? If yes, they may save you time by explaining their rationale, and if not, it highlights the agency's lack of thoroughness and oversight;
 - As an organizing tool to bring together members of the public who may have concerns about the facility;
 - Providing an opportunity for media coverage of the community's concerns.
- Are there risks to requesting a public hearing? There can be. The primary one is requesting a public hearing and not having community members show up or speak. Advocates should only request a public hearing when it is clear that the community is sufficiently engaged—and not overly intimidated—to attend and speak publicly.

Texas and Louisiana specific guidance:

- **Texas public meetings:** In Texas, public hearings are specifically referred to as public ‘meetings;’ requests for a public ‘hearing’ will be interpreted as a request for a contested case hearing, discussed below, so advocates must be precise with the language of their requests. Public meetings will only be held when requested. The public notice will contain instructions on how to request a public meeting.
- **Louisiana hearings:** Although Louisiana’s SIP appears to require public hearings on all major PSD permits,⁹⁵⁶ in practice it appears LDEQ only holds hearings for permits when requested or when they anticipate significant public interest. Advocates may request a hearing once the public notice for a draft permit is released, and the public notice will contain instructions for how to do so (including online and by email).

If advocates do wish to request a hearing, it is worth contacting the agency before the draft comes out if you have specific requests regarding when and where the hearing should be held. If the agency already intends to hold a public hearing on a draft permit, it likely will announce the time and location of the hearing in the same notice used to announce the availability of the draft permit for public comment.

What are the key issues I should cover in my comments on a draft major NSR permit?

Major NSR permits and the permit record can seem daunting. This section details key issues that tend to arise in major NSR permits, first in a general manner, and then in a more detailed look at LNG-specific NSR issues.

a. Prevention of Significant Deterioration requirements

Most LNG export facilities are permitted as major NSR sources, so they will need to obtain a PSD permit addressing all criteria pollutants for which the area where the source is proposed to be located is in attainment. As noted above, all areas in the U.S. are classified as attainment for at least some criteria pollutants, so a proposed major source will always be subject to PSD for at least some pollutants. This section addresses issues to watch for in the PSD portion of a permit.

i. Applicability Determinations

As discussed above, most LNG export facilities have been permitted as major NSR sources, so more often than not there won’t be significant issues around whether NSR applies to a proposed new facility.⁹⁵⁷ Further, the question of whether a minor or synthetic minor source should really be a major source is covered in the minor NSR section below.

Even with major NSR sources, however, there are still issues to watch for regarding major NSR applicability determinations. The main one involves support facilities. Here’s an example: if a minor source pretreatment facility is to be built four miles from a major source liquefaction export facility, both owned by the same company, and they will be connected by a pipeline, are they two sources or one for purposes of NSR permitting? This isn’t a hypothetical, but the questions faced by EPA and

⁹⁵⁶ LAC 33:III:509(Q)(2)(c).

⁹⁵⁷ One notable exception is Freeport LNG in Texas, which uses electric motors rather than combustion turbines in the LNG trains; as a result, it emits vastly lower levels of air pollution compared to similar-sized LNG export facilities that utilize combustion turbines.

TCEQ when permitting Freeport’s LNG operations in Texas, and the answer is critical for several reasons.

By attempting to separate projects into discrete permits, industry can evade key NSR requirements. In the foregoing example, the pretreatment facility—if permitted individually—would be a minor source not subject to major NSR, and the combined emissions of the two sources would not need to be considered together in the NSR impacts analyses for the export facility.

This question is referred to as “project aggregation” (or sometimes “source aggregation”), and here are the broad elements that must be met for two or more projects to be considered one source:

1. Do they share the same industrial grouping? This is determined by whether the facilities share the same first two digits of the four-digit Standard Industrial Code (SIC). LNG facilities fall into the SIC code beginning with ‘13’ for oil and gas extraction, so any other operation within that ‘13’ group will qualify, and
2. are located on “one or more contiguous or adjacent properties,” and,
3. they are “under the control of the same person (or persons under common control).”

40 C.F.R. § 52.21(b)(6)(i). Although the first prong is straightforward, the second two have been subject to shifting guidance and rulemaking in recent years. Key issues:

Definition of adjacent: As of February 2022, “adjacent” is defined for the oil and gas industry to mean on the same “surface site,” as defined in 40 C.F.R. § 63.761,⁹⁵⁸ or within ¼ mile of each other.⁹⁵⁹ This ¼ mile rule was implemented in 2016 by EPA to apply specifically to the oil and gas industry. Prior to that, much further distances could be considered adjacent (for instance, the four miles at issue in the Freeport permit above was considered adjacent in 2015 when the permitting was conducted, but likely would not be considered adjacent currently).

Definition of control and common control: Here’s how EPA recently summarized the common control question:

“EPA first determines whether the facilities are commonly owned, e.g., one company is a parent company to the other or one company owns part of the other company. Common control can also be established if an entity has the power to direct or cause the direction of the management and policies of another entity. This direction could be as a result of the ownership of stock, or voting rights, by the existence of a contract, lease, or other type of agreement between the facilities, or through another means.”⁹⁶⁰ EPA recently issued a Final Action further clarifying its interpretations of source aggregation,⁹⁶¹ which is a good starting point for advocates looking to learn more.

ii. Best Available Control Technology (BACT) Determinations

One of the most contentious realms of major NSR permitting, and therefore an area ripe for scrutiny, is the BACT determination (and much of what is discussed in this section also is relevant to LAER

⁹⁵⁸ 40 C.F.R. § 63.761 defines “surface sites as any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.”

⁹⁵⁹ 81 Fed. Reg. 35,622, 35,623 (June 3, 2016).

⁹⁶⁰ Letter from Gregg M. Worley, EPA, to James Capp, EPA, at 2, Dec. 16, 2011, <https://www.epa.gov/sites/default/files/2015-07/documents/ps2011.pdf>.

⁹⁶¹ 83 Fed. Reg. 57,324 (Nov. 15, 2018), <https://www.regulations.gov/document/EPA-HQ-OAR-2003-0064-0175>.

determinations for NNSR). Generally, the more stringent the BACT determination is, the more money the source will need to spend to comply; on the other hand, BACT is meant to require exactly what it stands for: the best available control technology. Herein lies the tension between sources, agencies, and advocates.

Despite its name, BACT is not truly a particular control technology, but instead a short-term emission limit based on the use of a given control technology or operating practice. Here is the most central part of the definition of BACT:

Best Available Control Technology means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source . . .

40 C.F.R. § 52.21(b)(12). See below for a more detailed description, but in short, BACT should be the lowest emission limit that has been achieved at a similar source such as combustion turbines. The burden then falls on the applicant to demonstrate why its unique, source-specific design or operating conditions render that emission limit infeasible either technologically or due to considerations of energy, environmental, or economic impacts.

In most states, the foregoing analysis is conducted in a five-step, “top down” approach pursuant to EPA guidance:⁹⁶²

- Step one. Assemble all available, potential control technologies and the related emission limits achieved or believed to be achievable. This can include both controls and operating practices, including a combination of controls, and the scope is not limited to control technologies in use in the United States.
- Step two. Eliminate those potential control technologies that are not technically feasible.
- Step three. Rank the remaining options in order of control effectiveness.
- Step four. Conduct a case-by-case consideration of energy, environmental, and economic impacts—starting with the option ranked most effective for controlling emissions. In the absence of unusual circumstance, the presumption is that cost and other impacts that have been borne by one source in a given category may be borne by another source in the same source category. Cost is usually expressed as cost-per-ton of emissions reduced. If the top option is rejected, evaluate the next most effective control option.
- Step five. The most effective option not rejected is BACT.

Ways to challenge a proposed BACT determination include:

- At step 1: The proposed determination ignores technology in use at other similar facilities (including those in other countries) or other industries that can be transferred to this industry. Sources and states sometimes claim that they can refuse to consider control technologies that

⁹⁶² This description of BACT and the following “Ways to challenge a proposed BACT determination” were adapted from material drafted by Patton Dycus for Clean Air Act Toolkit, and are excerpted here with permission.

are used by identical processes located at synthetic minor facilities, as these controls are not used as BACT, but this incorrect and should be challenged. In addition, it is not that unusual for the proposed BACT determination to involve no controls (but instead, best operating practices). Scrutinize such determinations carefully.

- At step 2. The technical infeasibility determination is unfounded.
- At step 4. A technology is improperly found cost-ineffective because costs are inflated (perhaps by counting the cost of controls that are already required to control other pollutants), the emission control efficiency assumption is too low (increasing the cost/ton of pollution removed), or the amount of uncontrolled emissions is underestimated.

Texas, meanwhile, does not use the top-down method, but instead a “three-tier” process. Note that while EPA does not require the top-down method, EPA will only accept other methods so long as the procedure produces the same results as the traditional EPA-endorsed top-down methodology.⁹⁶³ In addition, TCEQ has specifically stated that the three-tier method must produce exactly the same results as the top-down method, and not merely be “likely” to produce the same results.⁹⁶⁴

TCEQ’s three-tier process is briefly summarized here, but a full guide is available at this footnote.⁹⁶⁵

- Tier I: Evaluates emission limits or performance levels established as BACT in recent major NSR permits; this step roughly presumes that “technical practicability and economic reasonableness of a particular emission reduction option may have already been demonstrated in prior reviews for the same process and/or industry.”⁹⁶⁶ Note that Tier I also should also “take into consideration any new technical developments, which may indicate that additional emission reductions are economically or technically reasonable.”⁹⁶⁷
- Tier II: If no BACT requirements have been established for particular process or industry, the process moves to Tier II, which considers BACT limits in recent NSR permits for “similar air emissions streams in a different process or industry.”⁹⁶⁸
- Tier III: This tier applies only if the first two have failed to identify applicable BACT limits. Tier III is a “a detailed technical and quantitative economic analysis of all emission reduction options available for the process/industry under review.”⁹⁶⁹ In practice, it is rare for a source to reach Tier III, and it is especially unlikely that an LNG export facility would do so.

iii. Air Quality Modeling

Applicants for PSD permits must conduct air dispersion modeling to demonstrate that their emissions will not cause or contribute to exceedances of the NAAQS (or otherwise degrade air quality, see PSD Increments⁹⁷⁰). Air dispersion modeling is a complex and technical process, and

⁹⁶³ TCEQ, Response to Texas Chemical Council’s Comments on Air Permit Reviewer Reference Guide (APDG 6110) Air Pollution Control: How to Conduct a Pollution Control Evaluation, at 4 (undated), <https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/rtc-texas-chem.pdf>.

⁹⁶⁴ *Supra*, 4.

⁹⁶⁵ TCEQ, Air Permit Review Reference Guide (APDG 6110) Air Pollution Control: How to Conduct a Pollution Control Evaluation (2011), https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/airpoll_guidance.pdf.

⁹⁶⁶ *Supra*, 11.

⁹⁶⁷ *Supra*.

⁹⁶⁸ *Supra*.

⁹⁶⁹ *Supra*.

⁹⁷⁰ Here’s how EPA explains PSD increments: “PSD increment is the amount of pollution an area is allowed to increase. PSD increments prevent the air quality in clean areas from deteriorating to the level set by the NAAQS. The NAAQS is a maximum

advocates may benefit from bringing in expert assistance if there is reason to suspect issues with the modeling. Below are a few things to look for:

- How close does the applicant themselves show the results compared with the NAAQS or PSD Increments? The application will contain tables that show the results of the modeling, i.e. the highest concentration of each pollutant in the atmosphere as a result of both existing pollution and the plant's new emissions. Those tables will compare the results with the applicable standard. For instance, the NAAQS for PM_{2.5} (fine particulate matter) is 12 µg/m₃,⁹⁷¹ so if the modeling report shows the current value in the county is 8 µg/m₃, and will be 11.5 µg/m₃ with the new facility, that is worth further examination.
- Does the modeling report comply with the modeling protocol? Prior to conducting the modeling, applicants will work with the permitting authority to develop a protocol document that governs how the modeling will be conducted. In the final report, if the applicant has deviated from the protocol, they will typically say so and explain why. It may be legitimate, but it is worth a closer look.
- Does the modeling protocol and report comply with Appendix W? Appendix W to 40 C.F.R. Part 51 is EPA's guidance on how air dispersion modeling should be conducted. Any deviations from Appendix W may be another red flag. Such deviations will be discussed in the protocol, final report, or in communications between the applicant and the agency.
- If the modeling is for a modification rather than a new source, does modeling include only the increased emissions from the modification rather than the total emissions from the source? Sources occasionally attempt to model only the "new" emissions that result from a modification rather than the total emissions for the source; this is improper. Modeling for modifications must include the total emissions from the source.⁹⁷²

Finally, the modeling is only as good as the data it's based on. For example, if you have reason to believe a source is underestimating emissions, then you should also argue that the modeling analysis is deficient because it relied on underestimated emission rates.

iv. Significant Impact Levels

It is not uncommon for a permit applicant to claim that its emissions will not have a "significant" impact on ambient air quality, and thus, that the applicant is not required to undertake a detailed analysis or modeling to demonstrate that its emissions, in combination with the emissions of other sources in the vicinity, will not cause or contribute to a violation of the NAAQS or PSD increment (a "cumulative impact analysis"). This argument is based on a concept created by EPA called "Significant Impact Levels" (SILs). Essentially, the idea is that if ambient air impact of the proposed

allowable concentration 'ceiling.' A PSD increment, on the other hand, is the maximum allowable increase in concentration that is allowed to occur above a baseline concentration for a pollutant. The baseline concentration is defined for each pollutant and, in general, is the ambient concentration existing at the time that the first complete PSD permit application affecting the area is submitted. Significant deterioration is said to occur when the amount of new pollution would exceed the applicable PSD increment. It is important to note, however, that the air quality cannot deteriorate beyond the concentration allowed by the applicable NAAQS, even if not all of the PSD increment is consumed." EPA, *Prevention of Significant Deterioration Basic Information*, <http://www.epa.gov/nsr/prevention-significant-deterioration-basic-information#:~:text=The%20NAAQS%20is%20a%20maximum,baseline%20concentration%20for%20a%20pollutant>

⁹⁷¹ Concentrations of pollutants in ambient air are typically expressed as either micrograms per cubic meter (µg/m₃) or parts per millions (ppm).

⁹⁷² 40 C.F.R. Part 51, Appendix W, Table 8-2.

new source or modification is not projected to exceed the SIL, i.e. that it is not “significant,” then the impact is too small to matter.

The Clean Air Act unambiguously prohibits the use of Significant Impact Levels (“SILs”) to make permit determinations, as well as Modelled Emission Rates for Precursors (“MERP”) values that rely upon a SIL. The Act’s and Louisiana’s PSD provisions require Magnolia to demonstrate that the emissions from its proposed complex will “not cause, or contribute to” an exceedance of any NAAQS or any increment. Congress used mandatory and expansive language throughout Section 7475(a) to make its directive clear for EPA or LDEQ: “no” covered source may be constructed, “unless” that source “demonstrates” that it “will not” “cause, or contribute to,” “any” violation of the NAAQS or “any” increment. Congress specifically used the terms “cause” and “contribute” together to ensure the PSD program would prevent increments and the NAAQS from being exceeded by considering all possible violations or contributions to violations. A contribution to an ongoing violation can be either quite small or quite large: the term “contribute,” “has no inherent connotation as to the magnitude or importance of the relevant ‘share’ in the effect; certainly it does not incorporate any ‘significance’ requirement.” Congress left no room to forego demonstrating air quality would meet the NAAQS and increments, simply because an agency believes a facility’s emissions would not make a significant enough contribution to any violations.

Advocates have long argued that SILs are simply illegal and contrary to Congress’ intent behind the Clean Air Act. EPA, however, has generally approved of SILs, and even approved SILs into its regulations at one point,⁹⁷³ but litigation forced EPA to reconsider SILs and their future remains somewhat uncertain.⁹⁷⁴ Regardless, most states appear to use SILs, which can be a point to challenge a PSD permit. Below is an excerpt of excellent comments by Devin Lowell of Tulane Environmental Law Clinic and Josh Smith of Sierra Club on this issue in relation to Magnolia LNG in Louisiana:⁹⁷⁵

As to how the SILs work in practice, SILs allow a PSD source to conduct Phase I modeling that evaluates only emissions from the proposed facility without any consideration of other sources or the existing air quality; if the results of the Phase I modeling are below the relevant SILs⁹⁷⁶

⁹⁷³ 40 C.F.R. § 51.166(b)(2).

⁹⁷⁴ See *Sierra Club v. EPA*, 705 F.3d 458, 463-64 (D.C. Cir. 2013). In short, EPA has held the view that SILs may be appropriate, and in 2010 attempted to codify SILs for PM_{2.5} and ozone. Advocates challenged the 2010 rulemaking, and EPA requested that the Court vacate and remand the rules. EPA to date has not attempted new rulemaking, but instead issued non-binding guidance in 2018 establishing recommended SILs for PM_{2.5} and ozone as the first part in a two-step process it intends to take; EPA states that it intends to study the use of these recommended SILs in step one, before codifying them in step two. See EPA, Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program (Apr. 17, 2018), <https://www.epa.gov/nsr/significant-impact-levels-ozone-and-fine-particles>.

⁹⁷⁵ App. 59, Tulane Environmental Law Clinic and Sierra Club’s comments on draft air permit for Magnolia LNG (July 29, 2021).

⁹⁷⁶ EPA has generally given states discretion to set SILs, and frequently the numerical value of SILs is based on the table found at 40 C.F.R. § 51.165(b)(2), but note that from a legal perspective, the values in this table are not specifically approved as SILs. This table was developed for other permitting purposes, but EPA has referred to these values as SILs in various guidance documents. See EPA, *Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program*, at 8-9 (Apr. 17, 2018) (“SIL Guidance”), <https://www.epa.gov/nsr/significant-impact-levels-ozone-and-fine-particles>.

(established either by EPA guidance,⁹⁷⁷ future EPA regulations, or by states), then the agency will assume that the facility will not cause or contribute to any exceedance of the NAAQS or increments. Only if the Phase I modeled emissions exceed the SIL will the source need to conduct a comprehensive Phase II modeling analysis that includes nearby sources and existing air quality.

Note, however, that EPA has stated that permitting authorities will occasionally need to look beyond SILs and require additional measures to assure compliance with the NAAQS and Increments even for emissions that do not exceed the SILs. For example, EPA states that “notwithstanding the existence of a SIL, permitting authorities should determine when it may be appropriate to conclude that even a *de minimis* impact will ‘cause or contribute to’ an air quality problem and to seek remedial action from the proposed new source or modification.”⁹⁷⁸

If advocates are seeing a source attempting to take advantage of SILs, they should consult the full Tulane/Sierra Club Magnolia LNG comments,⁹⁷⁹ and would benefit from contacting an expert or Clean Air Act attorney.

v. Additional Impacts Analysis

In addition to directly assessing a project’s impacts on air quality through modeling, PSD also requires an analysis of impacts to soil, vegetation, visibility of pollution from the project, as well as an analysis of the impacts on air quality from residential, commercial, and industrial growth that will accompany the project.⁹⁸⁰ Note that EPA has taken the position that impacts from greenhouse gas emissions are not considered in the Additional Impacts Analysis.⁹⁸¹ Advocates have not generally found vulnerabilities related to LNG facilities under these Additional Impacts Analysis requirements, but advocates should look for unique aspects of future LNG facilities that may raise innovative impacts arguments.

vi. LNG-Specific PSD Issues to Watch For

This section addresses specific PSD issues that may arise in the context of permitting a major source LNG export facility. There are a number of common units that will need to undergo BACT/LAER at most facilities, but the stationary gas compression turbines are probably the most significant because these are the largest sources of emissions at LNG export facilities, especially of NO_x and CO, so particular attention will be given to those units. It should be noted that, from a BACT/LAER perspective, the turbines at LNG export facilities are generally comparable to turbines in use in other industries, such as power plants. Therefore, it is important to consider all industries using turbines in the BACT analysis.

(1) Limits do not reflect BACT

New sources often argue that the most stringent BACT limits that have been achieved in practice should not apply to their particular facility for numerous reasons. Those reasons are discussed below, but the following table shows what we have found to date to be the limits that should often qualify as BACT for simple-cycle combustion turbines. If an applicant is proposing limits higher than these, that is a red flag. Unfortunately, limits are often expressed in different units, meaning comparisons of the

⁹⁷⁷ As of March 2022, EPA has established “recommended” SILs in non-binding guidance for PM_{2.5} and ozone. See *SIL Guidance*, 15.

⁹⁷⁸ *SIL Guidance*, 10, citing 75 Fed. Reg. 64,864, 64,892.

⁹⁷⁹ App. 59, Tulane Environmental Law Clinic and Sierra Club’s comments on draft air permit for Magnolia LNG (July 29, 2021).

⁹⁸⁰ 40 C.F.R. § 52.21(o).

⁹⁸¹ EPA, *PSD and Title V Permitting Guidance for Greenhouse Gases*, 48 (Mar. 2011).

lowest limits can be difficult; see Section 8.J.4 of this Chapter for a brief guide on how to convert emission rates from one set of units to another.

Table 8.1: Recent BACT Limits for Gas Turbines

NOx limit	CO limit	VOC Limit	SO ₂ Limit	PM Limit
2 ppmvd ⁹⁸² (numerous non-LNG facilities); 2.5 ppmvd at Freeport LNG in Texas. ⁹⁸³	Limits lower than 1 ppmvd have been implemented at some non-LNG sources, and the lowest limit for LNG plants is 4 ppmvd at Freeport LNG in Texas. ⁹⁸⁴	0.0018 lb/MMBtu (non-LNG); ⁹⁸⁵ 2 ppm at Port Arthur LNG. ⁹⁸⁶	0.0011 lb/MMBtu (non-LNG); ⁹⁸⁷ 2.96 lb/hr at Port Arthur LNG. ⁹⁸⁸	0.0033 lb/MMBtu (non LNG); ⁹⁸⁹ 2.32 lb/hr at Port Arthur LNG. ⁹⁹⁰

NOTE: because BACT and LAER are intended to improve control efficiencies as technology evolves over time, the foregoing limits may not represent BACT/LAER in the future. To understand how to find the latest in BACT/LAER limits, see Section 8.J of this chapter.

If it appears that a new LNG facility is attempting to get away with significantly less stringent BACT limits than those set out above, it is recommended that an advocate bring in an experienced Clean Air Act lawyer, an expert engineer, or both. That said, a few common methods of evading true BACT limits are set out below, along with suggestions for how to challenge them:

- **Omission of relevant BACT options in Step 1.** Sources typically rely on a database called the RACT/BACT/LEAR Clearinghouse (known as the RBLC, because only environmental lawyers can turn a list of acronyms into a meta-acronym). The RBLC attempts to house all case-by-case technology determinations, as reported by state permitting authorities. Yet the RBLC is usually out-of-date and incomplete. Many states fail to enter information into the RBLC and the RBLC only assesses U.S. sources. Thus, a permit applicant that relies solely on the RBLC most likely has not identified all potential control technologies nor the lowest emission rates achieved in practice.

Specific to LNG export facilities, one argument that advocates have made is that BACT or LAER should include electricity-driven compressors rather than gas turbine-powered compressors in

⁹⁸² The full unit here is parts per million value, dry (ppmvd) at 15% oxygen. The parts per million value is the concentration of the pollutant in the exhaust stream; dry means that the water portion of the gas stream has been removed from the ratio, and 15% oxygen is a standard baseline as the ppmvd will change depending on the percentage of oxygen in the exhaust.

⁹⁸³ RBLC ID No. TX-0678; see also <https://www.baaqmd.gov/-/media/files/engineering/bact-tbact-workshop/combustion/89-1-3.pdf?la=en>.

⁹⁸⁴ RBLC ID No. TX-0678.

⁹⁸⁵ RBLC ID No. MI-0405.

⁹⁸⁶ RBLC ID No. TX-0790.

⁹⁸⁷ RBLC ID No. VA-0321.

⁹⁸⁸ RBLC ID No. TX-0790.

⁹⁸⁹ RBLC ID No. VA-0321; this converts to roughly 11.4 lb/hr, which is relatively high emitting. See Section J.4 of this Chapter for how to convert from lb/MMBtu to lb/hr.

⁹⁹⁰ RBLC ID No. TX-0790.

the liquefaction trains.⁹⁹¹ By eliminating the gas turbines, emissions of NO_x, CO, PM, and other pollutants are significantly reduced. Indeed, at least one major LNG export facility has already opted not to use combustion turbines in its liquefaction trains and instead utilize electric motors powered by the grid.⁹⁹² Because these LNG combustion turbines are by-far the largest source of emissions at LNG export facilities, eliminating them from the liquefaction train results in a substantial reduction in source-specific emissions. Thus, advocates argue that electrification should qualify as BACT or LAER.

- BACT dismissed as not Technically Feasible. Sources will often argue that some unique process or design inherent to their facility means that, where other sources, say turbines, have been able to use a particular control, they cannot employ the same technology for some reason. Such claims are worthy of skepticism and further digging.
 - Here's one example from a recent LNG export PSD permit. The applicant, Venture Global LNG, evaluated wet scrubbers for SO₂ removal for its turbines, which can achieve 80 to 95% removal rates for SO₂. Venture then dismissed the control as not technically feasible because the "optimal" exhaust temperature for wet scrubbers is between 40F and 100F, but the exhaust from Venture Global's turbines would be in the range of 450F to 527F. The applicant dismissed the control as not technically feasible on this basis, without considering that there are feasible methods to cool exhaust gases to the desired range. Ultimately the company proposed (and the state approved) no control technology, and relied instead on "good combustion practices," discussed below.
- Dismissed on environmental, energy, or economic grounds. The key here is that the environmental, energy, or economic issues must be unique to the proposed facility such that the impacts (i.e. cost) will be significantly higher than at the facility or facilities that have implemented the control and demonstrated compliance with the BACT limit. In other words, what makes this source special? Why is it more expensive to use the same technology and meet the same BACT limit that another comparable source has already met?

Typically, the technique sources use here is to calculate the cost per ton of emissions reduced by using a higher-ranked control technology. States often have informal, unpublished cost/ton thresholds above which a control can be dismissed as too expensive. If a source is dismissing a demonstrated control technology as too expensive, advocates may benefit from having an expert review the BACT determination.

- Using the right technology, but not the lowest limit. In several instances, LNG facilities have selected the highest achieving control technology, evaluated limits based on that control technology, and then proposed higher limits without much, if any, explanation. For instance, Commonwealth LNG in Louisiana noted that using catalytic oxidation, similar combustion turbines had achieved limits of 0.7 ppm for carbon monoxide, and then proposed a limit of 3.0

⁹⁹¹ See, e.g., Public Comments prepared by Devin A. Lowell, Tulane Environmental Law Clinic, and Joshua Smith, Sierra Club, on the draft permit for Magnolia LNG, Magnolia LNG Part 70 Renewal and Proposed PSD AI185639, Permit Number 0520-00481-V1 and PSD-LA-792(M1), and Activity Number PER20200001 and PER20200002 (July 29, 2021), <https://edms.deq.louisiana.gov/app/doc/view?doc=12829191>.

⁹⁹² That facility is Freeport LNG, in Freeport, Texas. Permit documents are available at EIP's Oil and Gas Watch Database: <https://oilandgaswatch.org/facility/870>.

ppm, nearly three times higher than the lowest limit. Commonwealth did not provide any explanation, and the limit was accepted by LDEQ.

- No short-term limits. BACT is supposed to be a short-term limit,⁹⁹³ something like 2.5 ppm on a “three-hour basis.” This means that at any given time, emissions may exceed that limit, but the limit is only violated if, on average over a given three-hour period, emissions exceed 2.5 ppm. The shorter the averaging period, the less likely it is that spikes of emissions might cause detrimental concentrations of pollutants in the ambient air.

Unfortunately, many of the BACT limits in LNG export permits do not include short-term limits, and instead implement limits on an averaging basis as long as 30-days, which is problematic. For instance, a limit that is averaged on a 30-day basis allows emissions that greatly exceed the numerical limit for days on end, perhaps because of poor combustion practices, which worsens air quality and potentially causes exceedances of the NAAQS. Yet, as long as average emissions over the 30-days is below the limit, perhaps because the facility addressed the cause of high emission rates, the facility will be in compliance with the limit despite potentially causing NAAQS exceedances.

- Not decided on a case-by-case basis. Some states, including Texas, have made predeterminations for what constitutes BACT for certain sources. This is contrary to the case-by-case nature of BACT, which is meant to “force” new technologies and lower emission limits over time. As such, if you encounter BACT limits that are established broadly by an agency rather than in a source-specific, case-by-case analysis, you should determine whether lower limits have been achieved in practice and argue that those limits must be considered as BACT following EPA’s top down method (and again, although Texas uses a different system, both EPA and TCEQ agree that whatever method is used it must ultimately produce the same result as EPA’s top-down method).
- Good Combustion Practices, What Does That Mean? Many LNG export facility BACT determinations utilize a combination of technologies (including multiple types of controls in some instances) and some form of “good combustion practices,” or often just “good combustion practices” alone. Unfortunately, good combustion practices are rarely defined in a way that results in enforceable permit conditions that require such practices. Commenters should therefore emphasize that this is a vague and ambiguous “control” under BACT, and focus especially on what precise, enforceable permit conditions (and related monitoring provisions) are incorporated into the permit to ensure that the source actually does use good combustion practices. Note that sometimes permitting authorities tack on a “good combustion practices” requirement in addition to specifying an enforceable emission limit based on BACT. So long as the BACT limit is itself adequately justified and enforceable, the inclusion of an additional “good combustion practices” requirement as a backstop likely wouldn’t contravene the BACT

⁹⁹³ BACT emission limits and associated monitoring must “demonstrate protection of short-term ambient standards (limits written in pounds/hour) and be enforceable as a practical matter (contain appropriate averaging times, compliance verification procedures and recordkeeping requirements).” NSR Workshop Manual at B.56; see also *In Re ConocoPhillips Co.*, PSD Appeal No. 07-02, 13 E.A.D. 768, 796 (June 2, 2008). In other words, if a NAAQS is a 1-hour or 8-hour standard, then the BACT limits should approximately match the standard. A 30-day rolling average for a limit, for instance, would not be protective of the short-term NAAQS. Spikes in emissions could readily cause NAAQS exceedances, yet there would not be a permit limit violation.

requirement, though it is still worthwhile to advocate for the permitting authority to make the good combustion practices requirement as clear and enforceable as possible.

- **Greenhouse Gases (GHG) BACT.** Most major NSR sources will also have to undergo GHG BACT. Universally with LNG facilities, BACT for GHGs has been set as some form of good combustion or other vague operation or design practices. Industry will typically propose something like CCS as an alternative and then dismiss it as not technically feasible, which, while perhaps valid, misses the point. Any steps that a facility can take to increase efficiency should be considered as part of GHG BACT. Electrification, discussed above, may be one valid option. Another argument can be made about the efficiency of control devices, specifically thermal oxidizers. LNG export plants usually use thermal oxidizers as control devices to reduce VOC emissions from certain processes (amine units and/or sweetener units). Thermal oxidizers are essentially large gas-fueled incinerators that burn off organic pollutants; they are conceptually similar in design to a gas grill—a simple box with gas burners. This system loses a significant amount of heat, and therefore energy, in heating the exhaust stream to necessary temperatures. Far more efficient incinerators exist in the form of regenerative and recuperative thermal oxidizers, which serve the same function but using vastly lower amounts of fuel (and therefore emitting far lower levels of GHGs).

Advocates should note that difference between a traditional BACT analysis and a GHG BACT analysis is that while a traditional BACT analysis considers what constitutes BACT “for each emissions unit or pollutant-emitting activity at each emissions unit,”⁹⁹⁴ it may be appropriate to select GHG BACT “on a facility-wide basis by taking into account operations and equipment which affect the environmental performance of the overall facility.”⁹⁹⁵ Thus, EPA “recommends that permitting authorities consider technologies or processes that not only maximize the energy efficiency of the individual emission units, but also process improvements that impact the facility’s energy utilization.”⁹⁹⁶ Advocates should consider whether facility-wide process improvements at an LNG export facility could serve to reduce the facility’s GHG emissions.

(2) Failure to commence construction within 18 months

PSD regulations require that permits shall become invalid if construction does not commence within 18 months of issuance, and likewise if construction is discontinued for 18 months, or if construction is not completed within a reasonable time.⁹⁹⁷ Note that “commencing” construction is a defined term that EPA has interpreted at length to set out what activities qualify as construction, including certain contractual obligations.⁹⁹⁸

This is an important requirement because the control technology determinations and air quality impacts analyses conducted during the permitting process become outdated over time. Yet because many LNG projects are permitted in a speculative manner, it is common for LNG facilities to fail to commence construction within 18 months of permit issuance.

⁹⁹⁴ EPA 1990 NSR Workshop Manual at B.4 (emphasis added).

⁹⁹⁵ EPA, *PSD and Title V Permitting Guidance for Greenhouse Gases*, Mar. 2011, 23, <https://www.epa.gov/sites/default/files/2015-08/documents/ghgguid.pdf> (emphasis added).

⁹⁹⁶ EPA PSD GHG Guidance at 30.

⁹⁹⁷ 40 C.F.R. § 52.21(r)(2), see also LAC 33:III.509.R.2 for a state equivalent.

⁹⁹⁸ See, e.g., EPA, Memorandum from Director, Division of Stationary Source Enforcement to David Kee, Chief Air Enforcement Branch, Region 5, addressing “‘Commence Construction’ under PSD” (July 1, 1978), <https://www.epa.gov/sites/default/files/2015-07/documents/commence.pdf>.

Advocates should therefore watch for opportunities to intervene where a previously permitted source has failed to commence construction; for instance, sources may apply for permit modifications after the PSD permit has expired due to failing to commence construction, and advocates should argue that the source cannot modify an expired permit and must instead apply for a new permit. Worst case, advocates may need to consider filing a citizen suit, discussed in Section 8.B.10, in which advocates can seek to halt construction of a major source without a major NSR permit.

Advocates should be further aware that LNG export facilities must provide status updates on construction progress to FERC that may be valuable resources for gathering information on whether construction has commenced.

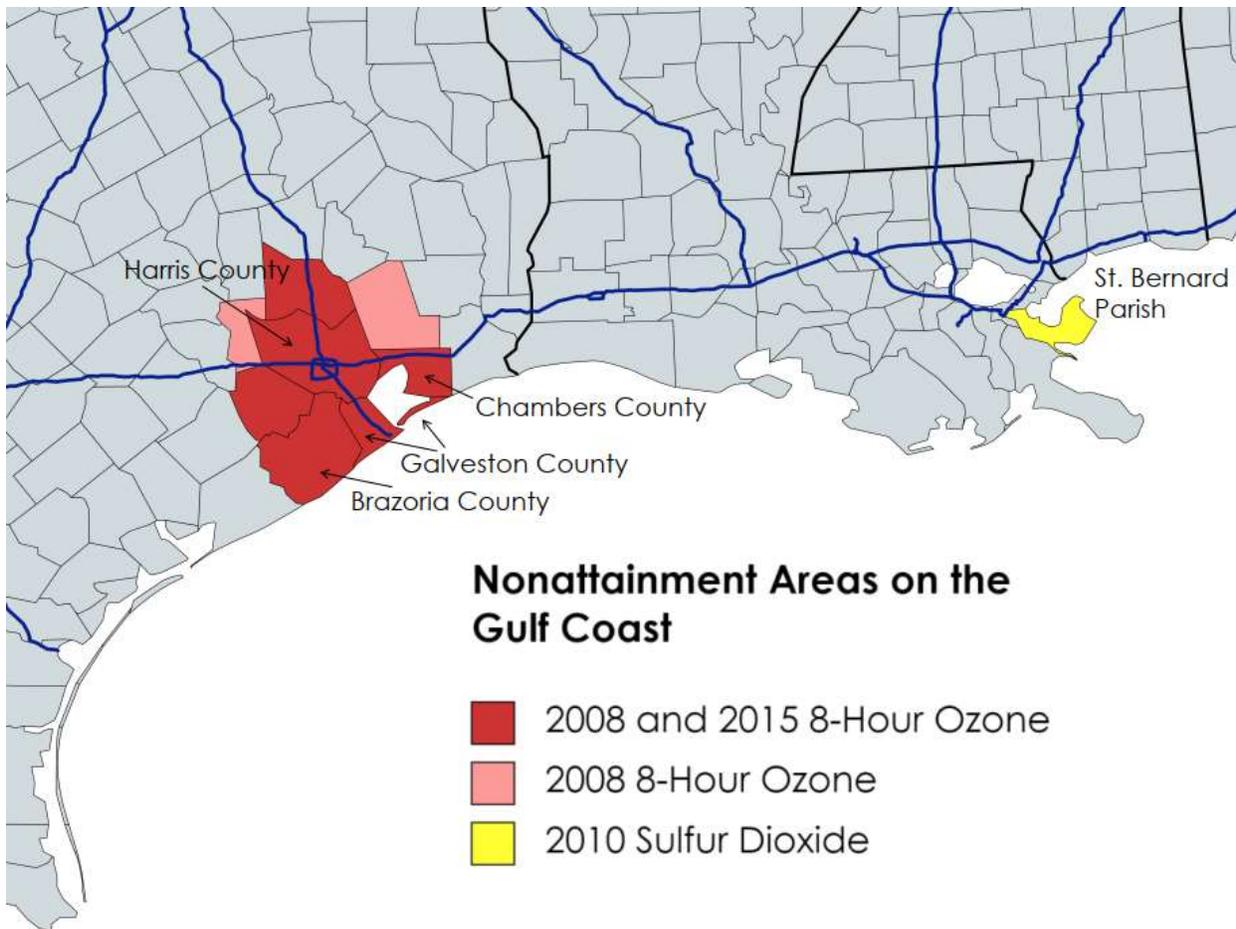
Finally, although sources may seek extensions, EPA has held that there are limits to how many extensions may be granted (usually a second extension is much harder obtain) and in what circumstances.⁹⁹⁹ Note also that Texas has specific rules governing extensions, which can be found at 30 TAC § 116.120.

b. Nonattainment NSR requirements applicable in areas that are not achieving a federal ambient air quality standard.

If the area where a major NSR facility is to be located is in nonattainment for a pollutant or multiple pollutants, then the facility must comply with stricter nonattainment NSR (NNSR) requirements for that pollutant. Many of the same requirements set out above for PSD permits, i.e. attainment NSR, will apply in parallel. This section highlights the unique steps required for NNSR.

Most counties in the country are designated as either attainment or unclassifiable (i.e., no data) for all NAAQS, but several key areas relevant to LNG export operations are listed as nonattainment. The map below shows nonattainment areas for the Gulf Coast as of February 2022, but note that if you are looking at a facility in other parts of the nation, especially California and the northeast, additional coastal areas are designated nonattainment.

⁹⁹⁹ See EPA, Guidance on Extension of Prevention of Significant Deterioration (PSD) Permits under 40 CFR 52.21(r)(2), at 5 (Jan. 31, 2014), <https://www.epa.gov/sites/default/files/2015-07/documents/extend14.pdf>.



If a new LNG export facility is proposed to be located in one of the ozone nonattainment counties in Texas, the facility will need to undergo NNSR for VOCs and NO_x, as these are the precursor pollutants to ozone formation. For other pollutants, a PSD review will also be required. Likewise, any new LNG facilities in St. Bernard Parish in Louisiana would need to undergo NNSR for SO₂.

i. Lowest Achievable Emission Rate

The lowest achievable emission rate (LAER) is defined as: “the more stringent [of]...

(A) The most stringent emissions limitation which is contained in [any SIP] for such class or category ..., unless the owner or operator ... demonstrates that such limitations are not achievable; or

(B) The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources.”¹⁰⁰⁰

¹⁰⁰⁰ 40 C.F.R. § 51.165(a)(1)(xiii).

Unlike BACT, LAER does not involve consideration of economic, energy, or other environmental costs; in short, if a similar source has achieved a particular emission rate, that emission rate shall constitute LAER unless particularly exceptional circumstances apply.¹⁰⁰¹

ii. Emission offsets

Another distinction between PSD and NNSR is that new major sources in nonattainment areas must offset their emissions increase of nonattainment pollutants by obtaining so-called “offsets.” Offsets are actual reductions in emissions from existing sources within the area. Exactly what qualifies as “actual reductions” is complex, but the reduction must be enforceable, quantifiable, permanent, and approved by the permitting authority.¹⁰⁰²

At a minimum, all offsets must at least reduce the emissions of the relevant pollutants in a one-to-one ratio (i.e., if your source will emit 75 tons of a pollutant, some other source in the area must agree to reduce its emissions of that same pollutant by at least 75 tons). Most offsets require more, however, and the degree of offsets required depends on the pollutant and the severity of the nonattainment in the area.

All counties in Houston-Galveston-Brazoria ozone nonattainment¹⁰⁰³ areas are designated “serious” nonattainment, meaning they will require an offset of at least 1.2 to 1 for both VOCs and NOx.

iii. Enforceable BACT and LAER Limits.

BACT and LAER emission limits and standards must be enforceable, i.e. coupled with conditions designed to enable the public, EPA, and states to identify violations.

Specifically, the BACT or LAER limit (and the required technology to meet the limit) is must be set forth in the permit. Further, EPA’s draft 1990 NSR Workshop Manual states: “[I]t is best to express the emission limits in two different ways, with one value serving as an emissions cap (e.g., lbs/hr.) and the other ensuring continuous compliance at any operating capacity (e.g., lbs/MMBtu).”¹⁰⁰⁴

This includes evaluating whether all technology determinations and assumptions in any air quality analysis are included in the permit as enforceable conditions, e.g., type of fuel, hours of operation, and control efficiencies. If the model used an emission rate of, say, 15 lb/hr, the permit must include an emission limit no higher than 15 lb/hr. In general, the permit must define as clearly as possible what is expected of the source.

In order to be enforceable, BACT and LAER limits must also be accompanied by monitoring, recordkeeping, and reporting provisions sufficient to enable the public and regulators to determine whether sources are complying with permit limits and other conditions. Note that this is a separate requirement from Title V monitoring, recordkeeping, and reporting requirements, but many of the

¹⁰⁰¹ In short, the only way out of using a given control technology in use by a similar source is if doing so would be so cost-prohibitive that no new major sources of the type could be built. If a source is attempting to dismiss a given LAER on economic grounds, advocates should learn more about LAER with EPA’s Draft NSR Workshop Manual.

¹⁰⁰² See 40 C.F.R. Part 51, Appendix S.

¹⁰⁰³ This is based on the 2008 8-Hour Ozone standard; most of the counties in the same area are also “marginal” nonattainment with the 2015 8-Hour Ozone standard as well, however the stricter offset requirement of the “serious” nonattainment with the 2008 standards controls. See TCEQ, Fact Sheet – PSD and Nonattainment (2019), 2, <https://www.tceq.texas.gov/assets/public/permitting/air/factsheets/factsheet-psd-na-6241.pdf>.

¹⁰⁰⁴ EPA, Draft NSR Workshop Manual, at H.5.

monitoring techniques may be the same. For a discussion on types of monitoring and the overlap with Title V requirements, see Section 8.G.5.

iv. Additional requirements as needed to assure that the facility will not cause or contribute to a NAAQS violation or exceed the available PSD increments.

If modeling shows that a facility as originally designed could cause or contribute to a NAAQS violation, the permit must include additional limitations and monitoring requirements over and above BACT that will prevent the NAAQS violation.¹⁰⁰⁵

At a minimum, all major NSR permits must include limits that constrain operations to those that were included in the NAAQS air dispersion impacts analysis (i.e., if the source modeled ambient air impacts assuming only one emergency engine would be operated at a time, that should be an enforceable permit limit). But where the modeling showed that a facility would cause near-exceedances, or potential exceedances, of the NAAQS, the permit should contain additional requirements that are protective of the NAAQS. For example, LDEQ implemented limits on how many engines (i.e. emergency engines, firewater pumps) may be operated simultaneously at the Magnolia LNG facility, as well as maximum operating times for high-emitting boiler operations.

Advocates should further address whether the existing off-site monitoring is adequate to determine whether the NAAQS are exceeded. Typically, many counties or parishes may only have one or two air monitors (or none at all), so it is highly unlikely these monitors will be located in the right location to assess NAAQS compliance.

Unfortunately, PSD's legal requirements for post-construction ambient air monitoring are relatively vague.¹⁰⁰⁶ Still, advocates should argue that such monitoring is necessary when a source's emissions could cause exceedances of the NAAQS. Specifically, the facility's air dispersion modelling will show the location of the highest concentrations of pollutants beyond its fence-line. If the modeled concentrations come anywhere close to causing a NAAQS exceedance, advocates should argue that the facility must install and operate an air monitor as close to this location as possible to verify ongoing NAAQS compliance at that location.

Finally, in certain areas with heavy LNG export activity, the county or parish may be designated attainment but modeling from numerous sources shows multiple and severe exceedances of the NAAQS. This is the case, for instance, in the Lake Charles area. In these instances, advocates should consider arguing that the county or parish should be redesignated as nonattainment (and potentially take up separate advocacy work outside of the facility-specific comments towards this end).

Modifications

As discussed above, existing (or permitted but not constructed) sources may request to modify their NSR permits. In general, modifications to major NSR sources are treated in a similar manner to a preconstruction permit (and, in fact, in many states, these modifications are also called preconstruction permits), in that PSD or NNSR must be conducted if certain thresholds are met. For sources that are already major and in attainment areas, the thresholds are set out below:

¹⁰⁰⁵ See, e.g., 42 U.S.C. § 7475(a)(3) (facility may not construct without showing that its emissions will not cause or contribute to a NAAQS violation or an exceedance of the allowable PSD pollution increment).

¹⁰⁰⁶ See 40 C.F.R. § 52.21(m)(2) (requiring a source to perform post-construction monitoring "as the Administrator [or permitting authority] determines is necessary").

- Carbon monoxide: 100 tons per year (tpy)
- Nitrogen oxides: 40 tpy
- Sulfur dioxide: 40 tpy
- Particulate matter: 25 tpy of total particulate matter emissions, 15 tpy of PM₁₀¹⁰⁰⁷ emissions, 10 tpy of PM_{2.5} emissions; 40 tpy of sulfur dioxide emissions (as a precursor to PM_{2.5}); 40 tpy of nitrogen oxide emissions unless demonstrated not to be a PM_{2.5} precursor
- Ozone: 40 tpy of volatile organic compounds or nitrogen oxides
- Lead: 0.6 tpy
- Fluorides: 3 tpy
- Sulfuric acid mist: 7 tpy
- Hydrogen sulfide (H₂S): 10 tpy
- Total reduced sulfur (including H₂S): 10 tpy
- Reduced sulfur compounds (including H₂S): 10 tpy

The thresholds for a modification to trigger nonattainment NSR are generally the same as the PSD thresholds—except that lower thresholds apply in serious, severe, and extreme nonattainment areas.¹⁰⁰⁸

Although this guide focuses on new facilities rather than modifications, several new LNG export facilities have been located at existing import terminals. These export facilities are therefore permitted as modifications of the existing source, almost always as a major NSR modification.

Finally, as mentioned above with respect to PSD, there are myriad ways for a facility to escape having its modification be classified as “major” even if the planned modification appears to result in an NNSR-triggering emissions increase. *Supra* at Section 8.B.1. The rules governing how to calculate whether a facility modification is subject to NSR are complex and beyond the scope of this guide. Advocates who believe that a facility modification has been improperly excluded from major NSR are strongly encouraged to consult with an experienced Clean Air Act attorney.

What are my legal options if the permitting authority rejects my comments on a draft major NSR permit?

If you have identified a defective major NSR permit and raised those issues in public comments, what are your options if the permitting agency rejects your comments? In most states, advocates can challenge a defective major NSR permit in an administrative proceeding established under state law (usually found in a state’s version of the Administrative Procedures Act). Often called a “contested case hearing” or similar, the proceeding resembles a civil trial in state court, complete with witnesses, discovery, and pre-trial motions, and is held before an administrative law judge (ALJ). In some states, there may be multiple levels of challenging a permit, for instance an initial contested case hearing before an ALJ, who then makes a recommendation to the director of the agency, and then advocates

¹⁰⁰⁷ PM₁₀ refers to particulate matter 10 microns or smaller in diameter. PM_{2.5} refers to particles 2.5 microns or smaller in diameter.

¹⁰⁰⁸ See 40 C.F.R. § 51.165(a)(1)(x).

can move to appeal the director's decision; finally, state court is usually the final step if all prior options have been exhausted.

Advocates are strongly urged to find an experienced lawyer to bring the case, but a few things to know:

- Typically, there is a firm deadline to file an administrative appeal, perhaps 30 days after final permit issuance, **but it may be sooner.** In fact, as discussed below, in Texas a request for a contested case hearing must be filed even before TCEQ issues a final permit. Thus, an advocate who wishes to mount a legal challenge to a major NSR permit must line up legal representation early in the permit review process;
- Requests for an appeal must be in writing and contain a certain amount of information (see below for Texas' example);
- The legal issues that form the basis of the challenge must have been made with some specificity in public comments, unless basis for the challenge arises after the public comment period or could not have been known to advocates during the public comment period;
- Advocates typically must have legal standing to bring a permit challenge. Standing is the concept that someone bringing the challenge must actually be impacted or potentially impacted by the proposed facility. This usually means individuals who live, work, or recreate near the facility and are concerned about the impacts to air quality;
- Usually, the challenge should be brought by a membership organization focused on the environment that represents the interests of the individuals harmed by the new facility. The organization will then have standing via its members, who spend time near the facility.

Challenging Major NSR Permits in Texas. Challenging air permits in Texas is complex compared to other states. Fortunately, the University of Texas Law School Environmental Clinic has recently published an excellent guide that covers this issue (and public participation in Texas more broadly) in great depth and is available online for free.¹⁰⁰⁹ As such, this guide will only briefly describe the main avenues to appeal a defective permit. Note that, in general, these administrative procedures must be followed before an advocate can challenge a permit decision in court.

If the permit is issued by TCEQ's Executive Director, the following challenges are applicable:

- **Request for a Contested Case Hearing:** this is the first opportunity to challenge, but the request must be made in writing within **30 days of the issuance of the Notice of Application and Preliminary Decision.** Unfortunately, this means advocates must decide to request a Contested Case Hearing before the agency has considered and responded to public comments. A Contested Case Hearing is an administrative appeal like those described above and is held before an ALJ with the State Office of Administrative Hearings.
- **Request for Reconsideration:** this is a request seeking for the TCEQ Commission to reconsider a final permitting action, and therefore must be made within 30 days of the "decision letter" announcing the agency's decision to issue or deny the permit (i.e. after considering public notice and comment and the result of any Contested Case Hearing).

¹⁰⁰⁹ University of Texas Law School Environmental Clinic, *Texas Environmental Public Participation Guide* (2017), <https://law.utexas.edu/wp-content/uploads/sites/11/2019/01/2017-EC-EnviroPublicParticipationGuide.pdf>.

- **Motion to Overturn:** is similar to a Request for Reconsideration but is only available if no request for a contested case hearing or request for reconsideration has been made (or if the request was rejected). The motion must be made within 23 days of the mailing date of a notice of signed permit.

If a permit is instead issued by the Commission itself, the only administrative appeal is a **Motion for Rehearing**, which must be made within 25 days of the date the Commission's decision is signed. See the University of Texas Law School Environmental Clinic's guide for more information.¹⁰¹⁰

Challenging Major NSR Permits in Louisiana. Louisiana is somewhat unique in that it does not provide for administrative appeals of final air permits. Instead, the sole remedy is to bring suit in state court. The state court will then act as fact-finder and ultimately decide whether LDEQ has issued the permit in accordance with state law, in particular the state's Administrative Procedure Act.¹⁰¹¹ Issues to note:

- The court will generally only evaluate evidence that is part of the administrative record, therefore if you think you might need to challenge an air permit, it is vital that your public comments are as thorough and detailed as possible;
- Advocates must file suit within 30 days of the notification of final permit action;¹⁰¹²
- The suit must be filed in the Nineteenth Judicial Circuit Court for the parish of East Baton Rouge (this is true regardless of the facility's location).¹⁰¹³

Citizen Suits: the foregoing legal challenges address appealing a *permit*, but advocates should be aware that the Act also allows advocates to bring a "citizen suit" against a company in federal court for Clean Air Act violations. While citizen suits are often thought of as tools for enforcing violations at existing plants, the Act also allows citizens to sue for constructing a major NSR source without an NSR permit.¹⁰¹⁴ For example, if a facility's PSD permit has expired because construction did not commence within 18-months of issuance, but the company starts construction, a citizen suit could be brought against the company.

What authority does EPA have to prevent a state with a SIP-approved major NSR permit program from issuing a legally deficient major NSR permit?

The Clean Air Act provides EPA with authority to stop construction of a facility that is not complying with NSR, even under circumstances where a state has approved the construction pursuant to an EPA-approved state NSR program. Specifically, Clean Air Act § 113(a)(5) provides that whenever EPA "finds that a State is not acting in compliance with any requirement or prohibition of [the Act] relating to the construction of new sources or modification of existing sources," EPA may "issue an order prohibiting the construction or modification of any major stationary source in any area to which such requirement applies."¹⁰¹⁵ Also, specific to Prevention of Significant Deterioration permitting, Clean Air Act § 167 requires EPA to "take such measures, including issuance of an order, or seeking injunctive relief, as necessary to prevent the construction or modification of a major emitting facility which does not conform to the [PSD] requirements."¹⁰¹⁶

¹⁰¹⁰ *Texas Environmental Public Participation Guide*, 10.

¹⁰¹¹ La. R.S. § 30:2050.21(F).

¹⁰¹² La. R.S. § 30:2050.21(A).

¹⁰¹³ La. R.S. § 30:2050.21(A).

¹⁰¹⁴ 42 USC §7604(a)(3).

¹⁰¹⁵ 42 U.S.C. § 7413(a)(5)(A).

¹⁰¹⁶ 42 U.S.C. § 7477.

EPA almost never exercises its statutory authority to block a facility's construction due to a state's issuance of a defective major NSR permit.¹⁰¹⁷ However, the possibility that EPA *might* exercise this authority means that states usually listen to whatever feedback EPA gives them regarding major NSR permit applications and draft permits and try to resolve EPA's concerns prior to final permit issuance. ***Thus, advocates should consider seeking to persuade EPA to raise concerns with the state permitting authority and the applicant early in the permitting process.***

The Clean Air Act includes specific procedures designed to facilitate EPA's oversight of state major NSR permit programs. First, the statute declares: "Each State shall transmit to the Administrator a copy of each permit application relating to a major emitting facility received by such State and provide notice to the Administrator of every action related to the consideration of such permit."¹⁰¹⁸ Second, before issuing an individual permit, a state permitting agency must provide an opportunity for all "interested persons," including "representatives of the [EPA] Administrator" to submit comments to the state on the draft permit.¹⁰¹⁹

Regional EPA offices vary tremendously in the extent to which they participate in major NSR permitting for sources located in areas where state, local, or tribal agencies have federal approval to administer air permitting requirements. For example, EPA Region 4, which oversees Clean Air Act implementation in Florida, Georgia, North Carolina, South Carolina, Tennessee, Alabama, Kentucky, and Mississippi, participates in nearly every major NSR permit proceeding for a proposed new facility in that region. First, EPA's Region 4 air pollution modeling experts review the applicant's proposed modeling protocol and identify what improvements or changes need to be made. Second, Region 4 staff reviews each permit application when it arrives at the agency and gives feedback to the state (and sometimes directly to the applicant) regarding additional information needed to complete the application. In addition, Region 4's modeling experts often re-run the models provided by the applicant to verify the modeling outcomes reported in the permit application. Third, as per an agreement between EPA and most Region 4 states, the permitting agencies provide EPA with an opportunity to review and give informal feedback on draft permits before they are released for the formal public comment period. If the state does not address EPA's feedback before releasing the draft permit for public comment (or if the state fails to provide EPA with an opportunity to comment prior to the start of the comment period), EPA will submit formal comments to the state permitting agency during the comment period, and these comments become part of the administrative record for the permitting action.

At present, in marked contrast to EPA Region 4's heavy involvement in reviewing state major NSR permits prior to their issuance, EPA Region 6, which oversees major NSR permitting in Texas, Louisiana, Arkansas, New Mexico, and Oklahoma, reports that it rarely reviews major NSR applications or draft permits for sources proposing to locate in the region. Instead, Region 6 focuses its oversight efforts on periodic evaluations of each state's implementation of Clean Air Act permitting programs. While most proposed LNG export facilities are likely to be located within the boundaries of EPA Region 6, the fact that Region 6 does not typically get involved in individual major

¹⁰¹⁷ One prominent example in which EPA used this authority resulted in litigation that reached the U.S. Supreme Court. In *Alaska Dep't of Env'tl. Conserv. v. EPA*, 540 U.S. 461 (2004), the Supreme Court affirmed EPA's orders prohibiting the Alaska environmental permitting agency from issuing a defective PSD permit and prohibiting the permittee from commencing construction under that permit.

¹⁰¹⁸ 42 U.S.C. § 7475(d).

¹⁰¹⁹ 42 U.S.C. 7475(a)(2).

NSR permit proceedings does not mean that EPA cannot get involved. Rather, it just means that you need to devote more resources toward persuading Region 6 that its involvement is necessary.

As an initial matter, even before an application is filed with the state and EPA, you should consider meeting with regional EPA staff to discuss your concerns and request that EPA review the application and modeling protocol when it is submitted. Note that a major NSR permit applicant typically submits its modeling protocol to government authorities well before submitting its permit application, because the permit application must include the actual modeling results. In fact, most, if not all, state permitting authorities require an applicant to provide them with a proposed modeling protocol early in the application process. If you discover that an applicant has submitted a modeling protocol to the state permitting authority, you could request that EPA review the protocol. If the relevant EPA regional office does not have anyone available to review the modeling protocol, you could suggest that the Region to ask for assistance from the Region 4 modeling section, which sometimes reviews modeling protocols for other regions. In addition, if you can enlist your own modeler to review the protocol, you could meet with EPA to discuss any flaws that you uncover and, if EPA agrees with your assessment, request that EPA send a letter to the state and the applicant detailing those flaws. If you get involved early in the process, you are more likely to be able to persuade EPA to insist upon the source performing more extensive modeling of the source's anticipated air quality impacts. Such modeling could uncover problems that make it less likely that the project will move forward.

Likewise, EPA's early involvement in reviewing and identifying deficiencies in an applicant's permit application could also be helpful. Sometimes, a project's funders tie their investment to the applicant meeting certain milestones, such as submitting a complete permit application. That might cause an applicant to apply for its permit before it has all of the necessary details so as to signal to funders that the project is moving forward. Persuading EPA to weigh in with the state regarding aspects of the application that are deficient could result in the state determining that the application is incomplete, perhaps casting doubt amongst funders as to the project's viability and slowing its progress.

Persuading EPA to weigh in on deficiencies in the draft permit also can be very valuable, especially if EPA's comments are in writing and placed in the permit record. If the state fails to correct the deficiencies identified by EPA, you could use EPA's objections to support your own challenge. Be aware that when EPA provides feedback to a state on a draft major NSR permit, it often provides that feedback on a "pre-draft" version of the permit before the draft permit is released for public comment. Furthermore, EPA often provides its comments via a telephone call with state permitting staff rather than in writing. If you can persuade EPA to provide its comments in writing, you could obtain those comments and place them in the permitting record yourself if EPA does not do so. Ideally, if the state has not addressed EPA's concerns by the time it releases a draft permit for public comment, EPA will file formal comments with the state agency during the comment period. Those comments would then be included in the administrative record for the permitting action and could be used in any subsequent challenge to the permit.

Finally, if you have a strong argument that a major NSR permit issued by a state agency does not comply with federal requirements, you can try to persuade EPA to use its statutory authority to block construction of the facility pursuant to the deficient permit. As noted above, EPA rarely exercises this authority, and if EPA did not at least send in comments to the state during the public comment

period identifying the alleged permit deficiencies, the likelihood of EPA blocking a facility's construction is pretty much zero. But if EPA did identify deficiencies and the state failed to correct them, it is worth advocating for EPA to issue an order prohibiting the source's construction.

Challenging Major NSR Permits in “Delegated” States

Most states implement major NSR permitting pursuant to their EPA-approved state implementation plans, which provide avenues for challenging major NSR permits at the state level as described above. A few states, however, have opted instead to issue major NSR permits pursuant to EPA's delegated authority.¹⁰²⁰ In these states, the state agency issues permits as if the agency is standing in the shoes of EPA. Delegated-authority states that may have LNG export facilities are Connecticut, Maryland, Massachusetts, New Jersey, and Washington (but, in Washington, only the GHG portion of PSD permits are issued under delegated authority). Challenging a major NSR permit issued by a state pursuant to federally delegated authority is different than challenging a permit issued by a state operating its own federally approved NSR program; the key difference is that challenges to a permit issued pursuant to federally delegated authority are heard by EPA's Environmental Appeals Board, and appeals are heard in federal district court. If an advocate wishes to challenge a major NSR permit before the Environmental Appeals Board, they should consult with an environmental attorney.

Minor NSR permits

New facilities (or modifications of existing facilities) with emissions that will not exceed the major NSR threshold generally still need to obtain a preconstruction permit under a state's minor NSR permit program. This will be true for all LNG export facilities (other than major sources, of course). Unfortunately, the statute and EPA's regulations are sparse on what is required in minor NSR permit programs, and permits and requirements therefore vary from state to state.

As discussed above, most new LNG export facilities will be major NSR sources. But consideration of minor NSR permitting is relevant as some smaller LNG export facilities, especially those without on-site combustion turbines or only a small number of turbines, may genuinely qualify as minor sources, or at least claim to be. Likewise, major NSR facilities may have non-located support facilities, like a pretreatment facility, that is a minor source. Additionally, certain modifications may be permitted as minor NSR modifications.

How will I know when a proposed facility has applied for a minor NSR permit?

Unfortunately, there typically is no public notice required when a new source applies for a minor NSR permit. See the section above as to major NSR for tips on how to track new applications as the methods are largely the same.

Will I be able to comment on a draft minor NSR permit?

Although federal regulations require public notice and comment on all minor NSR permits,¹⁰²¹ in practice some states do not allow for public notice and comment on any minor NSR permits, or perhaps only certain types of minor NSR permits. Others, like Georgia, instead allow for public

¹⁰²⁰ See 40 C.F.R. § 52.21(u).

¹⁰²¹ 40 C.F.R. § 51.161.

comment on minor NSR *applications* but refuse to grant public notice and comment on the draft permit, practices that advocates are currently fighting.¹⁰²²

Even where a state does not allow for public notice and comment on draft NSR permits, it is still worth requesting notice and comment in writing with the permitting authority and likewise raising any potential issues as though you were submitting formal comments.

Public notice and comment on minor NSR permits in Texas. Texas does provide public notice and an opportunity for comment on most minor NSR permits, with exceptions for certain administrative amendments or minor permit modifications. The public notice locations and relevant mailing lists are the same as those listed above for major NSR permits.

Public notice and comment on minor NSR permits in Louisiana. If a proposed facility is a major source for purposes of the Clean Air Act's Title V operating permit program but a minor source for NSR (because, in some circumstances, the Title V applicability threshold is lower than the major NSR threshold), Louisiana requires public notice and comment under its Title V rules.¹⁰²³ This is because Louisiana issues joint pre-construction and Title V permits (if a facility qualifies for Title V). Almost any LNG export facility will likely be a major source for Title V, so this should cover most LNG export facilities. If a source will be minor for both NSR and Title V, then public notice and comment will be provided only at the discretion of LDEQ.¹⁰²⁴

The public notice locations and relevant mailing lists are the same as those listed above for major NSR permits.

What issues should I look for in minor and synthetic minor NSR permits?

With all minor NSR permits, the biggest question is whether they are truly minor sources, and this is especially relevant with so-called “synthetic minor” sources. A synthetic minor source is one that would otherwise be major and require major NSR permitting, but that has sought permit limits (known as “synthetic minor limits”) that reduce potential emissions to below the major source threshold.

a. Potential to Emit Calculations

Major source applicability (for NSR, Title V, and NESHAP) depends on the facility's estimated “potential to emit” (PTE). As courts have explained, “PTE is not to be confused with actual emissions, which may be significantly lower.”¹⁰²⁵ Stated more plainly, PTE is a “worst case emissions calculation.”¹⁰²⁶ Note, however, that PTE calculations will take into account control technology that the facility is required to use as well as other enforceable production or operation limits.

In other words, if a facility is designed to process 1,000,000 tons of LNG per year, but anticipates it will only process 800,000, PTE must be calculated based on 1,000,000 tons unless the permit has

¹⁰²² Environmental Integrity Project, et al., Petition to (1) Require Compliance with Georgia's Clean Air Act State Implementation Plan Requirement That the Public Have an Opportunity to Comment for on Draft Synthetic Minor Permits and (2) Find Inadequate and Correct Georgia's Deficient Minor New Source Review Rules, at 13 (Mar. 18, 2021), https://environmentalintegrity.org/wp-content/uploads/2021/03/Final-Petition-Seeking-EPA-Orders-Requiring-Public-Comment-on-Draft-Minor-Source-Air-Permits-RBG-3_18_21.pdf.

¹⁰²³ 33 LAC:III:531(A)(2).

¹⁰²⁴ 33 LAC:III:531(A)(1).

¹⁰²⁵ *Voigt v. Coyote Creek Mining Co., LLC*, No. 1:15-cv-00109, 2018 U.S. Dist. LEXIS 111913, at *84 (D.N.D. July 3, 2018).

¹⁰²⁶ *In re Peabody Western Coal Co.*, 12 E.A.D. 22, 37 (E.P.A. February 18, 2005).

an enforceable synthetic minor limit that restricts processing to 800,000 tpy. Synthetic minor limits are discussed in the next section.

PTE calculations are usually made using emission factors, and it is important to ensure those emission factors (discussed below in Section 8.I.2) are representative of worst-case emissions. For instance, if AP-42 (again, discussed below) emission factors are used (which is common in the LNG industry), this is by default not a “worst case” calculation since the emission factor is based on an average of measured emission rates; roughly half of tested sources emitted more than the AP-42 emission factor.

One way to conceptualize PTE calculations is sort of a reverse BACT determination: what is the worst-emitting similar source? That should be the basis for PTE calculations unless the source can justify something unique about its operations that will reduce potential emissions.

b. Synthetic Minor Limits

If a source’s PTE exceeds the major source threshold, they may opt to utilize controls and/or take limits on the operating or production rates or parameters of the facility that reduce PTE to below the major source threshold. These are synthetic minor limits. Synthetic minor limits may only be considered valid and as part of the PTE calculation if they are “enforceable as a practical matter;” as EPA has consistently explained, a limit intended to restrict PTE “can be relied upon . . . only if it is legally and practicably enforceable.”¹⁰²⁷ EPA has further explained practical enforceability as such:

In order to be considered practically enforceable, an emissions limit must be accompanied by terms and conditions that require a source to effectively constrain its operations so as to not exceed the relevant emissions threshold. **These terms and conditions must also be sufficient** to enable regulators and **citizens** to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action.¹⁰²⁸

In short, a synthetic minor limit is only valid if it will actually constrain emissions to below the major source threshold. Note that the limit should usually constrain actual operations, not simply emissions; for instance, a limit that simply says NO_x emissions shall not exceed 249 tpy (just below the default major source threshold) has been held inadequate unless the facility uses continuous emissions monitoring systems (CEMS, discussed in Section 8.G.5.a). Thus, in most instances, the synthetic minor limit should look something like a limit on the hours of operations or the production rate, and must be accompanied by monitoring, recordkeeping, and reporting requirements to enforceable.

c. General Permits

General permits are a broad category of permits implemented by states that usually apply to common and relatively lower-emitting sources, perhaps one to five tons of emissions of criteria pollutants per year at most. They vary somewhat from state to state, but the general idea is that state agencies will develop rules setting forth the requirements for what may qualify for a general permit. Applicants often need only send the agency a notification that they intend to construct and/or operate small sources of emissions pursuant to a general permit and do not need to wait for

¹⁰²⁷ *In the Matter of Kentucky Syngas, LLC*, Order on Petition No. IV-2010-9, at 30 (E.P.A. June 22, 2013), https://www.epa.gov/sites/production/files/2015-08/documents/kentuckysyngas_response2010.pdf.

¹⁰²⁸ *In the Matter of Orange Recycling & Ethanol Prod. Facility, Pencor-Masada Oxynol, llc.*, Order on Petition No. II-2001-05, at 7 (E.P.A. Apr. 8, 2002), https://www.epa.gov/sites/production/files/2015-08/documents/masada-2_decision2001.pdf; see also *In re Piedmont Green Power, LLC*, Order on Petition No. IV-2015-2 (Dec. 13, 2016), at 14.

approval (and indeed, approval may not even be required). General permits will not involve public notice and comment (other than when a state promulgates the rules for the permit).

Although LNG export facilities may occasionally contain units that qualify for coverage under general permits, even the smallest LNG export facilities will need an NSR permit to construct (either a major, minor, or synthetic minor). As such, challenging general permits will not typically be a fruitful avenue to pursue for advocates, but advocates should be on the lookout for any particularly large source of emissions (roughly 5 tpy or greater) that is being permitted under a general permit.

One critical note, however, is that even if a source at an LNG facility is covered by a general permit, the source's emissions must still be included in the overall facility's PTE calculations.

How can I challenge a deficient minor NSR permit if my comments are ignored?

Generally, most states allow for administrative appeals on minor NSR permits under the same general provisions set out above for major NSR permit challenges. This is true for both Louisiana and Texas, and advocates should refer to the major NSR permit challenge section above.

Insofar as your concerns pertain to enforceability or inadequate monitoring, you likely can also raise these concerns through the Title V operating permit process, as described in more detail below. As mentioned previously, Louisiana issues a facility's minor NSR permit in tandem with its Title V operating permit, so you will have an opportunity to challenge the facility's Title V operating permit prior to the facility's construction. In most states, including Texas, however, a facility need not apply for a Title V operating permit until after construction. Thus, while you can still use Title V procedures to challenge a Texas minor NSR permit, such challenge is not part of a strategy to prevent the facility's initial construction.

Offshore Air Permitting

Who controls air permitting and what requirements apply when an LNG export facility proposes to construct in the ocean or the Gulf of Mexico? The answer depends on where the facility will be located.

First, all sources located in "state waters" will be permitted by the closest state's permitting authority and must comply with that state's regulations. In other words, within state waters, the facility will be permitted as if it were on land in the closest state. Most states' state waters extend 3 nautical miles from the coastline, but importantly, Texas' and the Gulf Coast of Florida's state waters extend the equivalent of 9 miles.¹⁰²⁹

For sources beyond state waters, EPA is the permitting authority (note that certain types of facilities that are not generally part of LNG infrastructure will be permitted by the Department of the Interior).¹⁰³⁰ Specifically, EPA's regional office covering the closest onshore state will issue the permit.

So, what law applies to sources in federal waters? According EPA, it issues air permits in federal waters "based on the Clean Air Act and the air regulations that would otherwise be applicable in the

¹⁰²⁹ Congressional Research Service, *Controlling Air Emissions from Outer Continental Shelf Sources: A Comparison of Two Programs—EPA and DOI*, Nov. 26, 2012, 7, <https://sgp.fas.org/crs/misc/R42123.pdf>.

¹⁰³⁰ Note that permitting authority in the western Gulf of Mexico is complex and has at times fallen to DOI, but at present EPA issues all relevant offshore permits.

nearest adjacent coastal state, as long as the state or local requirements are applicable and not inconsistent with federal law.”¹⁰³¹ Note that, despite the foregoing, beyond 25 miles from state waters, EPA need only apply federal law, but may in practice attempt to adhere to the state regulations of the nearest state.¹⁰³²

What to know about EPA permitting:

Generally, permitting under EPA will be similar to permitting under state agencies, but there are a few key distinctions to watch for:

- **Public Notice:** EPA’s public notices are available at <https://www.epa.gov/publicnotices>. Note that you can sign up for an electronic mailing list as well at the same address;
- **Availability of Documents:** Once EPA issues a public notice, it will create an online docket at [regulations.gov](https://www.regulations.gov) that contains the application and other relevant documents;
- **Challenging a major NSR permit issued by EPA:** Permit appeals are heard by EPA’s Environmental Appeals Board, and are similar to the administrative challenged described in Section 8.B.10; if the EAB rules against an advocate, then review is available in federal court (in the federal district court having jurisdiction).

Hazardous Air Pollutants and Air Toxics

The Clean Air Act’s NAAQS and major NSR programs seek to protect and improve air quality from the most common pollutants that cause poor air quality like smog and haze. But what about other air pollutants that are toxic or carcinogenic even in small quantities, such as benzene and formaldehyde? This is where regulations on hazardous air pollutants (HAPs) come into play, which are also sometimes referred to as air toxics. HAPs are regulated under the Clean Air Act and consist of 184 pollutants designated by Congress.¹⁰³³ Pursuant to Clean Air Act § 112, EPA promulgated federal HAP regulations known as the National Emission Standards for Hazardous Air Pollutants (NESHAP). These standards apply directly to sources in specified source categories and are included by some states in construction permits (including typically both Louisiana and Texas). States often also have their own state-law standards that apply to many of the pollutants on the federal HAP list, as well as some that aren’t on the federal list. State programs usually call these pollutants “toxic” pollutants or “air toxics.”

National Emission Standards for Hazardous Air Pollutants

NESHAP is a set of federal standards promulgated by EPA that govern minimum emission and operating standards, as well as monitoring, recordkeeping, and reporting requirements, for particular types of emission sources that emit HAPs. For instance, stationary combustion turbines like those at LNG export facilities are subject to NESHAP Subpart YYYYY. Such technology standards are referred to as “Maximum Achievable Control Technology” (MACT) standards; unlike BACT standards,

¹⁰³¹ EPA, Liquefied Natural Gas Regulatory Roadmap, at viii (Nov. 2006), https://www.epa.gov/sites/default/files/2015-08/documents/lng_regulatory_roadmap.pdf.

¹⁰³² See 40 C.F.R. § 55.3(b).

¹⁰³³ Congress initially listed 188 pollutants as HAPs and gave EPA authority to add or remove pollutants from the list. To date, EPA has only added one HAP and has removed five. The current list is available at: <https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications>.

however, these control determinations are established by EPA in rulemaking rather than on a case-by-case basis, except in certain unique situations.¹⁰³⁴

Like NSR and Title V, sources are divided between major and “area” sources (the term “area” is often used interchangeably with “minor,” but with HAPs, the technical term is “area”), and applicability is determined in a similar manner based on PTE. Major sources are those facilities that have the potential to emit more than 25 tpy of all HAPs in the aggregate, or any single HAP in rates greater than 10 tpy.¹⁰³⁵ For example, a source is major if it emits a HAP such as formaldehyde in rates equal to or greater than 10 tpy, or if all of the HAPs emitted by the facility are equal to or greater than 25 tpy.

The key question advocates should consider with regard to NESHAP is whether the facility is properly designated as either a major or area (or has enforceable synthetic minor limits, discussed above). Although there are some standards applicable to certain units at area sources, in many instances there is either no area source standard or if there is, it is less stringent. With regard to LNG facilities, for example, combustion turbines at major source facilities are subject to the NESHAP standards at 40 C.F.R. 63 Subpart YYYYY, but if the facility is an area source, those same combustion turbines would not be subject to *any* NESHAP standards. Note that the applicability determination is based on the entire facility’s HAP PTE, not the individual units subject to NESHAP.

In practice, most large LNG export facilities with on-site combustion turbines will qualify as major sources under NESHAP. Generally, these sources will exceed both the 25 tpy aggregate HAP threshold as well as the 10 tpy individual HAP threshold for formaldehyde.

That said, some small to medium-sized facilities, especially those without on-site combustion turbines, have been permitted as area or synthetic minor sources. Estimated emissions at these facilities are quite close to the major source thresholds; with formaldehyde estimated to be at around 8 or 9 tpy and total HAPs at around 20 to 22 tpy. As such, further scrutiny is warranted for these types of facilities. Generally, seeking the advice of an expert reviewer is the best course of action, but the following is a brief checklist for advocates to use to assess the emission estimates:

- Are all relevant pollutants accounted for? There are 184 HAPs to consider, and while most of these are not emitted in significant quantities by LNG facilities, *all* HAPs that are emitted must be included in calculating PTE. It is not uncommon for applicants to omit pollutants that are emitted in relatively low quantities, but if the facility is estimated to emit close to the major source threshold, these additional emissions can mean the facility is really a major source.
- Are fugitive emission sources included? All fugitive emissions must be included,¹⁰³⁶
- Are emissions from planned startup, shutdown, maintenance included? A facility’s PTE calculation must be based on the worst-case scenario and include emissions that can occur

¹⁰³⁴ For major sources of HAPs that are not subject to a NESHAP standard, permitting agencies must require MACT-level emission control technology on a case-by-case basis. See 42 U.S.C. § 112(g)(2)(b). And unlike BACT, there are no exceptions for economic, environmental, or other considerations; if a control technology has been implemented at a similar source and is technically feasible, it *must* be required as MACT.

¹⁰³⁵ 42 U.S.C. § 7412(a)(1).

¹⁰³⁶ Unlike certain major NSR applicability determinations that exempt fugitive emissions, the major source definition under NESHAP does not contain any such carve-out and fugitive emissions must be included. 42 U.S.C. § 7412(a)(1).

during all operational modes.¹⁰³⁷ It is not uncommon that a source will improperly exclude emissions associated with anticipated startup, shutdown, and maintenance activities, which can be substantial.¹⁰³⁸ Notably, in combustion sources like turbines, when the source is starting up or shutting down and the combustion level is low, most HAP emissions actually increase. This is because many HAPs are destroyed by incineration and proper combustion, so lower levels of combustion or temperature tends to increase emissions (especially of organic HAPs such as formaldehyde) as less of the HAPs are destroyed.

- Are destruction efficiency estimates for control technology appropriate? Destruction efficiency is the rate at which a control technology destroys pollutants, and it is often factored into an applicant's emission estimates. If an applicant claims that a flare (which are particularly finicky control devices) will destroy 99% of all emissions, but in reality it will only destroy 98%, that will actually mean that emissions *double*; if the flare instead only achieves 95% destruction, emissions will be five times—or 400%—higher than the applicant claims. As such, claims associated with destruction efficiencies should be well-supported. See Section 8.I.4 for more information on control technology.
- Are the emission factors reliable? See Section 8.I.2 for a discussion on emission factors.
- If the facility is seeking synthetic minor limits, are they enforceable? See Section 8.C.3.ii for more information on synthetic minor limits.

NESHAPs applicable at LNG facilities: Below is a list of NESHAP standards that commonly apply to LNG export facilities:

- Subpart A: General Provisions. This will apply to any LNG source that triggers one of the following subparts.
- Subpart EEEE: Organic Liquids Distribution (Non-Gasoline). This subpart establishes standards applicable to the storage, transfer, blending, and other handling operations of organic liquids. Here, that includes liquid natural gas as well as other liquid organics removed during the LNG process.
- Subpart YYYY: Stationary Combustion Turbines. This subpart establishes minimum operating requirements for combustion turbines and establishes an emission limit for formaldehyde (91 ppb), along with source testing requirements. Note that this will only apply to turbines located at major sources of HAPs; there is no NESHAP standard for turbines located at area sources.
- Subpart ZZZZ: Reciprocating Internal Combustion Engines. This subpart will cover stationary reciprocating internal combustion engines—in short, all of the stationary diesel or gasoline engines at the facility, such as emergency engines, generators, and firewater pumps.
- If the facility handles significant quantities of gasoline, it may also be subject to Subparts R, BBBB, and CCCCC.

¹⁰³⁷ EPA, Accounting for Emergency Generators in the Estimate of Potential to Emit, at 2 (Feb. 14, 2006) (“to determine PTE, a source must estimate its emissions based on the worst-case scenario taking into account startups, shutdowns and malfunctions.”).

¹⁰³⁸ After a facility is constructed and operating, all of its emissions, including those that occur during malfunction, must be counted when determining whether a facility operates in compliance with a PTE limit. Since malfunctions are unplanned, however, state policies vary regarding whether and the extent to which malfunction emissions must be included in a facility's preconstruction PTE calculation.

Generally, applicants will list which subparts it believes are applicable in the “Regulatory Applicability” portion of the application. Advocates should watch for any instances where an applicant argues that a certain subpart does not apply and the reasons stated.

State Air Toxics Requirements

Prior to the Clean Air Act Amendments of 1990, EPA did little to regulate most of the pollutants listed as HAPs. As a result, states often implemented their own regulatory framework for many of these same pollutants (and others that are still today not listed as HAPs), usually referred to as Toxic Air Pollutants. These programs continue to exist today in many states. Because they are state creations, they vary somewhat (and some states have no air toxics regulations), and importantly they are “state-only” requirements, meaning EPA has no oversight or enforcement authority, and the public is usually also cut off from enforcement. That said, they are still usually open to comments when permits are out for public notice and comment.

In general, most state air toxics programs establish health-based ambient air concentration thresholds for each air toxic based on its toxicity, then require that a new or modified source quantify their emissions of listed air toxics and conduct air dispersion modeling to see whether the source’s emissions will cause exceedances of the health-based thresholds.

Many of the same issues related to PSD modeling discussed above are relevant for reviewing these air toxics modeling reports. For instance, are reported concentrations close to the threshold? If so, advocates should consult an expert in air dispersion modeling.

Texas Air Toxics

In Texas, air toxics impacts must be assessed for any new or modified source that will emit new or increased levels of air toxics, unless certain exceptions apply. The list of air toxics is defined as any pollutant subject to an “effects screening level,” or ESL. A full guide to Texas air toxics requirements, including the ESL lists, is provided in a document titled “Modeling and Effects Review Applicability (MERA).”¹⁰³⁹ Although the screening and modeling requirements can be complex, in short, any facility whose emissions increases of air toxics are above qualifying thresholds must conduct air dispersion modeling to demonstrate that air toxics emissions from the source or project will not result in ambient concentrations above health-based concentrations, aka the ESLs.

Louisiana Air Toxics

LDEQ implements a state-only air toxics program that regulates all HAPs (i.e. those pollutants listed at 42 U.S.C. § 7412(b)) as air toxics, as well as 14 additional air toxics not listed as HAPs.¹⁰⁴⁰ The rules are set out at LAC 33:III.Chapter 51. Unfortunately, it is unlikely LNG export facilities will trigger LDEQ’s air toxics rules. First, only major sources of HAPs are subject to Louisiana’s Chapter 51 air toxics rules, i.e. those with the potential to emit 25 tpy or more of HAPs in the aggregate or 10 tpy or more of any individual HAP or air toxic.¹⁰⁴¹ Although larger LNG export facilities, such as Sabine Pass LNG, are indeed major sources of HAPs, the rules further provide a carveout for emissions from

¹⁰³⁹ TCEQ, Air Permit Reviewer Reference Guide, APDG 5874, Modeling Effects and Review Applicability (MERA) (Mar. 2018), <https://www.tceq.texas.gov/assets/public/permitting/air/Guidance/NewSourceReview/mera.pdf>.

¹⁰⁴⁰ The full list can be found at LAC 33:III.Chapter 51, Tables 51.1 - 51.3.

¹⁰⁴¹ LAC 33:III.Chapter 51, § 5109(B).

combustion of “virgin fossil fuels,” which includes combustion of natural gas in turbines.¹⁰⁴² Thus, when an LNG export facility calculates its HAP emissions for purposes of determining whether the Chapter 51 air toxics regulations apply, they can subtract emissions from the combustion turbines, which results in a significant reduction in HAP emissions that is ultimately below the major source threshold.

If a facility is subject to the Chapter 51 air toxics rules, however, it must quantify emission rates of all air toxics and compare those emission rates to the Chapter 51, Table 51.1 list of Minimum Emission Rates (MERs). Any air toxics emitted in rates that exceed the MERs must be modeled to demonstrate compliance with the corresponding Ambient Air Standards (Table 51.2).

New Source Performance Standards

As discussed above, the New Source Performance Standards are unlike New Source Review, despite the similarity in names. NSR involves a case-by-case, facility-specific application of potential control technologies. NSPS, on the other hand, are standards that EPA develops by rule for specific types of units and operations, e.g., gas turbines. They are conceptually similar to NESHAPs but apply instead to criteria pollutants. The NSPS standards are set out at 40 C.F.R. 60.

NSPS at LNG facilities

Below is a list of NSPS standards that commonly apply to LNG export facilities:

- Subpart A: General Provisions. This will apply to any LNG source that triggers one of the following subparts.
- Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels.
- Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
- Subpart KKKK: Standards of Performance for Stationary Combustion Turbines.

As above with NESHAPs, the question for a permit review is whether the applicant is attempting to evade any potentially relevant NSPS.

Title V Operating Permits

Congress enacted Title V, 42 U.S.C. §§ 7661-7661f, as part of the Clean Air Act Amendments of 1990. Title V’s purpose is to simplify enforcement and promote compliance by requiring each major stationary air pollution source (and certain smaller sources) to obtain an operating permit that identifies all applicable Clean Air Act requirements as well as monitoring, recordkeeping, and compliance certification requirements to assure the source’s compliance with those requirements. A Title V permit also must include an enforcement schedule of compliance for any source that will not be in compliance at the time of permit issuance.

¹⁰⁴² LAC 33:III.Chapter 51, § 5105(B).

EXISTING ADVOCATE GUIDE FOR TITLE V PERMITTING

A guide for advocates called “**The Proof is in the Permit: How to Make Sure a Facility in Your Community Gets an Effective Title V Air Pollution Permit**”¹ covers Title V permitting in depth and is aimed towards a similar audience as this guide. As such, this section will focus largely on LNG-specific Title V issues and provide a more minimal overview of Title V generally. The guide is available for free at:

<http://www.cacwny.org/docs/Title%20V%20-%20The%20proof%20is%20in%20the%20permit.PDF>.

Because Title V permits are operating permits rather than construction permits, federal Title V rules contemplate that a source will apply for a Title V permit after commencing operations (but no later than 12 months¹⁰⁴³). Some states, however, require issuance of a combined preconstruction and Title V operating permit prior to construction, including Louisiana.

EPA’s Title V regulations, which contain (among other things) the minimum requirements for state Title V programs, are found at 40 C.F.R. Part 70. As such, Title V is also referred to as Part 70 requirements, or federal operating permits (even though they are implemented by states in most cases).

Who needs a Title V permit?

In short, all LNG export facilities and most support facilities will likely require a Title V permit. The Title V threshold is relatively straight-forward: any source with a PTE for the main criteria pollutants (i.e. NO_x, CO, PM, VOCs, and SO₂) of 100 tpy or more is a Title

V source. Major sources of HAPs are also required to obtain a Title V permit, i.e., sources with the potential to emit more than 10 tons of any single HAP or 25 tons of total HAPs per year.

Does a new facility subject to Title V have to obtain a Title V permit prior to construction?

Title V permit regulations (40 C.F.R. Part 70) generally contemplate that a new source will apply for a Title V permit *after* commencing operation, usually needing to submit a complete application within 12 months of commencing operations. This timeframe is implemented in many, if not most, states. However, Texas and Louisiana have implemented different deadlines that do require certain Title V applications or approvals prior to either construction of a new source or operation of new sources.

Louisiana is one state that typically does require a new source to obtain a Title V permit prior to construction.¹⁰⁴⁴ At a minimum, a source must submit a complete Title V application prior to commencing construction. LDEQ may allow construction to commence prior to issuance of a Title V permit if certain conditions are met under LAC 33:III.501.C.3. Those conditions give discretion to LDEQ to “issue authorization to construct to an owner or operator in appropriate circumstances where there is a positive human health or environmental benefit, provided such an authorization is not precluded by any federally applicable requirement or by 40 C.F.R. Part 70.” Because the Part 70 rules do not require issuance of a Title V permit prior to construction, it is unlikely that these Part 70 regulations would prevent LDEQ from authorizing construction prior to issuance of a Title V permit.

Texas does not require the *issuance* of a Title V permit prior to commencing construction, but it does require a new source that will be subject to Title V to submit something known as an “abbreviated

¹⁰⁴³ 40 C.F.R. § 70.5(a)(1)(i).

¹⁰⁴⁴ See LAC 33:III:507:C:2.

application” before commencing operations.¹⁰⁴⁵ The abbreviated application must “include at a minimum, a general application form containing identifying information regarding the site and the applicant and a certification by a responsible official.”¹⁰⁴⁶

What opportunity is there to comment on a draft permit? Is the permitting authority required to hold a public hearing?

Other than permit revisions that qualify as “administrative” or “minor,” all Title V permits and permit revisions must undergo public notice and comment, including all initial Title V permits (this is particularly relevant in Louisiana, where LNG export facilities will almost certainly be permitted via joint Title V and Major NSR permits). This public comment period must be at least 30 days long, and all application material as well as the “statement of basis”¹⁰⁴⁷ must be available to the public for the entire 30-days.

Advocates may request a public hearing at any time during the 30-day public comment period; if an agency holds a public hearing, it must provide at least 30-days’ notice.

In addition to public-notice-and-comment requirements, Title V also requires that EPA to review proposed Title V permits and object to defective permits. After submitting comments, advocates can petition EPA to object, as discussed below.

State and EPA review procedures for Title V Permits; recent rulemaking.

In general, the Proof is in the Permit guide referenced above is largely up to date, however EPA recently issued rules formalizing the procedures that states and EPA must follow in reviewing draft permits and responding to public comments. Below is the process and timeline that states and EPA must follow when significant comments are received:

- Once the permitting authority has prepared a **draft** permit and statement of basis, it shall release the draft permit for 30 days of public notice and comment;
- If significant comments are received, the agency must prepare a response to comments addressing comments;
- After completing the response to comments, if no permit revisions are made, the agency may transmit the **proposed** permit, i.e., the permit the agency proposes to issue, along with the response to comments and statement of basis for the permit conditions, to EPA for its 45-day-review period.
- If significant permit revisions are made, the agency must usually allow for another 30-day public notice and comment on the new draft permit, restarting the timeline.
- Once an agency transmits the draft permit to EPA, EPA then has 45 days to review the proposed permit and record and decide whether to object (typically they will not);
- After the conclusion of EPA’s 45-day review period, commenters have 60 days to file a petition asking EPA to object. EPA then has 60 days to consider the petition, but in practice EPA almost

¹⁰⁴⁵ 30 TAC § 122.130(b)(1).

¹⁰⁴⁶ 30 TAC § 122.132(c).

¹⁰⁴⁷ Title V requires that permitting authorities prepare a “statement of basis” that “sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions).” 40 C.F.R. § 70.7(a)(5).

never acts within this time period. Petitioners may need to sue EPA for missing this deadline to force action on the petition.

What issues should I cover in my comments on the draft permit?

The most critical thing to know about making public comments on Title V permits is that, if you intend to petition EPA to object to a Title V permit, you must lay the foundation for that petition in your public comments. If a particular deficiency is not identified in public comments submitted during the comment period (by you or someone else), you are generally prohibited from seeking an objection on that same basis (unless you can demonstrate that “it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period”¹⁰⁴⁸, perhaps if new information is made available after the close of the comment period).

More generally, Title V permits are primarily designed to assure a facility complies with existing Clean Air Act requirements. As such, the most effective Title V permits will be those that address requirements that have been improperly omitted from or misstated in the permit, or that address the lack of sufficient compliance-assurance conditions like monitoring, recordkeeping, and reporting requirements.

Note again that the *Proof is in the Permit* guide is a great resource for how to spot Title V issues and address them in comments.

a. Does the monitoring, recordkeeping, reporting assure compliance?

In short, Title V permits must enable the public, EPA, and permitting authorities to promptly ascertain the “applicable requirement[s]” for a facility and whether the facility is complying with these requirements. The term “applicable requirement” is defined at 40 C.F.R. 70.2, but in general it is any Clean Air Act-related requirement, such as NSR limits, NESHAP standards, or NSPS standards. The only exception that might be encountered are “state-only” requirements that are outside the scope of the Clean Air Act and its regulations; one common example is state air toxics regulations.

In other words, almost every limit, standard, or operating condition contained in any Clean Air Act permit, in the relevant state implementation plan, or in an applicable Clean Air Act federal regulation must be wrapped into the Title V permit and paired with adequate monitoring, recordkeeping, and reporting requirements to assure the facility will comply with the condition and that violations are readily discovered and reported.

For instance, if a PSD permit establishes a limit of 1 lb/hr of NO_x, but the PSD permit does not include any way to monitor the facility’s NO_x emissions (which itself is a separate deficiency under NSR, generally speaking), the Title V permit must include monitoring, recordkeeping, and reporting requirements.

What monitoring is common at LNG plants?

There are various devices and methods used to monitor compliance with emission limits or other requirements, and they can be arranged in a rough hierarchy in terms of their ability to assure continuous compliance. At LNG plants, the requisite monitoring is often set forth in NESHAP and NSPS requirements, but advocates should remember that these monitoring requirements are the “floor” of what is required, especially in Title V permits, which must supplement existing monitoring

¹⁰⁴⁸ 40 C.F.R. § 70.8(d).

requirements if they are not sufficient to assure compliance. This is especially relevant in Louisiana because that state issues combined initial Title V permits and pre-construction NSR permits.

Continuous Emission Monitoring Systems (CEMS): CEMS are generally the best method for directly monitoring emission rates. These are devices installed in a unit's smokestack that directly and continuously measure the emission rate of specific pollutants. For instance, NSPS subpart KKKK requires combustion turbines to install and operate CEMS for NO_x emissions.

Stack Testing is the practice of periodically measuring the emission rate of a pollutant or pollutants directly from the stack. Stack testing may be the only requirement to measure actual emission rates of certain pollutants, or may be used to verify the accuracy of CEMS devices. Typically, where a permit requires stack testing, it will require an initial test within a certain date of initial operations, and then periodic testing thereafter. Note that stack testing alone is inherently deficient to assure compliance with short-term limits. For instance, if a unit is subject to an emission limit on an hourly basis, stack testing once per year will not alone assure compliance with the hourly limit. Although CEMS is ideal in such situations, if stack testing alone is used to demonstrate compliance, it must be paired with continuous parametric monitoring, as described below.

Continuous Parametric Monitoring Systems (CPMS) are devices or systems that monitor the operating parameters that influence emissions. For example, the combustion temperature in a turbine directly influences CO emissions, so a CPMS for CO emissions will measure and correlate temperature and other parameters to calculate estimated CO emission rates. Ideally, these parameters will be verified via stack testing; i.e., all of the relevant measurements will be monitored during a stack test and used to calculate emissions between stack tests.

Continuous Opacity Measurement Systems (COMS) are devices similar to CEMS that directly and continuously measure the opacity of a source's emissions. Almost all units at LNG plants will be subject to limits on opacity, which is a surrogate for PM emissions, and therefore permits must contain monitoring that ensures compliance with the opacity limits. COMS are ideal as compared to the alternative Method 9 measurement set out below.

Method 9 is EPA's methodology for having humans visually observe a source's opacity. Observers typically must attend a Method 9 training and receive certification, after which permits will require periodic Method 9 monitoring. In practice, this means a person will follow the procedures to determine what the opacity level is of a given source, perhaps on a daily, weekly, or even quarterly basis. This is problematic for several reasons; first, the source is usually free to choose when to make Method 9 observations, and may choose to do so only when the unit is operating optimally. Second, although Method 9 can produce accurate opacity measurements, it is still a subjective measurement and prone to human error. As such, COMS are preferable.

Equations and recordkeeping: permits may also "monitor" emissions by requiring the facility to use calculations and emission factors (described below in Section 8.1.2). For example, a permit might set out an equation that requires a source to multiply the tonnage of LNG produced by an emission factor to calculate an emission rate and determine compliance with an emission limit. This method is only as good as the emission factor utilized, which often is deficient. At a minimum, such monitoring should be paired with periodic stack testing to determine a "worst case" emission factor that represents maximum emissions.

b. Can I comment on substantive NSR issues in a Title V permit?

Title V permits are primarily intended to assure compliance with existing requirements, such as emission limits established in NSR permits. As such, permitting agencies typically hold that commenters may address Title V's compliance assurance related to those limits, but that the limit itself or related NSR requirements are not open to comment in the Title V context. For example, commenting that a Title V permit needs more monitoring related to a BACT limit is valid, but arguing that the BACT limit itself is defective (perhaps because the facility did not choose the lowest BACT limit) should have been raised in comments at the time of the NSR permit issuance, and is no longer an issue open to comment.

Historically, EPA generally agreed with states that concerns regarding what constitutes BACT and other substantive determinations made during a major NSR permit proceeding must be raised in that proceeding rather than in a later Title V proceeding. However, EPA made two exceptions: (1) if the deficiencies in the major NSR permit are so significant that the permit does not meet the fundamental requirement that a source obtain a major NSR permit prior to construction, or (2) if the state has chosen to issue a combined Title V and major NSR permit. It does not appear that EPA has ever identified a circumstance under which the first exception applies. As for the second exception, EPA changed its position in 2017 and declared in an order responding to a Title V petition that even when a state issues a combined Title V/NSR permit, Title V procedures are not available for challenging a substantive determination (e.g., BACT limit) established in a major NSR permit.¹⁰⁴⁹ EPA's change in position was controversial when made and potentially could change again.

Obviously, if an advocate is participating in a state permit proceeding where the state is simultaneously issuing an NSR permit and a Title V permit, or perhaps even issuing one combined NSR/Title V permit, there is no reason why the advocate cannot raise NSR concerns. But even if an advocate is commenting on a draft Title V permit at some point after the state has issued the major NSR permit in question, it does no harm to raise these in comments. A state agency always has discretion to correct its own errors. Furthermore, EPA potentially could be persuaded to change its position.

Also in 2017, EPA began declaring in response to citizen petitions to object to particular Title V permits that Title V procedures cannot be used to challenge a state's prior determination that a facility is *not* subject to major NSR.¹⁰⁵⁰ Environmental groups challenged two such EPA orders, one in the U.S. Court of Appeals for the Fifth Circuit, in Texas, and the other in the U.S. Court of Appeals for the Tenth Circuit, in Colorado. While the Fifth Circuit upheld EPA's new Title V interpretation, the Tenth Circuit found EPA's interpretation to be unlawful and struck it down.¹⁰⁵¹ Subsequently, EPA explained in another order pertaining to a particular permit that it would not (and could not) apply the challenged interpretation in the Tenth Circuit (which includes Oklahoma, Kansas, New Mexico, Colorado, Wyoming, and Utah), but that it would continue to apply the interpretation in all other states, including Texas and Louisiana. Advocates are hopeful that EPA will reconsider that decision and authorize clean air advocates nationwide to utilize Title V permit procedures to challenge a state's prior, erroneous determination that a source's construction or modification did not trigger

¹⁰⁴⁹ *In the Matter of Big River Steel, LLC*, Order on Petition No. VI-2013-10 (Oct. 31, 2017),

https://www.epa.gov/sites/default/files/2017-10/documents/big_river_steel_response2013.pdf.

¹⁰⁵⁰ See, e.g., *In the Matter of PacifiCorp Energy Hunter Power Plant*, Order on Petition No. VIII-2016-4 (Oct. 16, 2017),

https://www.epa.gov/sites/default/files/2021-03/documents/hunter_order_10-16-2017.pdf.

¹⁰⁵¹ *Sierra Club v. U.S. EPA*, 964 F.3d 882 (10th Cir. 2020).

major NSR applicability. Regardless, this issue is fairly unlikely to arise in the context of challenges to permits authorizing construction of LNG export facilities because major NSR applicability is likely to be clear.

Title V Petitions

One unique aspect of Title V permits as opposed to major or minor NSR permits is that states are statutorily prohibited from issuing a Title V permit without first providing EPA with a 45-day review period, and if EPA objects to its issuance, the state may not issue the permit until the basis for the objection is remedied. In practice, EPA rarely objects to a permit on its own, however the Act also allows advocates to petition EPA to object. EPA must grant a petition to object if the petitioner demonstrates that the permit does not comply with the Act or the requirements of the Title V regulations. The timeline for petitioning EPA is set out above at Section 8.G.2.

When filing a Title V petition, advocates should understand that the petitioner bears the burden of demonstrating that the permit is deficient; petitioners are further expected to acknowledge the state's response to comments and explain why the response is insufficient.

Importantly, advocates must be aware that any issue that they raise in a Title V petition must have been raised with reasonable specificity in their public comments on the draft permit, except in rare circumstances.¹⁰⁵² If there is some reason why it was impracticable or impossible to raise a particular issue in comments on the draft permit, e.g., the information was only made publicly available after the close of the public comment period, the petitioner must make that demonstration in the petition. Do not expect for EPA to fill in the blanks.

You do not need to be a lawyer to file a Title V petition. Nonetheless, an advocate who plans to file a Title V petition is encouraged to consult with an experienced Clean Air Act lawyer who can advise on how to craft arguments in a way that is most likely to result in an EPA objection.

Advocates should also be aware that historically, it has taken EPA far longer than the 60-day deadline set forth in the Clean Air Act to respond to Title V petitions. Moreover, about two-thirds of EPA's responses have come only after the petitioner files a lawsuit in federal court to force EPA to Act. Fortunately, the Act provides for attorney fee recovery from the government in a successful citizen suit. Furthermore, assuming that the petition was filed on time, a lawsuit against the government for missing the response deadline is fairly straightforward. Thus, it should not be that difficult to find a lawyer willing to file the case.

Examples of Title V petitions as well as EPA's responses can be found at EPA's Title V Petition Database.¹⁰⁵³ Finally, advocates should be aware that **EPA has recently set out minimum requirements for the format and contents** of Title V petitions.¹⁰⁵⁴

Effective comment drafting

This section provides a brief outline of what the authors consider to be best practices when reviewing an air permit for a new facility. Other experienced advocates may have different approaches, but this approach is premised on the back-and-forth nature of the permitting process,

¹⁰⁵² As discussed above, if petitioners could not reasonably have raised the issue in the public comments, EPA may consider new arguments in Title V petitions. 40 C.F.R. § 70.8(d).

¹⁰⁵³ Available at: <https://www.epa.gov/title-v-operating-permits/title-v-petition-database>.

¹⁰⁵⁴ 85 Fed. Reg. 6,431 (Feb. 5, 2020), <https://www.govinfo.gov/content/pkg/FR-2020-02-05/pdf/2020-01099.pdf>.

which can be viewed as an adversarial proceeding between the applicant, the state, and finally the public.

- Start with the application(s). This is where the company will set out the details of the proposed project, which Clean Air Act requirements they believe apply, and, most critically, which do not, according to them. If there is a close question of applicability for any given requirement, the company will tend to advocate for non-applicability. The concept of “the lady doth protest too much” is a general guiding principle when reviewing permit applications. If the applicant expends significant amounts of ink justifying why something doesn’t apply to them, it’s worth asking why.

A review of the application may also include a hard look at emission rates (i.e. emission factors, discussed below) and operating assumptions if the source is claiming certain requirements like major NSR doesn’t apply to them.

In sum, a deep read of the application and communications between the applicant and the agency is the best way to familiarize yourself with the context of the draft permit.

- Next, read the agency’s technical review document. Regardless of the permit type, almost all agencies will provide a document wherein they state their interpretation of the application, whether or not they agreed with the applicant’s claims, and how they drafted the permit and its conditions based on the application.
- In many instances, it can be very valuable to review other, similar sources. For instance, what technology and limits have been applied to this type of facility? Has the applicant and state included all similar sources, and not just those in the RBLC (discussed above)?
- What emission rates have been demonstrated in practice at similar sources? Note that this can cut both ways, if another source has achieved lower emissions, that should probably be included in setting limits for your source; alternatively, if a source is claiming it will be a minor or synthetic minor source, but similar sources have been found to emit higher rates than the applicant claims for its facility, is your source trying to evade major source requirements?
- Finally, review the draft permit. Now that you have a grasp on what the applicant is asking for, and how the agency has responded, look at the draft permit itself to see if it contains enforceable conditions related to the applicant’s claims and the agency’s interpretations. Also look to see if all of the assumptions made in the permitting process are reflected in the permit; if they performed

A TIP FOR SEARCHING VOLUMINOUS APPLICATION FILES

Often there may be dozens or even hundreds of individual PDF documents that form the application or permitting record, each of which may contain relevant information to a particular issue. Reading through each page of all such documents may simply not be feasible or advisable when reviewing a draft permit on short notice.

One method to speed the review process is to combine all PDFs into one single PDF. Then, targeted word searches can help learn about a given subject; of the documents are not initially word-searchable, many PDF viewers and online services provide for “OCR” to convert imaged PDFs to searchable text PDFs.

modeling assuming, say, 5,000 hours of operations per year, is there a permit limit reflecting this?

Again, it can be helpful to review permits for similar sources. Are those permits including limits and requirements that are not included in the permit you're reviewing? If so, why not?

Pollutants and Technology at LNG Export Facilities.

This section serves as a rough overview of the pollutants emitted by LNG export facilities as well as the applicable air pollution control technologies.

Pollutants emitted by LNG facilities.

This section gives a quick overview of the major pollutants emitted by LNG facilities and why they are regulated.

NO_x: Nitrogen Oxides combine with VOCs and sunlight to cause ground-level ozone, also known as smog. Breathing ground-level ozone is harmful to anyone, but especially the elderly, children, and individuals with lung conditions such as asthma. Constituents of NO_x also cause acid rain.

CO: Carbon Monoxide displaces oxygen and can result in health impacts; the greatest concern is for individuals with certain medical conditions, especially heart conditions, whose ability to get oxygen to their hearts may be especially sensitive.

VOCs: Volatile Organic Compounds, like NO_x, contribute to ground-level ozone and smog. VOCs are a vast mix of individual chemical compounds, many of which are also hazardous air pollutants (HAPs), meaning they are toxic or carcinogenic even in small quantities. For instance, LNG plants emit the HAP formaldehyde, a known human carcinogen, which is also a VOC.

PM: particulate matter, especially fine particulate matter, or PM_{2.5} (meaning particles smaller than 2.5 micrometers in diameter) is particularly harmful to any individual because these particles are small enough to cross through the lungs into the blood stream. Exposure to PM_{2.5} has been linked to increased rates of heart disease and premature death.

HAPs: As discussed above, HAPs are those pollutants listed by Congress as toxic and/or carcinogenic even in small quantities. LNG plants emit a large amount of the HAP formaldehyde, which is a known carcinogen. Additionally, while the plants emit lower levels of the HAP acrolein, that particular pollutant is so acutely toxic that even vastly lower emission rates may still be a risk to public health.

Emission factors.

Prior to constructing a new facility, there will obviously be no direct measurements of the facility's emissions. Yet, to determine what requirements apply (e.g. Title V, Major vs. Minor NSR, NESHAP standards, etc.), applicants must estimate potential emissions for dozens of pollutants from many different types of processes. Emission factors are the most common method of calculating these potential emissions.

An emission factor is the rate a pollutant is emitted per unit of production, throughput, combustion, or other measurable, planned activity. A simple example would be that for every ton of coal burned in a power plant, the plant emits nine pounds of NO_x; the emission factor here would be expressed as 9 lb/ton. If a planned coal power plant intends to burn 1 million tons of coal per year, that emission

factor would indicate the plant will emit 9 million pounds of NO_x ($9 * 1,000,000 = 9,000,000$), or 4,500 tons of NO_x per year.

Another example, a bit more complex but fundamentally the same idea and relevant to LNG facilities, would be that for every unit of heat input in a combustion turbine (expressed as million metric British thermal units, or “MMBtus”), the turbine will emit 0.32 pounds of NO_x, or 0.32 lb/MMBtu. If a planned new turbine will have a maximum heat input rating of 300 MMBtu per hour (a fairly typical rating), that means the turbine operating at full capacity for the full year will emit 8,409,600 pounds of NO_x (4,200 tons) per year: $300 \text{ MMBtu/hr} * 8760 \text{ hours (the number of hours in a year)} * 0.32 \text{ lb/MMBtu (the emission factor)} = 8,409,600 \text{ pounds/year}$; to convert to tons per year, divide by 2,000.

Because these emission factors are so central to estimating emissions, which in turn is vital to regulatory applicability and accurate modeling analyses (after all, if a facility is underestimating emissions, then the model will not be representative), emission factors must be well supported in the record and, more than anything, represent the facility’s true PTE.

AP-42: In this industry, and in many others, the most common source of emission factors is EPA’s compilation of emission factors known as AP-42. EPA periodically surveys existing data on emission rates (e.g., stack tests) from various industries, puts them together into vast excel documents, and averages the results into emission factors. For instance, AP-42 Chapter 3.1 contains EPA’s emission factors for combustion turbines.

The problem with averages and emission factors is that, generally speaking, about 50% of all sources within a source category will have emission rates that are higher than the average emission factor, perhaps vastly so. As such, EPA itself has repeatedly warned against using AP-42 emission factors in applicability determinations.¹⁰⁵⁵ Despite that, applicants and states routinely do just so. As discussed above, this is improper.

Trade Association Data: Some LNG applications rely on emission factors developed by trade associations, in particular the American Petroleum Institute (API). These emission factors are similar to AP-42 emission factors in that they are averages of multiple tests and sources, and therefore likewise do not represent potential emissions. Worse yet, with trade association emission factors, the underlying data is often not publicly available as it is treated as proprietary; even permitting agencies may not have access to the underlying data. Advocates should argue that use of such opaque emission factors does not meet the various requirements that require applicants to set forth the basis for a source’s emissions calculations.

Manufacturer data: Another common source of emission factors is “manufacturer data” or “manufacturer’s guarantee” or something similar. Almost universally, these emission factors will be listed without any supporting information and a mere footnote stating the basis is some iteration of the foregoing. This is problematic as the opaqueness of these emission factors makes it impossible for the public or permit writers to scrutinize how these emission factors were derived. The lack of transparency alone is grounds for comments that the applicant has not provided sufficient data on emissions calculations.

¹⁰⁵⁵ U.S. EPA, Enforcement Alert, “EPA Reminder About Inappropriate Use of AP-42 Emission Factors,” Publication No. 325-N-20-001 (Nov. 2020), <https://www.epa.gov/sites/default/files/2021-01/documents/ap42-enforcementalert.pdf>.

Moreover, as to manufacturer “guarantees,” these guarantees are typically only made on the basis of very specific operation parameters. Yet those parameters are known only to the manufacturer and the applicant, and not the agency or public. To properly rely on that guarantee, the permit should include such operating parameters as enforceable conditions, but almost never do.

Finally, and perhaps most troublesome, is the recurring pattern of applicants listing “manufacturer’s data/guarantee” while simultaneously listing the manufacturer as “TBD” in the application forms. Most states require that applicants supply the make and model of each unit in their permit application forms, yet it is quite common to see an applicant simultaneously list the make and model as “TBD” then claim emission factors are based on this unknown manufacturer’s guarantee. This is obviously a major contradiction: how can the source have manufacturer’s data if they don’t know who the manufacturer is?

Engineering estimates: Similar to manufacturer’s data above, emission factors are often based in “engineering estimates.” And, as above, the bases for these emission factors are largely omitted from the application record. Even if the engineering estimate is a good-faith effort at quantifying emission rates, the bases of the engineer’s estimates should be included in the application and any assumptions about the facility’s design or operation must be included as enforceable conditions in the permit.

Fugitive emissions

Fugitive emissions are defined as “those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.”¹⁰⁵⁶ In the context of LNG export facilities, most fugitive emissions are VOCs and greenhouse gases (methane in particular) emitted from leaks in valves, flanges, and connectors and from certain venting activities. Note that fugitive emissions must be considered in BACT and LAER analyses; industry typically argues that proper design and maintenance is BACT/LAER, but advocates should be aware that technology exists to reduce or eliminate leaks, such as “leakless” valves and fully-welded connections.¹⁰⁵⁷ Additionally, permits should contain monitoring to detect and fix leaks (usually referred to as “Leak Detection and Repair,” or LDAR); advocates have argued that optical gas imaging is a necessary component of adequate monitoring. Note that monitoring itself can qualify as part of BACT/LAER, as better monitoring will reduce emissions.

Control technologies at LNG plants

The following provides an overview of control technology that is commonly used at LNG plants, or that could potentially be used to provide greater level of control. Note that while ‘control’ may invoke add-on filters that scrub an exhaust stream, in the section “control” means any technology or technique that reduces emissions, regardless of where it is used in the process.

Controls for combustion turbines:

NOx controls for turbines:

¹⁰⁵⁶ 40 C.F.R. § 52.21(b)(20).

¹⁰⁵⁷ For examples, see TCEQ’s Air Permit Technical Guidance for Chemical Sources Fugitive Guidance, APDG 6422 (June 2018).

- Selective Catalytic Reduction (SCR) is an add-on control that uses a spray of ammonia in conjunction with a catalyst bed to selectively reduce NO_x to nitrogen and water. SCR's control efficiency is often cited as 70 to 90% or greater.
- Selective Non-Catalytic Reduction (SNCR) is an add-on control similar to SCR but without the use of a catalyst bed. Control efficiency is typically cited as 30 to 50%.
- Low-NO_x Burners or Dry Low NO_x Burners (LNB or DLNB) are a variety of burner designs that engineer combustion so as to reduce NO_x formation. These burners can achieve up to 75% or more reduction in NO_x formation. Note that LNB and DLNB can be paired with SCR or other add-on controls to achieve even further emissions reduction.
- Water or steam injection: NO_x pollution is generally increased as the temperature of combustion increases, therefore injecting water or steam into the combustion chamber to lower the combustion temperature will decrease NO_x formation (but may increase CO emissions).
- Electrification: this is the most significant form of NO_x reduction; replacing combustion turbines with electric compressors will reduce NO_x emissions to zero.
- Other proprietary controls: there are a wide range of proprietary NO_x controls, such as EM_x, NO_xOUT, or LoTO_x (all trademarked) that typically include some combination of the foregoing techniques to reduce NO_x and potentially other pollutants.

Other controls for turbines:

- VOCs and CO: Catalytic oxidation is, to date, the only add-on technology considered appropriate for turbines. Control efficiencies for CO and VOCs have been cited at rates well above 90%.¹⁰⁵⁸
- PM controls for turbines are generally non-existent. While add-on controls may be feasible, industry has argued that combusting natural gas in turbines produces sufficiently low levels of PM that add on controls are not warranted.
- SO₂ controls include flue gas desulfurization (FGD) and wet scrubbers have been proposed for controls on turbines, but have not been required to date.

Controls for units other than turbines:

Flares: Flares are used to burn-off (incinerate) waste gases such as methane. LNG export facilities operate several types of flares depending on the type of process being controlled. One key issue common to flares at LNG plants is overestimating the destruction efficiency of flares, which results in underestimating emissions. For more on this, see the Affidavit of Dr. Ranajit Sahu, attached to Sierra Club's 2021 comments on the draft permit for Magnolia LNG.¹⁰⁵⁹

Thermal Incinerators (also known as thermal oxidizers) are conceptually similar to flares except that they combust supplemental fuel (usually natural gas or propane) to incinerate a waste stream, and combustion occurs inside a controlled environment rather than at the tip of a smokestack. At LNG

¹⁰⁵⁸ EPA, Hazardous Air Pollutant Emission Control Technology for New Stationary Combustion Turbines, at 1 (Aug. 21, 2001), https://www.mdeq.ms.gov/wp-content/uploads/2017/06/CT_HAP.pdf.

¹⁰⁵⁹ App. 60, at 13.

plants, thermal incinerators are used to control the amine units (sometimes referred to as the gas sweetening units) for destruction of hydrogen sulfide and carbonyl sulfide.

Sources of data and information broadly

This section provides resources for advocates looking to learn more about air permitting generally and LNG air permitting in particular.

Online State Agency Databases

Many states maintain online databases where the state agencies provide access to facility-specific documents, including everything from applications and permits to, in some instances, all communications between a company and the state.

Texas

TCEQ maintains several overlapping, and frankly confusing, online databases for permit related material:

- **TCEQ Central File Room Online:** This is the electronic version of TCEQ's physical central file room and will contain many documents related to a facility, including air permits, applications, enforcement and investigation files, and so. In the experience of this author, the online Central File Room may be incomplete or not up to date, but is still relatively useful. If you suspect files are missing, you may need to file a public records request. Available at: <https://www.tceq.texas.gov/agency/data/records-services>.
- **New Source Review and Title V Operating Permits Database:** these two parallel databases allow advocates to search for all NSR (including minor NSR) and Title V permits issued in Texas or in particular counties. This includes some pending permits that have yet to be issued. Unfortunately, the actual permits are not available for download here, but instead you can find permit numbers and permitting dates. Available at: <https://www2.tceq.texas.gov/airperm/index.cfm>.
- **TCEQ Commissioners' Integrated Database:** this database lists filing dates and agency action on air permits. Typically the only documents available here are public comments, hearing requests, motions to overturn, and other similar communication from the public. Available at: https://www.tceq.texas.gov/agency/decisions/cc/cc_db.html.

Louisiana

Louisiana provides one comprehensive database which contains almost all documents relevant to air sources; applications, investigations, permits, public comments, etc. The database is called the Electronic Document Management System and is available at <https://www.deq.louisiana.gov/page/edms>.

HOW TO BULK DOWNLOAD DOCUMENTS FROM ELECTRONIC DATABASES

Advocates may find it easiest to bulk download files from electronic databases for review, and while some databases allow for this, many do not. However, if an electronic database provides links to documents (perhaps several hundred at a time), browser extensions such as Chrome's Batch Link Downloader can save a tremendous amount of time.

How to find public comments, petitions, and other advocacy material

A great way to quickly learn about issues with a particular industry is to look at what other advocates have identified as issues in public comments or other documents.

First, we have compiled the few public comments made to date on LNG export facilities at Appendices 59 through 67. Second, advocates can search for public comments in online databases in many states, as detailed above. Third, advocates should be aware of EPA's Title V petition database, which hosts all advocate's petitions to EPA to object to Title V permits (see the next section for more details).

Legal guides and resources

EPA's (Draft) NSR Manual: Although the Manual is not considered legally binding, it is recognized as the best resource for EPA's interpretation of NSR regulations and requirements. Many of those interpretations have been included in other EPA's documents or decisions that are binding, such as decisions by EPA's Environmental Appeals Board or in Title V petition orders. The manual is currently available at: <https://www.epa.gov/nsr/nsr-workshop-manual-draft-october-1990>.

EPA's New Source Review Policy and Guidance Document Index: EPA has issued hundreds of guidance and policy documents related to NSR since 1976. These include numerous source-specific determinations that may provide valuable citations for concepts set forth in the Draft NSR Manual—and unlike the Manual, these decisions do have legal authority. EPA maintains a comprehensive online Index as well as a search tool to search all such guidance, available at <https://www.epa.gov/nsr/new-source-review-policy-and-guidance-document-index>.

EPA's Environmental Appeals Board (EAB) Decisions: These decisions are essentially administrative “case law” issued by the EAB when someone challenges certain NSR permits (primarily those issued by EPA or in permits in states with delegated authority). The primary type of issue heard by EAB is PSD permit appeals, so this resource is most valuable for researching PSD issues like BACT or applicability determinations. Advocates can search these decisions online at: https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/Board+Decisions?OpenPage.

Title V permitting: The Proof is in the Permit: This is an excellent guide to all things related to Title V permitting, and is available at: <http://www.cacwny.org/docs/Title%20V%20-%20The%20proof%20is%20in%20the%20permit.PDF>.

EPA's Title V Petition Database: Title V petitions, and particularly EPA's orders on petitions, can be a valuable tool for researching Title V permit issues. Although only EPA's orders carry legal authority, petitions can also be valuable for assessing how other advocates have made legal arguments. A searchable database of all petitions and orders is at: <https://www.epa.gov/title-v-operating-permits/title-v-petition-database>.

Technical Guides and Resources

This section briefly provides several helpful tools for reviewing the technical aspects of a permit, e.g. emissions calculations.

RACT/BACT/LAER Clearinghouse (RBLC): is a database of air pollution controls that have been required as RACT, BACT, or LAER at new sources. Note that RBLC is notoriously incomplete and

should not be relied upon solely when determining RACT/BACT/LAER. Available at: <https://cfpub.epa.gov/RBLC/index.cfm?action=Home.Home&lang=en>.

AP-42: As discussed above, AP-42 is a compilation of emission factors for various types of sources. Although use of AP-42 emission factors is often inappropriate, the AP-42 database contains informative descriptions of various operations and sources, and the emission factors may still be useful to compare a source's estimates to what stack tests at similar sources have produced. Note that each section of emission factors is accompanied by an excel spreadsheet that provides details on each stack test that was used to formulate an emission factor. This can be valuable for getting more specific emission rates. Available at <https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors>.

EPA Control Technology Fact Sheets: A good starting point for learning about a certain control technology is EPA's control technology fact sheets, available at: <https://www.epa.gov/catc/clean-air-technology-center-products>.

Converting emission rates: Frequently emission rates at LNG plants are expressed in one of two emission rates: ppm and lb/MMBtu. This can make it difficult to compare emission rates from one source to another. A handy excel spreadsheet developed by the Santa Barbara County Air Pollution Control District can help convert between the two: <https://www.ourair.org/wp-content/uploads/PPMV-to-lb-per-MMBTU.xlsx>.

Additionally, some emission rates may be expressed in lb/hr rather than ppm or lb/MMBtu. To convert from lb/hr to either of the two other units, first convert from lb/hr to lb/MMBtu by dividing the lb/hr rate by the MMBtu value of the turbine or combustion source. For instance, if a turbine is rated for 500 MMBtu/hr, and the hourly emission rate is 10 pounds of pollutants per hour, divide 10 by 500 to get lb/MMBtu. Then, if necessary, to convert to ppm, use the above tool to convert from lb/MMBtu to ppm.



Chapter 9

TAX ABATEMENTS

CHAPTER NINE: TAX ABATEMENTS

Overview

What are tax abatements?

Tax abatements are artificial reductions on the amount of tax a property owner would otherwise pay. The term is generally interchangeable with terms like “tax breaks” and “tax exemptions.” The exemption can apply: at the federal, state or local level; to certain types of taxes at each level (e.g., school district taxes); and for a limited time period (e.g., ten years, after which the “normal” tax rate will be applied). An applicant typically qualifies for a tax exemption by applying to the overseeing entity, providing (usually minimal) documentation that it qualifies for the exemption, and having its application be approved or denied based on a vote by the various decision-making bodies prescribed by law. Sometimes the exemption recipient must provide follow-up documentation to show that the facility continues to qualify for the exemption; sometimes not. This chapter focuses on the two main state-level tax exemptions available in Texas and Louisiana; it also summarizes some other federal and local incentives that an LNG developer might pursue.

Why do facilities apply for tax abatements and incentives?

Unlike all of the other permissions and permits discussed in this guide, LNG terminals are not required to apply for tax exemptions as part of any permitting process.

Most LNG developers apply for the tax exemptions that state and local governments offer to industries because it is basically free money—millions of dollars in free money. In fact, LNG facilities receive some of the largest state tax exemptions of all industries: for example, the biggest beneficiaries under Texas’s corporate tax exemptions have been two LNG facilities: Corpus Christi Liquefaction and Freeport LNG, each receiving more than \$55 million in subsidies **annually**.¹⁰⁶⁰ Louisiana is even more generous to LNG companies—**eight** LNG facilities were granted more than \$50 million in the first year of each’s 10-year subsidy period, with the biggest winners being Sabine Pass LNG LP (d/b/a Cheniere Energy) and Cameron LNG LLC (d/b/a Sempra Energy), which respectively secured exemptions to the tune of over **\$553 and \$392 million** in years one of their subsidies.¹⁰⁶¹

LNG developers use these tax breaks to artificially inflate the project’s profitability and attract investors. However, these exemptions come at a cost to localities because valuable tax revenue is not collected¹⁰⁶²—revenue that could fund schools, pollution-reduction measures, health services,

¹⁰⁶⁰ Brown, Alleen. *Corporate Subsidy Quietly Dies in Texas—Topping Off Bad Week for Big Oil*. The Intercept. (June 1, 2021) at 5. https://d3n8a8pro7vnm.cloudfront.net/gulfcoastlc/pages/1561/attachments/original/1622690659/Brown_Alleen_Corporate_Subsidy_Quietly_Dies_in_Texas_The_Intercept.pdf?1622690659.

¹⁰⁶¹ Together Louisiana. Conference Presentation. (Sept. 21, 2021). In the 10-year lifespan of Sabine Pass LNG, LP’s subsidies, it will have avoided over **\$4.762 billion** in taxes. Cameron LNG, LLC will have avoided over **\$3.376 billion**. For more information about the size of Louisiana’s subsidies (including that Louisiana gives away 32 times as much per capita in corporate subsidies as Texas does), see Together Baton Rouge. “*GIVING AWAY THE FARM: a cost-benefit analysis of the industrial tax exemption program in East Baton Rouge Parish, 1998 - 2017*.” (Aug. 2017) at 8. https://d3n8a8pro7vnm.cloudfront.net/togetherbr/pages/2303/attachments/original/1503346818/Final_TBR_Giving_away_the_farm_8-17-2017.pdf?1503346818.

¹⁰⁶² Sometimes that revenue is partially replaced as part of the exemption’s legal framework. But there’s no such thing as a free lunch—that replacement money is pulled from other sources and the shortfall is simply moved onto others’ shoulders. *Id.* at 5 (“Texas’s Chapter 313 program allowed corporations building new facilities to apply to local school boards for a property tax waiver. The school boards hardly ever said no — likely because the local school district didn’t stand to lose money. Instead,

municipal services, or infrastructure improvements. And the justifications for these tax exemptions—that they are necessary for the project to break even, increase jobs and grow the local economy—are drastically overblown. When challenging a project’s permits, advocates should also consider challenging these exemptions—many are vulnerable because so little scrutiny has been given them.

What is unique about challenging tax abatements and incentives?

Of the advocacy avenues discussed in this guide, tax exemption challenges are unique for two major reasons: (1) defeating an exemption is not guaranteed to stop a project; (2) a larger range of concessions may be more quickly offered by developers, potentially dividing the coalitions initially united against the exemption. These are factors to be aware of, not necessarily reasons to avoid fighting exemptions.

As for the first issue: that defeating an exemption is not guaranteed to stop a project. This can be counter-intuitive, because lawmakers and industry often justify exemptions as necessary to make the project economical in the proposed location. The facts don’t back this assumption up—for example, many oil and gas projects in Louisiana and Texas are built either before they receive an exemption or despite not receiving one.

Challenging exemptions for projects that may be built anyway is worthwhile because it combats public subsidy of harm (and may actually stop a project—it can be hard to predict the future). These projects (that are built regardless) can be classified as those that clearly do not qualify under the spirit or letter of the laws for an exemption, even under minimal scrutiny. The stated purpose of many exemption programs is to attract good jobs to the state. Yet many projects get exemptions without needing any financial incentive at all: the projects have already been constructed (and thus need no continued “incentive” to be constructed); the projects are expansions or routine capital upgrades that would be built regardless; the projects have no other possible location except in a particular state, county or parish; the projects will not increase high-paying jobs or add to development; the projects are time-barred from receiving exemptions (e.g., the legal exemption period has elapsed). And attracting a project is no guarantee that good jobs will follow—Louisiana and Texas historically have failed to ensure that companies live up to their job promises. Local government entities that reject exemptions from these aforementioned projects will likely be able to tax these entities for the full value anyway, because either they will be built anyway or the increased scrutiny will show that they simply did not qualify for the exemption program. For these cases, a broad coalition of groups, from environmental advocates to local organizations will likely be aligned in arguing for an unqualified “No” to these exemptions.

As for the second issue: that a larger range of concessions may be more quickly offered by developers, potentially dividing the coalitions initially united against exemptions. Tax exemptions get processed much more quickly and with less public scrutiny than the environmental permit described in this guide (except for possibly certain states’ section 401 permits). And the conditions that are attached to permits are often more narrowly tailored to environmental and human health concerns—whereas tax exemptions can include conditions about real job creation, wages, economic development, supplemental payments to local organizations, and other measures outside the

the property tax money that was waived would have gone into a state fund, which should have especially benefitted overstretched urban school districts.”) See Section 9.C for more details about how this happens in Texas.

bounds of human and environmental health.¹⁰⁶³ If a developer offers attractive-enough economic concessions, coalitions united against a project can break down. **Robust and compassionate communication in a coalition is critical**—those interested in such concessions should be open to hearing how enforceable (or not) they may be plus any environmental / human health tradeoffs; and those opposed to any concessions should be open to hearing the very real concerns and needs of those with different viewpoints.

What are avenues of advocate involvement?

There are two main avenues for challenging tax abatements: on a macro (exemption-wide, state and local) and on an individual level (for each facility).

- Challenges at a macro (state) level. The overall structure of many tax abatement programs is set at the state level, even if individual localities and governing entities may add requirements for all or a subset of projects. It's usually the politicians in the state legislature or the governor's office who can make wholesale changes to the state tax exemption framework.¹⁰⁶⁴ Therefore, advocating at the state level for changes to the tax abatement programs themselves can improve the process for all projects (as advocates in Louisiana and Texas have succeeded at—see Section 9.B and 9.C, respectively). This is much more about political organizing and mobilizing to change the overall legal framework instead of working within a pre-existing framework. Grassroots organizers and coalitions outside of environmental groups are key to making this change happen.
- Challenges at a macro (local) level. Although the overall framework for many tax abatement programs is set at the state level through state legislation, the local entities—e.g., the city, county, school district, or other local entities often have significant leeway in shaping the requirements that all companies planning on developing in their jurisdiction must meet before qualifying for an exemption from that local entity.¹⁰⁶⁵ Again, organizers and coalitions are key to convincing the local entities that macro-level changes to these local incentives are necessary. For example, if local entities can be convinced to adopt living wages, benefits, and local hire standards as conditions for receiving certain tax exemptions, this can affect all future projects that seek exemptions in that locality (as Austin Interfaith, Workers Defense, and other advocates were able to convince the City of Austin to do in 2013¹⁰⁶⁶). This requires researching each parish, county, and city individually to understand the incentives a facility might seek from these entities.
- Challenges to the tax exemptions sought by an individual facility. This avenue of challenge requires picking off each individual tax exemption. Advocates can prioritize those that are

¹⁰⁶³ Technically, challenging a permit can lead to a wide spectrum of concessions like these, but typically only after protracted litigation dissolves into a settlement agreement. Negotiations over tax exemptions do not have such a long and expensive timeline. FERC's certification could also include economic mitigation measures, but that process is also much longer and much more expensive.

¹⁰⁶⁴ Whether the exemption programs should be abolished or narrowly tailored to green industries like wind and solar is outside the scope of this guide.

¹⁰⁶⁵ For example, in Texas some of the local incentives are codified in Chapter 380 and 381 of the state's tax code. These laws give the local taxing authority (the city or county, respectively) a lot of power in deciding the scope of the exemption programs, both across the board for all companies and in each individual case.

¹⁰⁶⁶ Mosqueda, Priscila. "In Austin, Workers Score a Big Win." Texas Observer. (Oct. 25, 2013) <https://www.texasobserver.org/austin-workers-score-big-win/>. The same advocates have also pushed Travis County to incorporate labor protections in its economic development agreements. For some history on that work, see: Aldridge, Olivia. "Travis County votes to accept application for Silicon Silver development incentives agreement." Community Impact Newsletter. (Jan. 26, 2021) <https://communityimpact.com/austin/central-austin/business/2021/01/26/travis-county-votes-to-accept-application-for-silicon-silver-development-incentives-agreement/>.

expected to be the largest. Public momentum will be key to help decisionmakers see that each tax exemption will bring more harm than good to a community. Partnering with experienced organizers and building coalitions at the grassroots level is key to success.

How is this chapter organized?

Because tax exemptions are state specific, this chapter is divided into two sections, one for the main tax break available in Louisiana (Section 9.B) and one for Texas (Section 9.C) as of January 2022. Section 9.D briefly summarizes other types of tax exemptions a facility might be offered that an advocate could challenge.

Louisiana tax exemptions

What is the main tax exemption LNG developers seek in Louisiana?

The largest tax exemption that LNG developers have access to in Louisiana is the Industrial Tax Exemption Program, or ITEP,¹⁰⁶⁷ which has its origins in the state constitution.¹⁰⁶⁸ Advocates, including in particular, Together Louisiana, have played key roles in fighting this exemption and have compiled a wealth of information about the program and how best to reform the program so it is not simply a gift to polluting industries like LNG, which have received millions.¹⁰⁶⁹ Advocates challenging ITEP are highly encouraged to reach out to these experienced advocates and to review the material already compiled by these organizations.¹⁰⁷⁰

Until 2016, ITEP exemptions from property taxes of up to 100% for 10 years were granted with no local oversight or input. These decisions were made by a largely unelected state entity housed in the state department of Louisiana Economic Development (LED): the Board of Commerce and Industry. But in June 2016, Louisiana Governor John Bel Edwards signed an executive order giving local school districts, sheriff departments, parishes and cities the authority to determine for themselves whether to approve industrial tax exemptions and on what terms,¹⁰⁷¹ although the state Board of Commerce

¹⁰⁶⁷ Groner, Anya. "One Oppressive Economy Begets Another." *The Atlantic*. May 7, 2021.

<https://www.theatlantic.com/culture/archive/2021/05/louisiana-chemical-plants-thriving-off-slavery/618769/> ("According to a study by Together Louisiana, a statewide network of community organizers, from 1997 to 2016 the ITEP board approved all but eight of 16,931 corporate-tax-exemption applications. In 2017 alone, those exemptions cost state parishes about \$1.9 billion, money that could've been spent on local parks, libraries, and schools.")

¹⁰⁶⁸ Louisiana Constitution Art. 7 § 21(F) ("Notwithstanding any contrary provision of this Section, the State Board of Commerce and Industry or its successor, with the approval of the governor, may enter into contracts for the exemption from ad valorem taxes of a new manufacturing establishment or an addition to an existing manufacturing establishment, on such terms and conditions as the board, with the approval of the governor, deems in the best interest of the state.")

¹⁰⁶⁹ See e.g., the tax break given to Cheniere Energy. <https://www.opportunitylouisiana.com/case-studies/cheniere-energy>.

¹⁰⁷⁰ Together Louisiana's summary page on Fair Taxes is a great place to start. "*The Biggest Corporate Welfare Program in the Nation . . .*" <https://www.togetherla.org/fairtaxes>; See also Together Louisiana, "*Why Louisiana Stays Poor.*"

<https://www.youtube.com/watch?v=RWTic9btP38>. For an in-depth dissection of the costs of the program (both directly and indirectly as it shifts the burden to other taxpayers) and debunking the myths of job-creation and business growth, see Together Baton Rouge's report: "GIVING AWAY THE FARM: a cost-benefit analysis of the industrial tax exemption program in East Baton Rouge Parish, 1998 - 2017." (Aug. 2017) https://d3n8a8pro7vhmx.cloudfront.net/togetherbr/pages/2303/attachments/original/1503346818/Final_TBR_Giving_away_the_farm_8-17-2017.pdf?1503346818.

¹⁰⁷¹ Office of the Louisiana Governor. "Gov. Edwards Ties Industrial Tax Breaks to Job Creation and Local Approval." (June 24, 2016) <https://gov.louisiana.gov/news/gov-edwards-ties-industrial-tax-breaks-to-job-creation-and-local-approval>. See also "*The Biggest Corporate Welfare Program in the Nation . . .*" <https://www.togetherla.org/fairtaxes>. These entities also have the power to recommend penalties for non-compliance. See e.g., Cobler, Paul. "*Baton Rouge car-parts maker not punished for flouting tax break, decision delayed for brewery*" *The Advocate*. (Nov. 10, 2021)

https://www.theadvocate.com/baton_rouge/news/article_2bd2339a-4290-11ec-b3fa-9b139dd20d63.html ("As the representatives of the three East Baton Rouge Parish entities that would have received the exempted tax dollars, Metro Council, the Sheriff's Office and the School Board all have the power to recommend a penalty to the state board, defer to the board or mandate on their own that the companies pay a penalty.")

and Industry is still heavily involved.¹⁰⁷² The Governor further limited the amount of tax exemption available from 100% to 80%.¹⁰⁷³ In 2020, the Governor amended the ITEP rules to allow applicants that were denied tax breaks to—in limited circumstances—appeal those denials to the state board.¹⁰⁷⁴

Even though new projects seeking tax breaks through ITEP will be subject to the new rules requiring local approval, some projects are grandfathered into the old system in which the Board of Commerce and Industry rubberstamped approvals without sharing authority with local entities.¹⁰⁷⁵ Whether such facilities should be grandfathered is a possible point of advocacy, especially if those projects seek ITEP exemptions for facility expansions.

Where should advocates focus in challenging individual exemptions?

Defeating ITEP tax exemptions requires quickly mobilizing local opposition to convince local authorities to reject the tax exemptions LNG developers seek. The local entities with decision-making power are parish governing bodies, municipal governing bodies, school boards, and sheriffs. Each of these entities has the power to approve or reject the portions of tax exemptions it would be forgoing. Because of this it can be useful to educate these officials about the ITEP program's costs **before** an individual project is up for review, and to encourage the election of ITEP-opposed individuals to these positions. The Board of Commerce and Industry is still a largely rubberstamp entity unresponsive to community concerns.

When are localities officially involved in the ITEP process?

Localities are only presented with the opportunity to weigh in on ITEP exemptions **after** the Board of Commerce and Industry has approved the applicant's initial application and negotiated the terms and conditions of the tax exemption (memorialized in a document known as "Exhibit A").¹⁰⁷⁶ Within three business days of the Board approval, LED forwards the approved application and Exhibit A to local governmental authorities. Notice of the approval is posted on the LED Board website,¹⁰⁷⁷ and the posted date begins the 30-day period for the local governing authorities to initiate action to approve or reject the board's approved tax exemption. There are several nuances to note:

- Within the 30-day period, a local governing authority has the option of placing the application on a public meeting agenda (and publishing notice of that action), which would extend the deadline for approving or rejecting the tax exemption for an additional 30 days (for a total of 60 days from

¹⁰⁷² "Industrial Tax Exemption Program." <https://www.opportunitylouisiana.com/business-incentives/industrial-tax-exemption>; see also Louisiana Economic Development. "Louisiana Board of Commerce and Industry."

<https://www.opportunitylouisiana.com/boards-reports-and-rules/louisiana-board-of-commerce-and-industry>.

¹⁰⁷³ 13 LAC § I-537(B).

¹⁰⁷⁴ Houston, Matt. "New ITEP rules spark fear locals will lose say in granting tax breaks." WAFB9. (Feb. 21, 2020), <https://www.wafb.com/2020/02/21/new-itep-rules-spark-fear-locals-will-lose-say-granting-tax-breaks/>. Companies typically can only appeal if a local entity has set up rules that are "in conflict" with the state rules. As of January 2022, no company has prevailed on an appeal.

¹⁰⁷⁵ Mosbrucker, Kristen. "Why plastic maker Formosa's big Louisiana property tax break is not likely at risk despite delays." The Advocate. (June 20, 2021). https://www.theadvocate.com/baton_rouge/news/business/article_68dce452-c3b9-11eb-b8e1-1bf42c7e5145.html ("Since [Formosa's original application in 2014], Gov. John Bel Edwards has changed the state's ITEP incentive to an 80% property tax break over 10 years rather than 100% tax break and given local government entities a say in whether tax abatements are granted. However, Formosa and many other megaprojects — some like Formosa that have not yet begun construction — were "grandfathered in" by Edwards to receive the more generous tax break under the old rules. This special status also forgoes the approval of parish councils or police juries, school boards and sheriff's offices.").

¹⁰⁷⁶ The Louisiana Department of Revenue (LDR) is also involved, but like with the Board's review, most applications are approved for submittal to the local entities with little substantive scrutiny of actual costs and benefits.

¹⁰⁷⁷ ITEP "Board Approved Projects" can be found by searching the Business Incentives in the public search of LED's FastLane: <https://fastlaneng.louisianaeconomicdevelopment.com/public/search/bi>.

start of notice period). If the local governing authority elects to place the application on a public meeting agenda, it must notify LED of such action within three business days.

- If a local governmental entity does not take action or provide notice of the application's placement on a public agenda within the 30-day period, the application is deemed approved by that entity.¹⁰⁷⁸

This thirty- to sixty-day window for official action is small, but it has been sufficient to enable local officials to reject proposals. Advocates also can and should work to educate local entities about the ITEP program costs well before any individual project applies for an ITEP exemption.

What is the timing for advocacy on an individual project and how do I find out about pending applications?

The window for action in the ITEP process is small. Local entities typically have only thirty days—and at most sixty—to approve or reject the exemption agreed to by the Board and the applicant. Failure to act puts the entity at risk of having the exemption deemed approved, even if there is substantial opposition.

But advocates need not wait to mobilize against a project until the Board and applicant have finished negotiating an exemption and present it to local entities for approval. The ITEP process starts with the applicant filing an “Advanced Notification” through the state’s “FastLane NextGen” website. This is the official notice that an applicant *intends* to seek an ITEP exemption. This notice of intent often is the first public indication that an applicant plans to act and is typically filed at least a few months before the localities are invited to participate.¹⁰⁷⁹

Advocates should be able to check on whether a project has taken this initial step in two different ways using the FastLane website: <https://fastlaneng.louisianaeconomicdevelopment.com/>, using either the Public Reports interface or the Public Search Function.

With the Public Reports option, navigate to “Public Reports” (<https://fastlaneng.louisianaeconomicdevelopment.com/public/reports>) and download the latest “Advance Report.” Projects in the ITEP program will include the tag “ITE” in the “Project Id”; filtering by “ITE” and sorting “Advance Received Date” from newest to oldest will show projects that have most recently expressed interest in an ITEP exemption.¹⁰⁸⁰ This dataset also contains useful information about the estimated jobs, payroll, and investments that will be made.

The second option, which avoids downloading the entire report, is to use the public search function, which allows the user to screen on narrower criteria before downloading data. The public search function is located here: <https://fastlaneng.louisianaeconomicdevelopment.com/public/search/bi>. Set the “Criteria” to “Advance Notification” and keep the boxes for “EZ” “QJ” and “ITE” checked.

¹⁰⁷⁸ LED. “Industrial Tax Exemption Program: Next Steps.” <https://www.opportunitylouisiana.com/business-incentives/industrial-tax-exemption>. For the official rules and regulations governing new projects as of 2018, see Chapter 5: Industrial Ad Valorem Tax Exemption Program §§ 501 – 537. https://www.opportunitylouisiana.com/docs/default-source/default-document-library/rules-2018_itep.pdf?sfvrsn=c460ba05_0.

¹⁰⁷⁹ After the advance notice, an applicant must submit its application to LED. It is reviewed by both LED and the Louisiana Department of Revenue. LED and the applicant must agree on the terms of the tax exemption and then the Board of Commerce and Industry must approve it. The Board meets every other month to consider applications, for a total of six times per calendar year. The Board only gives one week of notice as to its monthly agenda. Only once all these steps are completed are the localities given a say. See LED. “Industrial Tax Exemption Program: Next Steps.” <https://www.opportunitylouisiana.com/business-incentives/industrial-tax-exemption>.

¹⁰⁸⁰ These suggestions are based on the format of the website on November 29, 2021.

After “Search” is clicked, the user should be able to search for certain phrases like “LNG” to further narrow the results before exporting the data.

Is there other useful data on FastLane?

FastLane’s Public Reports page also includes other reports that advocates may find useful in understanding trends in the ITEP program and at particular facilities.¹⁰⁸¹ The “Industrial Tax Exemption Projects Report” is one such report that advocates like Together Louisiana have used to uncover the real costs of the program. This report includes columns for Board Approvals, Contract Dates, and Renewal Requests if available for each project, which shows the history of exemptions received at specific facilities. The first column also shows whether the project is operating under the pre-2016 rules or after the Governor’s executive orders.

The historical data in the ITE Projects Report is helpful because not only new projects can take advantage of ITEP. Expansions to pre-existing facilities are also eligible. Many of these must go through the local approval process. Some of advocates’ successes have come from stopping expansions from benefiting from ITEP, as Section 9.B.7 highlights.

Won’t companies leave if they don’t get the tax exemptions, causing localities to lose tax revenue?

The truth is that many companies that seek tax exemptions do not need them to be profitable and will build at the proposed location regardless of whether they receive exemptions. For example, companies expanding existing facilities are likely to do so with or without exemptions. Some facilities even complete all work before receiving an exemption—as Exxon did in East Baton Rouge parish (see Section 9.B.7). One Together Louisiana study found that one parish lost \$69.6 million in one year alone from exemptions—even if some of those projects would not have been constructed without exemptions it is clear that communities are forgoing millions of dollars that could be used for public services instead of subsidizing public harms.

\$69.6 MILLION IN OPPORTUNITY COSTS IN 2017 IN EAST BATON ROUGE ALONE

Using FastLane data, advocates have found that in one parish alone, the amount of tax revenue schools, the parish government, sheriff, and other local entities lost in 2017 because of ITEP amounts to **\$69.6 million**, which could have been otherwise used to fully fund universal pre-K (or give teachers a \$9,000+ raise), improve drainage (or give police officers a \$14,000+ raise and fully fund an independent police monitor), cover the sheriff’s budget deficit and buy body cameras for all deputies, open and operate 168 new swimming pools, AND hire 190 new firefighters and 47 paramedics.¹⁰⁸²

Ideally, the state would encourage bringing green industry to the state, which as Louisiana Together has repeatedly pointed out, is necessary to meet the state’s own climate change goals. And at a

¹⁰⁸¹ LED “Public Reports.” <https://fastlaneng.louisianaeconomicdevelopment.com/public/reports>.

¹⁰⁸² Together Louisiana. “GIVING AWAY THE FARM: a cost-benefit analysis of the industrial tax exemption program in East Baton Rouge Parish, 1998 - 2017.” (Aug. 2017) https://d3n8a8pro7vhm.cloudfront.net/togetherbr/pages/2303/attachments/original/1503346818/Final_TBR_Giving_away_the_farm_8-17-2017.pdf?1503346818.

minimum, the facilities that create public harms—poor jobs, damage to human and environmental health—should do so by internalizing the costs of that harm, not by receiving public subsidies.

Are there success stories of advocates blocking an ITEP exemption?

Yes, advocates in Louisiana have successfully convinced local entities to reject ITEP exemptions. One such success story highlighted in *the New York Times* centers on the Exxon facility in East Baton Rouge Parish.¹⁰⁸³ After being persuaded by concerned community members, the school board voted 5-4 to reject the \$2.9 million ITEP deal Exxon had struck with the state on tax exemptions for its already completed expansions of its refinery and a polymer plant.¹⁰⁸⁴ With the local schools in a budget crisis, needing to cut roughly \$30 million in future spending, agreeing to an Exxon tax break would have made the situation even more dire.¹⁰⁸⁵ In response, Exxon withdrew its request for the tax breaks entirely.¹⁰⁸⁶

This is not the only case of local organizations rejecting ITEP proposals. In St. James Parish in 2020, all three entities: the parish, the school board, and the sheriff rejected \$24 million in tax breaks over five years for a hydrogen plant, recognizing the costs to the community of allowing these exemptions.¹⁰⁸⁷ The \$247 million plant was already under construction when the localities rejected the exemption proposal. As local media reports, “Under the deal St. James officials rejected, the taxing jurisdictions still would have split \$6 million in revenue over 10 years even after Linde’s [the industrial entity] \$24 million in breaks. Instead the local governments will split the full \$30 million if the decisions withstand any possible appeal to the state Board of Commerce and Industry.”¹⁰⁸⁸ It does not appear that the local authorities’ decisions were overturned.

Another win for Louisiana advocates was in the case of Marathon Oil’s Garyville refinery in St. John the Baptist Parish. For decades, 84% of all of Marathon’s property—valued at \$3.7 billion—was tax exempt.¹⁰⁸⁹ In 2019, both the school district and the parish council rejected Marathon’s request for \$25 million more in new tax breaks **for already completed work** (the sheriff’s office accepted the deal).¹⁰⁹⁰ This was the first time that the any St. John Parish board had the opportunity to approve an ITEP proposal, which the school district rejected resoundingly, 9-1. And when other previously exempt Marathon property finally came onto the tax rolls in 2020, it increased total property tax revenue in the parish from \$57 to \$86 million **in a single year**.¹⁰⁹¹

¹⁰⁸³ Fausset, Richard. “A School Board Says No to Big Oil, and Alarms Sound in Business-Friendly Louisiana.” *New York Times*. (Feb. 5, 2019) <https://www.nytimes.com/2019/02/05/us/louisiana-itep-exxon-mobil.html>.

¹⁰⁸⁴ *Id.*

¹⁰⁸⁵ *Id.* (“The school district is in a budget crisis, and it is looking for ways to cut roughly \$30 million in future spending. Layoffs may be on the table. Teachers say that administrators have even been rationing paper.”).

¹⁰⁸⁶ Mitchell, David. “In St. James, complete denial of industrial plant’s tax breaks a rare step in Louisiana.” *The Advocate*. (Oct. 14, 2020). <https://www.houmatoday.com/story/business/2020/10/14/st-james-complete-denial-industrial-plants-tax-breaks-rare-step-louisiana/5969887002/>.

¹⁰⁸⁷ Mitchell, David. “In St. James, complete denial of industrial plant’s tax breaks a rare step in Louisiana.” *The Advocate*. (Oct. 14, 2020). <https://www.houmatoday.com/story/business/2020/10/14/st-james-complete-denial-industrial-plants-tax-breaks-rare-step-louisiana/5969887002/>.

¹⁰⁸⁸ *Id.*

¹⁰⁸⁹ In other words, out of that \$3.7 billion, only \$600 million was taxable. Because the majority of the property was tax exempt, the community lost out on \$885 million in tax revenue from 1999-2017. “When Goliath stays in charge, places stay poor.” Together Louisiana. <https://www.youtube.com/watch?v=cNcbZKevTpg>.

¹⁰⁹⁰ Reimann, Nick. “St. John seeing cash windfall as Marathon gives \$20 million ahead of expiring tax breaks.” (Dec. 28, 2019) https://www.nola.com/news/business/article_c836bdbc-21f1-11ea-9e5d-1fa308bcd381.html.

¹⁰⁹¹ “When Goliath stays in charge, places stay poor.” Together Louisiana. 2:54-3:13. <https://www.youtube.com/watch?v=cNcbZKevTpg>.

What are advocacy avenues available other than fighting the revenue lost in individual projects?

Beyond the cost-benefits of individual exemptions, global questions about ITEP may be fruitful avenues of advocacy involvement to combat this program on a wider scale. For example:

- An applicant expanding a facility may seek to grandfather itself into the pre-2016 system and avoid local review improperly. ITEP only allows expansions, not new facilities to be grandfathered into the system.
- The Board of Commerce and Industry is not required to conduct a public interest review of an application before approving it, despite the fact that ITEP exemptions represent the state forgoing massive amounts of public resources that could be used to support essential public services. This makes ITEP an outlier as compared to other actions that are taken by state agencies, which often are charged with protecting state resources. For example, agencies charged with protecting the state's natural resources have a duty to protect these resources and conduct specific analyses before impacting these resources.¹⁰⁹²
- More scrutiny and advocacy may also help the Board of Commerce and Industry consider applications in a more procedurally sound manner. In the past, the Board has inconsistently followed its own rules and acted in a manner that could be argued as arbitrary and capricious. Advocates with experience in Louisiana administrative law are encouraged to investigate the Board's ITEP approvals to confirm that no procedural violations are occurring.

If the recent changes are executive action, what happens when the governor's term is up?

Because the changes to the ITEP program allowing for local input are based on executive order, they are vulnerable once Governor Edwards' time in office is over. Groups like Together Louisiana are trying to embed the governor's executive order into the state constitution so that the program continues to have local oversight. One potential avenue is a constitutional amendment during the 2022 legislative session.

Texas tax exemptions

What is the main tax exemption LNG developers seek in Texas?

The most lucrative tax exemption that Texas LNG developers have sought is known as Chapter 313 tax exemptions, named for the location of this exemption in the Texas tax code.¹⁰⁹³ Created in 2001—and currently ending on December 31, 2022 thanks to the work of advocates like the Texas IAF Organizations, Every Texan, the Texas AFL-CIO, and others—Chapter 313 creates a state tax incentive program for certain large businesses (like LNG developers) to limit the appraised value of their property for the purposes of local Texas public school district property taxes. This program lets companies avoid local school district taxes for ten years. The local school district doesn't lose out on those funds, however; it is reimbursed with state funds that could have otherwise been invested

¹⁰⁹² See La. Const. art. VI § 1 (1921); La. Const. art. IX § 1.

¹⁰⁹³ Chapter 313 is also known as the Texas Economic Development Act. See <https://statutes.capitol.texas.gov/docs/TX/htm/TX.313.htm>.

across all Texas school districts.¹⁰⁹⁴ In 2021, there were 509 projects getting Chapter 313 benefits.¹⁰⁹⁵

The “appraised value limitation” that forms the backbone of Chapter 313 tax break is an agreement between the developer and the local school district in which the developer proposes to develop property—and create jobs meeting certain job and wage requirements—in exchange for a ten-year limitation (*i.e.*, a ten-year cap) on the facility’s property value for school district maintenance and operations tax purposes. This lets a company pretend that, for example, a \$500 million petrochemical plant is worth anywhere from \$10 million to \$100 million on a school district’s tax rolls for a decade, depending on the size of the district. The limitation can save a company tens of millions of dollars in property taxes.¹⁰⁹⁶ The tax break proposed for Annova LNG, for example, would have treated the \$1.4 billion proposed export terminal as if it were worth only \$25 million, for ten years.¹⁰⁹⁷ (And when it went back on the tax rolls, it would likely be valued less than originally promised.)

Local school boards are the ultimate decisionmaker on whether an exemption is granted, once the state Comptroller approves the application, which it almost invariably does. And if a school district grants a tax break for a project, it doesn’t lose a cent—the state is obliged to cover the difference. The cost of the tax break comes out of the state budget. The school board also has authority to negotiate for “payments in lieu of taxes” (“PILOTs” or “PILTs”)—basically supplemental money above and beyond what it could have collected from taxes.¹⁰⁹⁸

Unlike other tax exemption programs, there is no limit on how much money can be exempted through the Chapter 313 program statewide. Over the past 20 years, Chapter 313 had delivered \$10 billion in tax cuts to corporations operating in Texas, with petrochemical

WHAT ABOUT OTHER EXEMPTIONS?

Chapters 380 and 381 of the Texas tax code give cities and counties, respectively, power to grant tax exemptions and to offer economic development packages. These can be lucrative for developers but are not necessarily as big, and are not covered in depth in this guide.

¹⁰⁹⁴ For example, if these funds were reinvested across all school districts on a per-student basis instead of going to the few districts that agreed to Chapter 313 exemptions, 1061 districts and charters—which collectively serve 95% of public-school students—would be better off. App. 68, “Losers & Winners from Chapter 313.” Network of Texas Organizations. (Feb. 2021). Central Texas Interfaith’s analysis found that by using state money to reimburse Chapter 313 districts instead of investing it on a per-student basis across all districts, urban school districts like Houston and Dallas have each lost more than \$20 million annually from the exemption program. Brown, Alleen. *Corporate Subsidy Quietly Dies in Texas—Topping Off Bad Week for Big Oil*. The Intercept. (June 1, 2021) at 5.

https://d3n8a8pro7vnm.cloudfront.net/gulfcoastlc/pages/1561/attachments/original/1622690659/Brown_Alleen_Corporate_Subsidy_Quietly_Dies_in_Texas_-The_Intercept.pdf?1622690659.

¹⁰⁹⁵ The Texas Comptroller’s Webinar on Chapter 313 Value Limitation Agreements: <https://youtu.be/urF-fw2EbmA>, at 15:40-52.

¹⁰⁹⁶ The savings apply only to the school district’s operations taxes. Districts also levy taxes to pay off debts, and Chapter 313 recipients pay all taxes on that portion of their bill, which is typically a far smaller amount. See Texas Taxpayers and Research Association. “*Understanding Chapter 313: School Property Tax Limitations and the Impact on State Finances*,” at 1, 13 (2017). https://www.ttara.org/wp-content/uploads/2018/09/UnderstandingChapter313_Final_Web_1_11_17.pdf.

¹⁰⁹⁷ Michels, Patrick. “Free Lunch.” Texas Observer. (Mar. 14, 2016) <https://www.texasobserver.org/chapter-313-texas-tax-incentive/>.

¹⁰⁹⁸ “*Understanding Chapter 313: School Property Tax Limitations and the Impact on State Finances*,” at 7 (2017). https://www.ttara.org/wp-content/uploads/2018/09/UnderstandingChapter313_Final_Web_1_11_17.pdf.

companies and LNG companies being the biggest winners.¹⁰⁹⁹ But in the 2021 Legislative Session, the Chapter 313 tax program was not reauthorized, thanks in large part to community advocates like the Texas IAF Organizations, Every Texan, and the Texas AFL-CIO (see Section 9.C.4 for details on this success story). This means that unless a special legislative session is convened in the interim, the availability of new Chapter 313 exemptions will expire on December 31, 2022, and companies are scrambling to apply before the deadline to lock in ten years of tax exemptions.

What is involved in getting a Chapter 313 tax exemption?

Until the subsidy program sunsets, it is very easy to get a tax exemption unless sustained pressure is placed on the local school board.

The application process is described on the Texas Comptroller's website.¹¹⁰⁰ The application itself can be downloaded here: <https://comptroller.texas.gov/forms/50-296-a.pdf>.¹¹⁰¹ For an example application and approval, see the Comptroller's webpage on the Freeport LNG project.¹¹⁰²

There are three main items that Chapter 313 facially requires: that the exemption create certain "qualifying" jobs; that it be a "determining factor" in the developer's decision to site the facility in the proposed location; and that the school board approve the exemption. In Practice, only the third item—a school board vote—is required.

IN THEORY, THE EXEMPTION MUST:

- Create jobs (unless waived)
- Be a "determining factor" in a developer's decision to build the project in the proposed location
- Be approved by the school board

In practice, only the third item—a school board vote—is required.

- **Job creation.** In theory, Chapter 313 tax breaks are contingent on the company creating a minimum number of jobs (typically between 10 and 25) and paying certain minimum wages; both minimums are computed based on project's proposed location.¹¹⁰³ The Comptroller and local school boards share the responsibility for ensuring that the promised jobs are created. But very few companies are penalized for not creating promised jobs—in the first ten years of the program's existence, only one company had been penalized for this.¹¹⁰⁴ Even when jobs are created, it is at an exorbitant cost. A *Houston Chronicle* study found that "[b]y even a

¹⁰⁹⁹ "Texas IAF Blocks \$10 Billion Dollar Corporate Tax Giveaway to Big Oil." (June 1, 2021)

https://www.tmoHouston.org/2106_tmo_313win The biggest beneficiaries under Texas's corporate tax exemptions have been two LNG facilities: Corpus Christi Liquefaction and Freeport LNG, each receiving more than \$55 million in subsidies annually. Brown, Alleen. *Corporate Subsidy Quietly Dies in Texas—Topping Off Bad Week for Big Oil*. The Intercept. (June 1, 2021) at 5.

https://d3n8a8pro7vnm.cloudfront.net/gulfcoastlc/pages/1561/attachments/original/1622690659/Brown_Alleen_Corporate_Subsidy_Quietly_Dies_in_Texas_-The_Intercept.pdf?1622690659.

¹¹⁰⁰ Chapter 313 Application Process. <https://comptroller.texas.gov/economy/local/ch313/process.php>.

¹¹⁰¹ This form (Form 50-296A, revised October 2020) and the required attachments (Excel "schedules") are found on the Comptroller's forms website: <https://comptroller.texas.gov/economy/local/ch313/forms.php>.

¹¹⁰² Texas Comptroller. "Brazosport ISD No. 1559, Freeport LNG Development, L.P."

<https://comptroller.texas.gov/economy/local/ch313/agreement-docs-details.php?id=1559> (containing application and agreement files).

¹¹⁰³ A qualifying job is a full-time one that pays at least 110% of the county average weekly wage for manufacturing jobs in the county where the job is located (either 25 or 10), among other requirements. See Texas Tax Code Sec. 313.021(3); see also Sec. 313.051(b). Wage information for other jobs can be found here:

<https://comptroller.texas.gov/economy/local/ch313/wage-targets.php>.

¹¹⁰⁴ Michels, Patrick. "Free Lunch." Texas Observer. (Mar. 14, 2016) <https://www.texasobserver.org/chapter-313-texas-tax-incentive/>.

conservative measure, Texas is paying \$211,600 in tax incentives for each job created under the program. Using a different metric cited in the past by state officials, the cost per job **tops \$1.1 million.**¹¹⁰⁵ And the developer may not be required to create any jobs at all if it qualifies for the waiver of this requirement.¹¹⁰⁶

- **“Determining Factor.”** The Comptroller must also determine either that a tax break is “a determining factor” in a firm’s decision to proceed with a project in Texas¹¹⁰⁷ or make a “qualitative determination that other considerations associated with the project result in a net positive benefit to the state” (a secondary loophole less often used).¹¹⁰⁸ It must memorialize its decision in the certification it provides to the school district.¹¹⁰⁹ In practice, these are very weak bars to surmount; the Comptroller often relies heavily on the applicant’s own material to inform its economic impact assessment without questioning underlying assumptions or considering contrary evidence. Many projects have been approved even when it’s been clear that the only viable location for the project is within a single district. The newspaper the *Houston Chronicle* highlighted one such example in its exposé series on Chapter 313:¹¹¹⁰

Enterprise Products Partners, like its competitors, had begun building a network of new pipelines dedicated to transporting “natural gas liquids” in the Eagle Ford to its processing plants in South Texas.

The Houston-based energy company said enormous demand for its services soon would overwhelm its South Texas plants. But in April 2011, the company sought taxpayers’ help in building a new gas processing plant in Lavaca County by applying for a Chapter 313 incentive for the project.

To prove the project qualified for the tax break, Enterprise told the comptroller’s office that it had a large pipeline network and gas processing plants in four other states, allowing “substantial flexibility in plant location.”

But like so many of its competitors, Enterprise had told its investors a different story.

The company had discussed the plant in public statements dating back 10 months — its location, its capacity, its construction timeline, the length of pipe needed to connect it to the company’s network — and described it as part of a series of projects necessary to “meet the needs of producers” in the Eagle Ford.

¹¹⁰⁵ Morris, M. et al. “Huge corporations are saving \$10 billion on Texas taxes, and you’re paying for it” *Houston Chronicle*. (Updated June 3, 2021) <https://www.houstonchronicle.com/news/investigations/unfair-burden/article/unfair-burden-part-1-texas-tax-corporations-covid-16164744.php>.

¹¹⁰⁶ See Texas Tax Code § 313.025(f-1).

¹¹⁰⁷ Tax Code § 313.026(c)(2). See generally also Texas Comptroller’s website at: <https://comptroller.texas.gov/economy/local/ch313/>.

¹¹⁰⁸ Tax Code § 313.026(f).

¹¹⁰⁹ For example, here is the certification decision for Sabine Pass Train 3, issued in 2014. *Ltr fr. Martin A. Hubert (Deputy Comptroller) to Kristi Heid (Superintendent of Sabine Pass ISD)* (Mar. 4, 2014) <https://assets.comptroller.texas.gov/ch313/378/Sabine-Pass-ISD-378-Golden-Pass-Economic-Impact-and-Recommendation-Package-3-4-2014.pdf>. All documents associated with Sabine Pass Train 3 can be found here: <https://comptroller.texas.gov/economy/local/ch313/agreement-docs-details.php?id=378>.

¹¹¹⁰ Morris, M. et al. “Huge corporations are saving \$10 billion on Texas taxes, and you’re paying for it” *Houston Chronicle*. (Updated June 3, 2021) <https://www.houstonchronicle.com/news/investigations/unfair-burden/article/unfair-burden-part-1-texas-tax-corporations-covid-16164744.php>.

If the comptroller's office was aware of these statements, they were not mentioned in the office's letter recommending the \$41 million in tax incentives be approved.

A previous exposé in the *Texas Observer* documented many other examples of how non-existent of a hurdle “determining factor” is.¹¹¹¹ Many companies barely pretend they have looked outside the state before deciding on a location for a facility. And LNG is no different. Despite advocates’ success in convincing the Point Isabel school board to reject Annova LNG’s application for millions in exemptions, within a day after the vote Annova announced its discovery that it actually didn’t need the tax break to build in Brownsville, and that it would be pushing ahead with its project unchanged.¹¹¹²

- **School District Approval.** Other gatekeepers are elected members of local school boards. Most school boards approve exemptions because they are reimbursed from the state—ultimately at a cost to urban districts that do not have Chapter 313 agreements. In addition, Chapter 313 allows the local school district to negotiate for “supplemental” payments from developers, on top of the exemptions they grant, leaving the local school district not just even, but ahead, after the exemption is granted.¹¹¹³

*The Houston Chronicle succinctly explained the school board process and incentives as follows.*¹¹¹⁴

School officials are important gatekeepers in the program and ultimately decide whether to approve the agreements. But districts also have a powerful incentive to never deny a Chapter 313 deal: They can make money each time they approve one.

State funding formulas ensure that school districts don't bear the cost of granting property tax breaks. And school officials negotiate additional payments from companies that can be used for a variety of education purposes — money they never would have received under the state's educational allotments.

Over the 10-year life of each deal, these extra payments are providing a \$1.5 billion windfall for districts across Texas that participate in the Chapter 313 program. School boards occasionally reject an application if there's a community outcry against a project. But that seldom happens.

The comptroller's office itself, in a December 2010 report on the program, said these supplemental payments to schools “are evidence that the incentives awarded are higher than necessary to attract these projects, and represent unnecessary costs to the state.”

¹¹¹¹ Michels, Patrick. “Free Lunch.” *Texas Observer*. (Mar. 14, 2016) <https://www.texasobserver.org/chapter-313-texas-tax-incentive/> (giving examples highlighting the results of its review of 360 Chapter 313 deals that “suggests that much of this money was handed to projects that would have come to Texas anyway or couldn't have been located anywhere else”).

¹¹¹² Michels, Patrick. “Free Lunch.” *Texas Observer*. (Mar. 14, 2016) <https://www.texasobserver.org/chapter-313-texas-tax-incentive/> (“If the deal truly was necessary to bring Annova to town, local residents hoped, then the board's rejection would keep the company out. But within a day, Annova announced that even without the break, it planned to press ahead with its terminal on the ship channel.”).

¹¹¹³ Michels, Patrick. “Free Lunch.” *Texas Observer*. (Mar. 14, 2016) <https://www.texasobserver.org/chapter-313-texas-tax-incentive/>.

¹¹¹⁴ Morris, M. et al. “A controversial tax program promised high-paying jobs. Instead, its costs spiraled out of control.” *Houston Chronicle*. (updated June 1, 2021). <https://www.houstonchronicle.com/news/investigations/unfair-burden/article/unfair-burden-part-2-tax-program-costs-spiral-16164758.php>.

Nathan Jensen, a University of Texas at Austin professor who has studied Chapter 313, has noted the perverse incentives these payments create.

“The thing that makes it particularly unique is how politically clever it is,” Jensen said. “It’s kind of an evil-genius program where you’ve essentially bought off the normal opposition for these kinds of programs. School districts always vote yes because it’s set up like that.”

Chapter 313 creates a system of winners and losers among Texas school districts. Only a portion attract the sort of manufacturing investments that qualify for the program. Roughly 1,000 school districts, including the Houston Independent School District and nearly every other big, urban district in Texas, don’t have any active Chapter 313 agreements.

Just a sixth of all Texas school districts — about 170 — are granting tax breaks under the program this year. A majority of the incentives are concentrated in just eight districts, all but one of them petrochemical hubs on the Gulf Coast.

Fully half of the \$95 million in supplemental payments companies make to schools this year will go to just six school districts in industrial areas.

The total amount of the exemption will depend on the project’s existing tax base and location, meaning that neighboring districts may be subject to different minimum discounts they can grant.¹¹¹⁵ Some coastal counties are classified as “Strategic Investment Areas” with increased opportunities for exemption available—which districts qualify is updated yearly and found here: <https://comptroller.texas.gov/economy/local/ch313/values.php>. Rural districts are treated like these Strategic Investment Area districts. Projects in these areas also need to create fewer jobs.

What is the timing for advocate involvement on an individual project?

Early intervention is key to rally support for a “no” vote by the school board. Once it receives an application, the school district has up to 151 days to act on it. The Comptroller, which conducts its own analysis, has up to 91 days to review an application after receiving it from the school district. The school district and the applicant can extend the deadline by agreement, and the school district and Comptroller work together during this time period to assess the application and determine economic impact.¹¹¹⁶ A sample timeline of projects for applications approved after December 31, 2013 can be found here: <https://comptroller.texas.gov/economy/docs/4-digit-313-timeline-processes-2014.pdf>. Because the Comptroller almost always rubberstamps these applications, advocates should focus on persuading the school board, which can be more receptive to advocates’ concerns. In addition, because the school district and Comptroller work together to determine economic impact, the Comptroller may be more receptive to economic concerns being presented to it by the school board itself, as opposed to advocates.

Applicants should assume that projects will apply for these tax breaks and mobilize early. Advocates should be prepared to bring public attention to what happens after the ten-year limitation period ends—once a property goes back on the tax rolls, it’s often at a valuation less than what the developer estimated they would be worth in it is initial Chapter 313 applications! Advocates should also be aware that applicants may attempt to pit neighboring districts against each other in a bidding

¹¹¹⁵ Texas Tax Code §§ 313.022-23 (rules for typical districts); § 313.052-54 (rules for rural and Strategic Investment Area districts).

¹¹¹⁶ Texas Tax Code § 313.025.

war to “win” a project, as happened during Samsung’s search for a location in Central Texas.¹¹¹⁷ If this appears to be happening, it can be helpful to consult with organizations experienced in fighting incentives for advice on how to proceed. LNG projects often have fewer siting options because the goods they handle (gas) are geographically limited (both in which gas fields the gas originates from and which ports are equipped to handle the massive tankers), so it may be that any perceived bidding wars have been manufactured by the applicant.

How have advocates successfully blocked Chapter 313 exemptions?

Advocates have successfully fought Chapter 313 exemptions on the macro level (at the state legislature) and on a project-by-project basis, including with an LNG project in south Texas.

On a macro level, the Texas IAF Organizations (NTO), Every Texan, the AFL-CIO, and others fought hard leading up to and during the 2021 state legislative session to stop the reauthorization of the Chapter 313 program entirely. In prior years the Chapter 313 program—which required the Legislature to periodically reauthorize its existence—had been reauthorized with nothing more than a rubberstamp. But because of the intense pressure put on state legislators from these organizations, the public, and numerous exposés in the press, efforts in the 2021 session to extend or expand the program failed completely.¹¹¹⁸ Unless the program is revived in a special session before December 31, 2022, no new exemptions will be available after that date.

As for blocking exemptions at an individual level, experience has shown that these exemptions are stopped most effectively by applying pressure on the local school district and partnering with a diversity of organizations and community members.

For example, a coalition of shrimpers, fishermen, environmentalists, Native Americans and others successfully convinced the local Port Isabel school board to reject the tax-subsidy applications filed by two of three LNG projects in Brownsville (Rio Grande LNG¹¹¹⁹ and Annova LNG¹¹²⁰; the third, Texas LNG, never sought Chapter 313 protection). Although these rejections did not stop the projects in their tracks, the Annova LNG project is now dead, ostensibly because of “changes in the global LNG market.”¹¹²¹ But it’s possible that the Annova project might still be around today if it had been able to secure the millions of dollars in Chapter 313 tax breaks that advocates successfully fought.¹¹²²

¹¹¹⁷ Samsung approached the school districts in both Travis and Williamson Counties for Chapter 313 exemptions. The school district in Travis County refused to grant a Chapter 313 exemption—the district in Williamson County was more sympathetic and ultimately joined the county and city in approving large exemption and incentives packages. It is unclear whether the fact that the Travis County school district (and other local entities) refused to “play ball” was the deciding factor on the facility’s location—those familiar with discussions believe that more important was Samsung’s ability to procure enough water, land, and electricity for its facility on more favorable terms in Williamson County. Clark-Madison, Mike. “Austin at Large: Brightness on the Edge of Town.” Austin Chronicle. (Dec. 10, 2021) <https://www.austinchronicle.com/news/2021-12-10/austin-at-large-brightness-on-the-edge-of-town/>.

¹¹¹⁸ Jensen, Nathan. “Could the Death of a Corporate Handout in Texas be a Turning Point?” The Hill. (July 27, 2021) https://d3n8a8pro7vhnmx.cloudfront.net/texasiaf/pages/86/attachments/original/1629393046/Jensen_Nathan_%22Could_the_Death_of_a_Corporate_Handout_in_Texas_Be_a_Turning_Point_%22-The_Hill.pdf?1629393046.

¹¹¹⁹ Michels, Patrick. “Once Again, School District Shuts Down Tax Break for Gas Exporter.” Texas Observer. (Sept. 22, 2016) <https://www.texasobserver.org/port-isabel-isd-rio-grande-lng-tax-break/>.

¹¹²⁰ Port Isabel South Padre Press. “WITHDRAWN: School board rejects Annova LNG tax break.” (Sept. 19, 2015) <https://www.portisabelsouthpadre.com/2015/09/19/withdrawn-school-board-rejects-annova-lng-tax-break/>.

¹¹²¹ Weber, Harry. Annova LNG discontinuing US export project.” Mar. 22, 2021. <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/032221-annova-lng-discontinuing-us-export-project-operator>.

¹¹²² For more on the Annova LNG saga, see the Texas Observer article: Michels, Patrick. “Free Lunch.” Texas Observer. (Mar. 14, 2016) <https://www.texasobserver.org/chapter-313-texas-tax-incentive/> (explaining how “In its application to Point Isabel ISD, Annova said its terminal would be valued at \$1.4 billion, but wanted the school district to pretend for the next 10 years that it was worth just \$25 million. The tax break, Annova told the district, would be “a key component” in its decision to build.”).

These success stories show that partnering with local organizations across the spectrum is essential: not just with environmental organizations, but cross-disciplinary, such as with teachers' unions, faith-based groups, and labor organizations like AFL-CIO chapters. Sustained outreach to the press, public, and decisionmakers is also essential to stop exemptions, both on a macro-level and for individual projects.

Where can I find the application materials and agreements for an individual project?

Chapter 313 requires that the local school board and the Comptroller post applications that have been received to their respective websites.¹¹²³ The Comptroller has a centralized location for this data: <https://comptroller.texas.gov/economy/local/ch313/agreement-docs.php>. Each school district should post this information on its website as well.

What might happen with Chapter 313, given that it has not yet been reauthorized?

There is no regularly scheduled state legislative session before the December 31, 2022 expiration date of this tax exemption—the next such session will begin January 2023. However, the Governor could call a special session of the legislature at any time and name the Chapter 313 program as an item to be discussed. Indeed, there have been calls from industry and business interests to do just that! For this reason it is imperative that advocates continue to advocate at the state level and in all future legislative sessions to prevent the exemption program from being resurrected. As advocates' successes in the 2021 legislative session showed, sustained vigilant advocacy at the state level has the potential to stop exemptions across the board without the same difficulties inherent in mobilizing against each exemption individually.

In the meantime, developers are rushing to get approvals from local school districts to lock in ten years of tax breaks. According to the Comptroller, a developer's application must be approved by the governing body of the school district before December 31, 2022, to benefit under Chapter 313. "For the purpose of the program expiration, 'approved by the governing body' includes the execution of a Texas Economic Development Act [Chapter 313] Agreement by the authorized representative of the school district and the approved applicant."¹¹²⁴

It is possible that in a future legislative session, a Chapter 313-like program is reinstated. Advocates will want to keep an eye out for such proposals and work together to determine what, if any, state-wide exemption program would be beneficial to communities. For example, some advocates (like the Texas IAF Organizations) have suggested that any new tax exemptions should be more narrowly tailored to particular industries of public value, like renewable energy projects, and must avoid the dangers of unlimited tax breaks and their impact on the health of school districts across the state. Such exemptions would need to be structured to create good jobs and support local labor without harming communities.

¹¹²³ Sec. 313.025(a-1) ("The comptroller shall publish each document received from the school district under this subsection on the comptroller's Internet website. If the school district maintains a generally accessible Internet website, the district shall provide on its website a link to the location of those documents posted on the comptroller's website in compliance with this subsection.") And if all else fails, non-confidential information is available through the Texas Public Information Act. See Texas Comptroller. "Property Tax Agreement Applications: Texas Government Code Chapter 313: Confidential Information Submitted to the Comptroller." <https://comptroller.texas.gov/economy/docs/confidentiality-notice.pdf>.

¹¹²⁴ Texas Comptroller. "Chapter 313 Guidelines and Frequently Asked Questions." <https://comptroller.texas.gov/economy/local/ch313/faq.php>.

Where can I find more information?

In addition to the *Texas Observer* and *Houston Chronicle* articles about Chapter 313 cited above, there are a number of other resources about the program, including:

- The Texas Comptroller’s Webinar on Chapter 313 Value Limitation Agreements: <https://youtu.be/urF-fw2EbmA>. Annual Eligibility Report 50-772A; Job Creation Compliance Report (50-825);
- The Biennial Reports for Chapter 313 are available here: <https://comptroller.texas.gov/economy/local/ch313/biennial-reports.php>;
- The Comptroller has a Data Analysis and Transparency Division that can be contacted by email at econ.dev@cpa.texas.gov or at 844-519-5672, ext. 6-9231. A full list of personnel available to help is found here: <https://comptroller.texas.gov/economy/contact.php>;
- Chapter 313’s death is documented in the following article: Brown, Alleen. “Corporate Subsidy Quietly Dies In Texas – Topping Off Bad Week For Big Oil.” *The Intercept*. (June 1, 2021). https://d3n8a8pro7vhmx.cloudfront.net/gulfcoastlc/pages/1561/attachments/original/1622690659/Brown_Alleen_Corporate_Subsidy_Quietly_Dies_in_Texas_-_The_Intercept.pdf?1622690659.

What are other tax exemptions and financial incentives that a facility might have access to?

At a federal level, there is a carbon sequestration tax credit (**the Section 45Q tax credit**) that at least one proposed LNG facility has sought to take advantage of.¹¹²⁵ A main concern with carbon sequestration tax credits centers around the viability of the technology itself—facilities should not be rewarded for “sequestering” carbon if it does not remove carbon from the atmosphere long-term. A change in the 45Q law made in the Bipartisan Budget Act of 2018 made it easier for more companies to seek this credit and made the credit more lucrative.¹¹²⁶

In Louisiana, LNG developers may attempt to take advantage of other state programs¹¹²⁷ like the Quality Jobs program,¹¹²⁸ Enterprise Zone tax credit,¹¹²⁹ and FastStart, a state-funded workforce training program.¹¹³⁰ These programs do not have a clear role for local input but do increase the profitability of projects. At a local level, localities publicize other incentives that a company might qualify for.¹¹³¹

In Texas, there are several state funds that an LNG developer might seek to exploit to lower the cost of a project. A summary of the available programs can be found here:

¹¹²⁵ Namely, Rio Grande LNG in Brownsville, Texas. See “NextDecade Launches NEXT Carbon Solutions.” (Mar. 18, 2021) <http://investors.next-decade.com/news-releases/news-release-details/nextdecade-launches-next-carbon-solutions>.

¹¹²⁶ For more information on this topic, see Rodgers, Michael and Dubov, Brandon. “Carbon capture and storage: The legal and regulatory context.” White & Case. (Jan. 29, 2021) <https://www.whitecase.com/publications/insight/carbon-capture/us-tax-credit-encourages-investment>. See also Congressional Research Service. “The Tax Credit for Carbon Sequestration (Section 45Q)” (June 8, 2021) <https://sgp.fas.org/crs/misc/IF11455.pdf>.

¹¹²⁷ <https://www.opportunitylouisiana.com/business-incentives>.

¹¹²⁸ Up to a 6 percent rebate on annual payroll expenses for up to 10 years and either a state sales/use tax rebate on capital expenses or a 1.5 percent project facility expense rebate for qualifying expenses. See LED. “Quality Jobs.” <https://www.opportunitylouisiana.com/business-incentives/quality-jobs>.

¹¹²⁹ LED. “Enterprise Zone.” <https://www.opportunitylouisiana.com/business-incentives/enterprise-zone>.

¹¹³⁰ LED. “LED FastStart – No. 1 State Workforce Development Program.” <https://www.opportunitylouisiana.com/faststart>.

¹¹³¹ See e.g., Port of South Louisiana Incentives. <https://portsl.com/incentives/>.

<https://gov.texas.gov/business/page/incentives>¹¹³² and is also often on regional economic development websites¹¹³³; note that not all will apply to LNG projects. But LNG projects may be eligible for tax abatements for installing pollution control technology on the facility, under the TCEQ's program.¹¹³⁴

Texas local governments have broad authority to offer their own incentives,¹¹³⁵ including under Chapters 380 and 381 of the Texas tax code (for municipalities and counties, respectively). Advocates that fight these economic development incentives have had success challenging individual projects (if not in stopping them completely, to secure wins for labor) and advocating for more stringent review of all projects across the board.¹¹³⁶ More transparency should be coming to these deals soon, thanks to a 2021 amendment that requires these deals be made available online through a public database.¹¹³⁷ It is likely that LNG developers use these incentive structures to reduce the cost of their projects.¹¹³⁸

¹¹³² See also Office of the Governor Texas Economic Development & Tourism. "Texas Business Incentives & Programs Overview." (Revised Apr. 2021) <https://gov.texas.gov/uploads/files/business/IncentivesOverview.pdf>.

¹¹³³ For example, see Southeast Texas Economic Development Foundation. "State Incentives" <https://www.setedf.org/store/pg/77-State-Incentives.aspx>.

¹¹³⁴ TCEQ. "Tax Relief for Pollution Control Property." <https://www.tceq.texas.gov/airquality/taxrelief>.

¹¹³⁵ For example, see Southeast Texas Economic Development Foundation. "Local Incentives"

<https://www.setedf.org/store/pg/78-Local-Incentives.aspx>. See, e.g., League City Texas Economic Development. "Local Incentives." <https://www.leaguecityedc.com/137/Local-Incentives>.

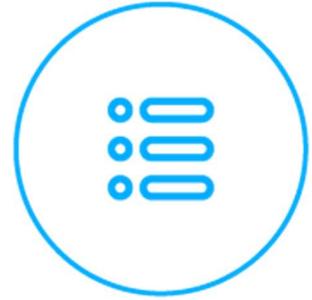
¹¹³⁶ See Clark-Madison, Mike. "Austin at Large: Brightness on the Edge of Town." Austin Chronicle. (Dec. 10, 2021) <https://www.austinchronicle.com/news/2021-12-10/austin-at-large-brightness-on-the-edge-of-town/> (describing the exemptions process with the Samsung expansion in Central Texas); see also Mosqueda, Priscila. "In Austin, Workers Score a Big Win." Texas Observer. (Oct. 25, 2013) <https://www.texasobserver.org/austin-workers-score-big-win/> (highlighting the success advocates had in changing Austin's economic development guidelines); see also Aldridge, Olivia. "Travis County votes to accept application for Silicon Silver development incentives agreement." Community Impact Newsletter. (Jan. 26, 2021) (describing similar work being conducted on the county level).

¹¹³⁷ See Texas Comptroller. "Chapter 380/381 Economic Development Agreements."

<https://comptroller.texas.gov/economy/local/ch380-381/index.php>.

¹¹³⁸ See, e.g., Nichols, C. "Chapter 380 Economic Development Agreements" powerpoint at 10.

https://tmleconomicdevelopment.org/wp-content/uploads/2015/10/CH.-380s_TML-Eco-Dev.-Conf._Nichols.pdf (describing how an LNG fractionator plant might structure Chapter 380 incentives).



Chapter 10

OTHER TOPICS

CHAPTER TEN: OTHER TOPICS

This guide covers many, but not all, of the permits that an LNG terminal needs before construction may begin and issues an advocate might consider when challenging an LNG terminal. This chapter touches on some of the permits and topics that were not covered in previous chapters. This includes coastal use permits—highlighting Louisiana’s process (Section 10.A); local land use issues like easements and eminent domain (Section 10.B); how federal law preempts certain state and local laws that might otherwise be used to challenge LNG projects (Section 10.C); how port authorities are involved in LNG project development (Section 10.D); and the basics of permitting deepwater terminals (Section 10.E).

Note that this chapter only provides advocates with a basis from which to start on the permits and topics discussed herein. Advocates that want to engage meaningfully in these proceedings will need to do additional research and, if possible, consult with attorneys experienced in each area.

Coastal Use Permits

As introduced in Chapter 3, like the permits and permissions required under the Clean Water Act (Chapters 6 and 7) and Clean Air Act (Chapter 8), LNG applicants that cannot show that their projects will comply with the federal Coastal Zone Management Act (CZMA) will be barred from building their projects.

In other words, states like Louisiana and Texas that participate in the Coastal Zone Management Program under the Coastal Zone Management Act exercise important authority that is not preempted by FERC.¹¹³⁹ Although the state governor does not have direct veto power over onshore or near-shore LNG facilities,¹¹⁴⁰ a participating state’s designated coastal management decision-maker has authority to determine whether a proposed onshore/near-shore LNG project is consistent with the state’s federally-approved coastal management plan (CMP).¹¹⁴¹ A state’s CMP defines the “permissible land uses and water uses” within the state’s coastal zone and establishes “[b]road guidelines on priorities of uses.”¹¹⁴²

FERC cannot approve an onshore/near-shore LNG facility without either a declaration from the state that the project is consistent with the state’s federally approved CMP, or an override of a state denial of consistency from the Department of Commerce Under-Secretary for Oceans and Atmosphere in NOAA. The CZMA specifically prohibits FERC from granting a permit to conduct an activity that will affect “any land or water use or natural resource of the coastal zone” until the state concurs with an applicant’s assertion that the activity “complies with the enforceable policies” of the state’s federally approved coastal management plan.¹¹⁴³

If the state denies a coastal consistency statement, then an applicant may appeal the state’s action to NOAA, which has been delegated the authority to act on behalf of the Secretary of the U.S.

¹¹³⁹ Thirty-five states are eligible for the CZMA program. Only Alaska does not participate, having withdrawn in 2011. “*Alaska Coastal Management Program Withdrawal*.” NOAA. 76 Fed. Reg. 39,857 (July 7, 2011). The CZMA is codified at 16 U.S.C. §§ 1451-1465.

¹¹⁴⁰ Such veto power only exists if the LNG facility is a deepwater port.

¹¹⁴¹ 16 U.S.C. § 1456(c)(3)(A). A state that fails to object is presumed to be concurring with project certification. *Id.*

¹¹⁴² 16 U.S.C. § 1455(d)(2).

¹¹⁴³ 16 U.S.C. § 1456(c)(3)(A).

Department of Commerce.¹¹⁴⁴ NOAA may override the state’s objection upon a finding that the activity is either consistent with the objectives or purposes of the CZMA or is otherwise necessary in the interest of national security.¹¹⁴⁵ If NOAA overrules the state, then FERC and any other relevant federal agency can proceed with approving the project.¹¹⁴⁶ If NOAA does not overrule the state, the project is stopped and the developer’s only recourse is to appeal the NOAA ruling to federal court. (Note that the Secretary of the U.S. Department of Commerce has delegated to the Under-Secretary of Commerce for Oceans and Atmosphere in NOAA the duty to hear and rule on appeals of state denials of consistency determinations.)

NOAA has rarely been asked to review a state’s consistency determination—only a handful of cases in the last decade. One such appeal was for an LNG project; in 2021 NOAA agreed with Oregon that the Jordan Cove LNG project was not consistent with Oregon’s CMP.¹¹⁴⁷

Unless states are sympathetic to environmental concerns or if a state has incorporated strong public-participation and environmentally friendly local ordinances into its Coastal Management Plan, using the CZMA to challenge a project can be difficult. Without consulting with an attorney experienced with your state’s CMP, it can be difficult to determine what, if any, local and state rules have been incorporated into the CMP. Some such rules might be floodplain management regulations: under the National Flood Insurance Act states and local governments must establish and implement such regulations that either meet or exceed the Federal Emergency Management Agency (FEMA) requirements, known as the federal Criteria for Land Management and Use.¹¹⁴⁸ If the state specifically includes these regulations within its federally-approved CMP (rather than merely incorporating them by reference¹¹⁴⁹), they would likely survive preemption.

The following section provides more information on Louisiana’s coastal consistency process, which has a more transparent process than Texas. For more information on Texas, see:

- The General Land Office’s (“GLO”) permitting website, which describes Texas’s coastal management program and links to applicant forms (<https://www.glo.texas.gov/coast/coastal-management/permitting/index.html>). Note that the Railroad Commission handles consistency determinations for applications for Texas LNG facilities as part of its Clean Water Act section 401 water quality certifications,¹¹⁵⁰ but provides little online guidance; and

¹¹⁴⁴ NOAA is delegated the authority to perform functions prescribed in the CZMA, including administering and deciding consistency appeals. Departmental Organizational Order 10-15 § 3.01(u). Secretary of Commerce. (Dec. 12, 2011) https://www.osec.doc.gov/opog/dmp/doors/doo10_15.html.

¹¹⁴⁵ *Id.* Also see 15 C.F.R. § 930.120. This review is *de novo*, meaning that NOAA does not give deference to the state’s determination, but rather makes the decision based on its own expertise, with deference to the views of interested federal agencies regarding their areas of expertise. 15 C.F.R. § 930.127(e)(1).

¹¹⁴⁶ 15 C.F.R. § 930.130(e)(1).

¹¹⁴⁷ Hildebrandt, Brooklyn. “Increase in Consistency Appeals Pursuant to the Coastal Zone Management Act: Are States Taking a More Active Role in Protecting Their Coastal and Marine Resources?” ABA. (Apr. 29, 2021) https://www.americanbar.org/groups/environment_energy_resources/publications/mr/20210429-increase-in-consistency-appeals/.

¹¹⁴⁸ 44 C.F.R. § 60.

¹¹⁴⁹ See Section 10.C.1 (analyzing *Algonquin Gas Transmission, LLC v. Weymouth*, 919 F.3d 54 (1st Cir. 2019)). <https://law.justia.com/cases/federal/appellate-courts/ca1/18-1686/18-1686-2019-03-19.html>.

¹¹⁵⁰ 16 TAC § 3.93(f) (“For an activity within the boundary of the Texas Coastal Management Program (CMP), applicable state water quality requirements include the enforceable goals and policies of the CMP, Title 31, Texas Administrative Code, Chapter 501.”).

- The GLO’s 2019-2020 biennial report (<https://www.glo.texas.gov/coast/coastal-management/forms/files/2019-2020-cmp-biennial-report.pdf>).¹¹⁵¹

For more information on other states, one starting place is NOAA’s summary of the thirty-five active coastal management plans: <https://coast.noaa.gov/czm/mystate/>.

Louisiana coastal use permits

The process for ensuring that a project is consistent with the CZMA will vary from state to state. Louisiana’s process involves obtaining a coastal use permit and is highlighted here to demonstrate some issues advocates may need to consider.

- What agency governs?

The Louisiana Department of Natural Resources (“LDNR”) manages the state’s compliance with the federal CZMA through its Office of Coastal Management (“OCM”). It establishes the state’s Coastal Management Plan, which must be approved by NOAA, and decides whether to issue Coastal Use Permits (“CUPs”) for activities that take place on state lands that lie within Louisiana’s designated “coastal zone.”¹¹⁵²

Although parishes can establish a local CMP to process permits that are not of state interest,¹¹⁵³ oil and gas projects are excluded from local control, as are pipelines, energy facilities and projects using state-owned lands or water bottoms.¹¹⁵⁴ Onshore or near-shore LNG projects thus are evaluated by the LDNR.¹¹⁵⁵

Note that **deepwater LNG ports** are not required to obtain a CUP, but their activities “shall be consistent to the maximum extent practicable with the state program and affected approved local programs.”¹¹⁵⁶ As explained in Section 10.D, the governors of adjacent states have veto power over permitting of deepwater LNG ports. The laws of the nearest adjacent coastal state, to the extent consistent with federal law, would also apply to the deepwater port project if the state’s seaward boundaries, if extended beyond three miles, would encompass the port site.

- What basic laws and principles must the LNDR apply?

The Louisiana State and Local Coastal Resources Management Act of 1978 (“SLCRMA”) is the governing state law. Section 701H of the statute states that a project may be permitted if “after a systematic consideration of all pertinent information regarding the use, the site and the impacts of

¹¹⁵¹ Texas has a history of finding every federal license and permit consistent with its CMP, including in 2019 and 2020. “Texas Coastal Management Program Biennial Report 2019 – 2020.” Texas Coastal Management Program. (Dec. 2020) at 19. <https://www.glo.texas.gov/coast/coastal-management/forms/files/2019-2020-cmp-biennial-report.pdf>. This isn’t an anomaly; other years also have had no federal projects deemed inconsistent. E.g., “Texas Coastal Management Program Biennial Report 2013 – 2014.” Texas Coastal Management Program. (Dec. 2014) at 13. <https://www.glo.texas.gov/coast/coastal-management/forms/files/CMP-Biennial-Report-2014.pdf>.

¹¹⁵² Federal lands are excluded from the Louisiana coastal zone, although any activity that takes place on those lands that may affect land or water use or the natural resources of Louisiana’s coastal zone are subject to the CZMA’s consistency provisions. Coastal Zone Management Act § 304(a).

¹¹⁵³ The 12 parishes that have done so are Calcasieu, Cameron, Jefferson, Lafourche, Orleans, Plaquemines, St. Bernard, St. James, St. Charles, St. John the Baptist, St. Tammany and Terrebonne. “Local Coastal Management Programs.” LNDR. <http://www.dnr.louisiana.gov/index.cfm/page/111>.

¹¹⁵⁴ La. R.S.49:214.25(a)(1)(b), (f), (g) and (h).

¹¹⁵⁵ An LNG project applicant must apply for a CUP by using a joint application form, addressed to both LDNR and the U.S. Army Corps of Engineers. SLCRMA, R.S. 49:214.25 and 214.30.

¹¹⁵⁶ La. R.S.49:214.32(A).

the use...and a balancing of their relative significance,” the LDNR finds it meets *all three* of the following tests:

1. The benefits resulting from the use “would clearly outweigh the adverse impacts that would result from compliance with the modified standard;”
2. No “feasible and practical alternative locations, methods, or practices” for the use exist that comply with the standard, and
3. The use meets *one* of the following three criteria:
 - a. “Significant public benefits” will result from the use, *or*
 - b. The use would “serve important regional, state, or national interests,” including “the national interest in resources and the siting of facilities in the coastal zone identified in the coastal resources program,” *or*
 - c. The use is coastal water dependent.¹¹⁵⁷

First test. Louisiana’s regulations declare that the LDNR’s permit decision “shall represent an appropriate balancing of social, environmental and economic factors,”¹¹⁵⁸ but the LDNR clarifies in its Coastal User’s Guide that the first test is not strictly a cost-benefit analysis “because environmental harms generally cannot be quantified in monetary terms,” and is “more in the nature of a subjective test,” weighing “the value of the natural resources and the value to the public from the proposed use.”¹¹⁵⁹ The LDNR further declares that “public benefits must go to the public as a whole, not to just a few individuals in the locality, and must be measurably substantial.”¹¹⁶⁰ The regulations require the LDNR to consider the “extent of long term benefits or adverse impacts.”¹¹⁶¹

The regulations state that a project is of “overriding public interest” if “the public interest benefits of a given activity clearly outweigh the public interest benefits of compensating for wetland values lost as a result of the activity.”¹¹⁶² It suggests, as examples of such projects, “certain mineral extraction, production, and transportation activities,” or flood control measures for existing infrastructure.¹¹⁶³ The LDNR Coastal User’s Guide, similarly, states, “Louisiana’s oil and natural gas industries are important to the state’s economy, providing taxes and jobs. Proven reserves of both resources are ranked among the nation’s largest.”¹¹⁶⁴ A critique of an LNG project, however, could challenge the actual need for the particular project and the question the extent to which the public would actually benefit, in light of the economic decline of the gas industry and the uncertainties of export.

Second test. The LDNR states that consideration of the second test “should be similar to the process provided for under Section 102 of the National Environmental Policy Act.”¹¹⁶⁵ It requires the LDNR to evaluate the “economic need for use and extent of impacts of use on economy of locality” and the

¹¹⁵⁷ La. Admin. Code, Title 43, Part 1, Ch. 7, § 701(H)(1).

¹¹⁵⁸ La. Admin. Code, Title 43, Part 1, Ch. 7, § 723(C)(8).

¹¹⁵⁹ “A Coastal User’s Guide to the Louisiana Coastal Resources Program.” LDNR. (Rev. Jan. 2015) (hereafter, “Coastal User’s Guide”), p. IV-2. <https://data.dnr.la.gov/LCP/LCPHANDBOOK/FinalUsersGuide.pdf>.

¹¹⁶⁰ *Id.*

¹¹⁶¹ La. Admin. Code, Title 43, Part 1, Ch. 7, § 701(F)(19).

¹¹⁶² La. Admin. Code, Title 43, Part 1, Ch. 7, § 700 (Definitions).

¹¹⁶³ *Id.*

¹¹⁶⁴ “Coastal User’s Guide.” p. II-1.

¹¹⁶⁵ “Coastal User’s Guide.” p. IV-2.

“extent of resulting public and private benefits.”¹¹⁶⁶ This second test provides further strong support for the relevance of challenges to the actual need for the LNG project and the extent to which the public would benefit.

The LDNR also opens the door to concerns about the financial resources of the applicant. It emphasizes that the decision maker “is not held to the options economically available to the applicant,” but rather includes the alternatives that “would be available to a reasonable person in a normal situation.” It explains, “An undercapitalized applicant should not be permitted to damage or destroy important public resources when a well-financed one is prevented from doing so.”¹¹⁶⁷

Third test. An LNG port would meet criteria (c) because it is water dependent.

- Other rules to be aware of.

The State of Louisiana seeks to ensure that its coastal management regulations are not interpreted in such a way that landowners are denied all use of their property. The regulations state that the Coastal Use Guidelines “are not intended to nor shall they be interpreted so as to result in an involuntary acquisition or taking of property.”¹¹⁶⁸ This shouldn’t stop a state from finding that an LNG project is inconsistent with its coastal plan, because that would be a narrow finding that would not prohibit other uses for the site.

Some legal language that could be worked into comments come from the guidelines on coastal use for all projects.¹¹⁶⁹ Advocates are encouraged to read these regulations before formulating comments.

As an additional note, Louisiana’s regulations do clarify that coastal use guidelines can be stronger than water and air quality laws and regulations. Compliance with air and water laws “shall be deemed in conformance” with the coastal management program “except to the extent that these guidelines would impose additional requirements.”¹¹⁷⁰

Louisiana’s regulations also extend its jurisdiction more broadly over wetlands than does the federal clean water laws. Louisiana's coastal use guidelines define "wetlands" as: "open water areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions."¹¹⁷¹ The definition for wetlands regulated under Section 404 of the Clean Water Act is based instead on specific criteria regarding vegetation, soils and hydrology. The LDNR notes, for example, that a bottomland hardwood site that occurs below the five-foot elevation but does not meet the hydric soils parameter for federal Clean Water Act § 404 regulatory jurisdiction would be considered jurisdictional under the Louisiana Office of Coastal Management but not by the Army Corps.¹¹⁷²

¹¹⁶⁶ La. Admin. Code, Title 43, Part 1, Ch. 7, § 701F(7) and (8).

¹¹⁶⁷ “Coastal User’s Guide.” p. IV-2.

¹¹⁶⁸ La. Admin. Code, Title 43, Part 1, Ch. 7, § 701(D).

¹¹⁶⁹ La. Admin. Code tit. 43 § I-701. A free source copy of the Louisiana Code on coastal use management can be found here: <https://casetext.com/regulation/louisiana-administrative-code/title-43-natural-resources/part-i-office-of-the-secretary/subpart-1-general/chapter-7-coastal-management>.

¹¹⁷⁰ La. Admin. Code, Title 43, Part 1, Ch. 7, § 701B.

¹¹⁷¹ La. Admin. Code, Title 43, Part 1, Ch. 7, § 700 (Definitions).

¹¹⁷² “Frequently Asked Questions (FAQ).” LNDNR Office of Coastal Management. <http://www.dnr.louisiana.gov/index.cfm/page/1387>.

- Which parishes are coastal under the statute?

Certain parishes lie completely within Louisiana’s coastal zone. These include: **Orleans, Jefferson, St. Bernard, Plaquemines, St. John the Baptist, St. James** and **St. Charles**. Other parishes having some portion included in Louisiana’s coastal zone are (from the Texas Border to the Mississippi state line): Calcasieu, Cameron, Vermillion, Iberia, St. Mary, St. Martin, Assumption, Terrebonne Laforche, Ascension, Livingston, Tangipahoa, and St. Tammany.¹¹⁷³ A map of the coastal zone can be accessed online at: <http://www.dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=928>. All on-shore LNG terminals are expected to be proposed in this coastal zone.

- Application Process

For coastal projects like LNG terminals, LDNR directs applicants to file a joint permit application for a coastal use permit with its application for Corps permits.¹¹⁷⁴ More information about the application is also available on the LDNR’s webpage here: <http://www.dnr.louisiana.gov/index.cfm/page/93>.

- Deadlines during the permitting process

The LDNR must make its coastal permit decision quickly. The statute states that the decision “shall be made” within 30 days after public notice or within 15 days after a public hearing, whichever is later.¹¹⁷⁵ This short timeframe, it should be noted, is not required by federal law. The CZMA allows the state agency six months to concur with or object to an applicant’s proposed certification.¹¹⁷⁶

Public notice must be provided within 10 days of receipt of the coastal use permit application,¹¹⁷⁷ but neither the statute nor the regulations specify a public comment period. Practically speaking, any comment would have to get to the LDNR extremely quickly to have any meaningful impact on the agency’s decision if that decision is to be issued just 30 days after public notice.

The coastal use permit fast track can be slowed to a somewhat more reasonable pace in two ways—the holding of a **public hearing** or a **request for more information**.

The statute grants the LDNR discretion as to whether to hold a **public hearing**.¹¹⁷⁸ Public notice must be provided at least 30 days in advance of any public hearings, and the hearing file must remain open for 10 days after the close of the hearing.¹¹⁷⁹ But, notwithstanding any other law to the contrary, the decision to approve or deny the permit must be made within 60 days of the date on which the LDNR notified the applicant that the application was complete.¹¹⁸⁰ An advocate would likely want to make an effective case for a public hearing swiftly after receiving public notice. The regulations state:

“Public hearing(s) are appropriate when there is significant public opposition to a proposed use, or there have been requests from legislators or from local governments or other local

¹¹⁷³ “Coastal User’s Guide.” p. III-1.

¹¹⁷⁴ “Joint Permit Application.” LDNR. <http://www.dnr.louisiana.gov/assets/OCM/permits/JPA2010Fillable.pdf>.

¹¹⁷⁵ La. R.S.49:214.30(C)(3).

¹¹⁷⁶ 16 U.S.C. § 1456(c)(3)(A). If not objection or concurrence is made within six months, the state’s concurrence is “presumed.”

Id.

¹¹⁷⁷ La. R.S.49:214.30(C)(2)(a).

¹¹⁷⁸ A public hearing “may” be held. La. R.S.49:214.30(C)(2)(a).

¹¹⁷⁹ La. Admin. Code, Title 43, Part 1, Ch. 7, § 727(B)(1) and (6).

¹¹⁸⁰ La. R.S.49:214.30(C)(2)(b).

authorities, or in controversial cases involving significant economic, social or environmental issues.”¹¹⁸¹

The LDNR may **request more information** of the applicant if it deems that it has not received all the “necessary data and information” required.¹¹⁸² The applicant must respond within 60 days. If the applicant does not timely respond, the LDNR may deny the application without prejudice (meaning the applicant can simply refile), withdraw it, or place it on inactive status.¹¹⁸³ Thus, an advocate would likely want to identify any important missing information in the application swiftly and urge that the LDNR should request and obtain it.

- Asking for reconsideration of or appealing the decision on a coastal use permit.

Once the LDNR has made a decision on a coastal use permit, any person can file a petition to the LDNR secretary for reconsideration of the decision within ten days after public notice or receipt of the final decision. The secretary must rule within 15 days of receipt of the petition and has discretion to stay the permit or notice of determination in the interim. The grounds for reconsideration are:

1. The decision is “clearly contrary to the law or the evidence before the secretary”;
2. The petitioner has discovered important evidence that the petitioner could not, with due diligence, have presented to the secretary prior to the decision;
3. Issues not previously considered, through no fault of the petitioner, should be examined to properly dispose of the matter; or
4. Other grounds exist to examine issues and evidence further in the public interest.¹¹⁸⁴

Any “aggrieved person” or affected local, state or federal agency, or “any other person adversely affected by a coastal use permit decision” may bring an appeal an adverse decision by the secretary in accordance with La. R.S. 49:214.35.¹¹⁸⁵ The appeal may be brought directly to the state district court—whether or not a petition to the secretary for reconsideration has been filed.¹¹⁸⁶ The appeal must be filed within 30 days after the LDNR mails notice of the final decision (not after the individual receives that notice), or, if a petition for reconsideration was filed with the LDNR secretary, then within 30 days after the secretary’s decision on the petition.¹¹⁸⁷

- Deadlines for construction

A project must start construction within two years of the date of permit issuance and be completed within five years of the date of issuance.¹¹⁸⁸ The term may be extended, on a case-by-case basis, by up to two years to start construction and up to 3 years to complete it. A 30-day extension may be granted without public notice, but longer extensions are subject to public notice and comment. Also, extension requests involving project modifications that would result in greater environmental

¹¹⁸¹ La. Admin. Code, Title 43, Part 1, Ch. 7, § 723(C)(6)(c).

¹¹⁸² 15 C.F.R. § 930.60(a). The required data and information is described in 15 C.F.R. § 930.58(a).

¹¹⁸³ La. R.S.49:214.30(C)(7).

¹¹⁸⁴ La. R.S.49:214.35(B).

¹¹⁸⁵ La. R.S.49:214.30(D).

¹¹⁸⁶ La. R.S.49:214.35(D). This is unique to permits sought for LNG terminals, which normally go to the federal circuit courts under 15 U.S.C. § 717r. That statute excludes CMZA orders from the federal circuit review scheme. See 15 U.S.C. § 717r(d)(1) & (2).

¹¹⁸⁷ La. R.S.49:214.35(E). Trial de novo shall be held upon request of any party. La. R.S.49:214.35(F).

¹¹⁸⁸ La. Admin. Code, Title 43, Part 1, Ch. 7, § 723(C)(9)(d).

impacts will be treated as new applications.¹¹⁸⁹ An approval of a permit extension may be appealed on the sole ground that the proposed activity should be treated as a new application.¹¹⁹⁰

- Issues that can be raised in Louisiana’s coastal review process

In addition to specific air and water quality concerns, Louisiana’s regulations allow consideration of several specific issues that can be raised in a coastal review process for an LNG facility. A non-exhaustive list of issues is provided in the following table:

Table 10.1: Selected Issues Relevant in Louisiana’s Coastal Review Permit Process

Cumulative impacts	The regulations require consideration of “Cumulative Impacts,” defined as “impacts increasing in significance due to the collective effects of a number of activities.” ¹¹⁹¹ Significant “adverse effects of cumulative impacts” are defined as adverse impacts to “avoid to the maximum extent practicable.” ¹¹⁹² Consider raising any cumulative impacts that might be relevant, such as wetlands health, coastal erosion, and diminished flood protection capacity.
Emergency risks and preparedness	The regulations for “oil, gas and other mineral activities,” state: “Effective environmental protection and emergency or contingency plans shall be developed and complied with for all mineral operations.” ¹¹⁹³ While the section emphasizes exploration, production and refining, LNG facilities are clearly gas activities. Consider raising issues related to safety for nearby communities and the ecosystem.
Land-based traffic issues	The LDNR must consider the “existence of necessary infrastructure to support the use and public costs resulting from use.” ¹¹⁹⁴ The regulations declare a policy to “avoid to the maximum extent practicable” certain “adverse impacts,” including “adverse economic impacts on the locality” and “adverse disruption of existing social patterns.” ¹¹⁹⁵ Consider impacts in the short-term (e.g., during construction) and long-term (e.g., at full permitted capacity).
Local development plans, navigation, and recreation plans; existing and traditional uses	The regulations state that public and private works projects such as “ports” and “public utilities” are “necessary to protect and support needed development and shall be encouraged,” ¹¹⁹⁶ but that they “shall, to the maximum extent practicable, take place only when . . . consistent with all relevant adopted state, local, and regional plans.” ¹¹⁹⁷ Consider raising how expanding LNG export capacity conflicts with Louisiana’s Coastal Master Plan, for example. ¹¹⁹⁸ In addition, the LDNR must consider the “extent of impacts on existing and traditional uses of the area and on future uses for which the area is suited.” ¹¹⁹⁹ Also, “[u]ses shall to the maximum extent practicable be designed and carried out to permit multiple concurrent uses which are appropriate for the location and to avoid unnecessary conflicts with other uses of the vicinity.” ¹²⁰⁰ Local advocates can provide invaluable input into existing and historic uses.

¹¹⁸⁹ La. Admin. Code, Title 43, Part 1, Ch. 7, § 723(D)(5).

¹¹⁹⁰ La. Admin. Code, Title 43, Part 1, Ch. 7, § 723(D)(5)(d).

¹¹⁹¹ La. Admin. Code, Title 43, Part 1, Ch. 7, § 700 (Definitions).

¹¹⁹² La. Admin. Code, Title 43, Part 1, Ch. 7, § 701(G)(10).

¹¹⁹³ La. Admin. Code, Title 43, Part 1, Ch. 7, § 719(K).

¹¹⁹⁴ La. Admin. Code, Title 43, Part 1, Ch. 7, § 701(F)(10).

¹¹⁹⁵ La. Admin. Code, Title 43, Part 1, Ch. 7, § 701(G)(2) and (6).

¹¹⁹⁶ La. Admin. Code, Title 43, Part 1, Ch. 7, § 711(B).

¹¹⁹⁷ La. Admin. Code, Title 43, Part 1, Ch. 7, § 711(B)(3).

¹¹⁹⁸ “Our Plan: Louisiana’s Coastal Master Plan” Coastal Protection and Restoration Authority. <https://coastal.la.gov/our-plan/>.

¹¹⁹⁹ La. Admin. Code, Title 43, Part 1, Ch. 7, § 701(F)(11).

¹²⁰⁰ La. Admin. Code, Title 43, Part 1, Ch. 7, § 701(I).

Bad actor issues	The law says the LDNR “shall take into consideration the permit applicant’s history of compliance with the provisions of the Louisiana Coastal Resources Program” in making its decision. ¹²⁰¹ Consider whether the applicant has connections to other projects in the state.
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Local Land Use Issues: Easements and Eminent Domain

Another issue relevant to LNG facility but largely outside the scope of this guide is local land use issues of easements and eminent domain. Advocates looking to press this issue for a particular terminal should consult experienced counsel before proceeding.

If any part of the LNG facility is sited over or within state-owned lands, including underwater lands, the state lands management agency has the authority to grant or deny an easement for the proposed use. The local parish or county or even municipality may also have authority with regard to easements for crossing authorization if, for example, transport over a levee or piping under a street is involved.

A project applicant that is constructing a terminal will not be able to use eminent domain to take the land needed for the terminal’s construction: LNG export terminals (approved under section 3 of the Natural Gas Act) are not statutorily authorized to use eminent domain to obtain property for their development.¹²⁰² Any state or local agency with public land stewardship authority retains its power to decide whether to approve land lease or easement applications. In some states, such as Texas, the public lands commissioner is independently elected. In other states, such as Louisiana, the position is an executive branch appointment.

However, LNG pipelines are a different matter. Once a project is certified by FERC, the project sponsor can avail itself of the condemnation powers that interstate gas pipeline project sponsors enjoy under 15 U.S.C. § 717f(h), regardless of whether the land is privately or state-owned.¹²⁰³ This is another reason why it is so important to challenge the pipeline part of a project as well.

Concerns about preemption

In general, state and local laws cannot be used to override FERC’s decision to certify a project (unless it is under the Clean Water Act, the Clean Air Act, or the Coastal Zone Management Act). For example, although FERC must consult with state agencies regarding local safety considerations,¹²⁰⁴ it would assert that any state or local safety permit issued to an LNG terminal “must be consistent” with its own authorization. FERC emphasizes that while it encourages cooperation between LNG applicants and local authorities, “this does not mean that state and local agencies . . . may prohibit or

¹²⁰¹ La. R.S.49:214.30(C)(9).

¹²⁰² Compare 15 U.S.C. § 717b with 15 U.S.C. § 717.

¹²⁰³ In a pipeline case decided by the U.S. Supreme Court in 2021, the Court held that a developer that has received a FERC certificate to build a pipeline may use eminent domain to obtain both private and state lands that it needs for the pipeline’s construction. *PennEast Pipeline Co., LLC v. New Jersey*, 594 U.S. ___, No. 19-1039, 2021 WL 2653262, (U.S. June 29, 2021) (“By its terms, [15 U.S.C.] § 717f(h) authorizes FERC certificate holders to condemn all necessary rights-of-way, whether owned by private parties or States.”). It’s interesting to note that even though the PennEast developers won at the Supreme Court, by September 2021 they canceled the pipeline—because the project had not yet received all of its required permits, including a water quality certification in New Jersey! Disavino, Scott. “*PennEast becomes the latest to scuttle a natural gas pipeline project.*” (Sept. 27, 2021). <https://www.reuters.com/business/energy/penneast-end-development-pennsylvania-new-jersey-natgas-pipe-2021-09-27/>.

¹²⁰⁴ Energy Policy Act, P.L. 109-58, § 311(d).

unreasonably delay the construction or operation” of FERC-approved LNG facilities.¹²⁰⁵ What FERC is describing is “conflict preemption.” Conflict preemption exists when compliance with both state and federal law is impossible, or where the state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.

Practically, this means that advocates pressed for resources should deprioritize fighting local and state permits (**other than** Clean Air Act and Clean Water Act permits) that are likely to be found to be in “conflict preemption” with FERC’s authority to permit LNG terminals and pipelines, even if advocates think they can win those fights. Identifying conflict-preempted laws can be tricky, even for experienced attorneys; Sections 10.C.1 – 10.C.3 provide a basic overview of when a law might be preempted. Advocates shouldn’t completely ignore these laws though: there can be good reasons to be involved with processes that are likely “conflict preempted,” as described in Section 10.C.4.

Preemption where a regulation is an obstacle.

The U.S. Supreme Court has found that conflict preemption by the Natural Gas Act may occur when it is impossible to comply with both the federal and state/local regulations, or when the state/local regulation is an obstacle to achieving a federal objective. For example:

- In *Schneidewind v. ANWR Pipeline Co.*, the court preempted a Michigan statute that required a public utility transporting gas in Michigan for public use to obtain the Michigan Public Service Commission’s approval before issuing long-term securities.¹²⁰⁶
- A zoning regulation in Providence, RI, that would have blocked replacement and modernizing of vaporizers at an LNG terminal was deemed preempted.¹²⁰⁷
- A federal district court in 2020 found that the Natural Gas Act preempted a town’s land use ordinances to the extent of precluding the town from preventing construction of a gas pipeline compression station through a building permit denial.¹²⁰⁸

While states supposedly maintain their rights under the Clean Air Act, Clean Water Act and Coastal Zone Management Act, preemption has still, on occasion reached local zoning or wetland ordinances incorporated into a state’s federally approved Coastal Management Plan or Clean Air Act State Implementation Plan. For example:

- The Massachusetts Office of Coastal Zone Management would not grant a coastal consistency statement under the CZMA for a gas compressor station unless the project obtained a Wetlands Protection Act permit from the Massachusetts Department of Environmental Protection, which, in turn, refused to issue such a permit until the Town of Weymouth permitted the project under its local Wetlands Protection Ordinance. The Weymouth Conservation Commission denied the

¹²⁰⁵ *In re Alaska Gasline Development Corp.*, 171 FERC ¶16,174 (May 21, 2020), p. 88.

<https://www.ferc.gov/sites/default/files/2020-06/C-7-052120.pdf>. FERC’s decision cites *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, 245 (D.C. Cir. 2013) (noting that the Natural Gas Act preempts state and local regulation to the extent it conflicts with federal regulation, or would delay construction and operation of FERC-approved facilities.)

¹²⁰⁶ See *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 299-310 (1988).

<https://supreme.justia.com/cases/federal/us/485/293/>. The court found “field preemption” related to FERC’s rate regulation authority, but also conflict preemption due to the “prospect” of collision between the federal and state action even if actual collision is not inevitable.

¹²⁰⁷ *Algonquin LNG v. Loqa*, 79 F. Supp. 2d 49 (D.R.I. 2000). <https://law.justia.com/cases/federal/district-courts/FSupp2/79/49/2522998/>.

¹²⁰⁸ *Empire Pipeline, Inc. v. Town of Pendleton*, 472 F. Supp. 3d 25 (W.D.N.Y. 2020). <https://casetext.com/case/empire-pipeline-inc-v-town-of-pendleton>.

local permit. The court found the local ordinance to be subject to conflict preemption.¹²⁰⁹ The decision is hard to justify given that the requirements of the local ordinance were likely relevant to the goals of the CZMA, but merely incorporating a statute or ordinance by reference into a state Coastal Management Plan does not appear to be sufficient to ensure exemption from preemption.

- In another case, a Maryland environmental agency refused to process a Clean Air Act permit because Maryland’s air regulations (at Md. Code § 2–404(b)(1)) required a showing that the facility had obtained local zoning approval (which had been denied) or otherwise complied with “applicable” local zoning regulations. Noting that “laws that are part of a state’s [Clean Air Act implementation plan (“SIP”)] are not preempted, unless the NGA says otherwise”—the court found that § 2–404(b)(1) had been incorporated by reference into Maryland’s SIP and “therefore saved from preemption by the NGA.”¹²¹⁰

Unfortunately for Maryland, the language of § 2–404(b)(1) was insufficient to escape the NGA’s preemptive reach because the second clause of the regulation looped the NGA back in. The second clause of § 2–404(b)(1) asked whether the applicant had failed to comply with “applicable” local zoning laws—the only way Maryland’s refusal to process the permit could be justified. Interpreting “applicable” to mean “not preempted by the NGA,” the court remanded the case to Maryland’s environmental agency to identify a local zoning law that had not been preempted that could justify the agency’s inaction.¹²¹¹

Preemption where related infrastructure is part of LNG facility construction or operation.

The extent to which any state utility authority or other state regulatory agency has jurisdiction over intrastate pipelines or other construction related to an LNG facility depends on whether the infrastructure is deemed to be part of the construction or operation of the LNG facility. The First Circuit Court of Appeals denied Rhode Island’s attempt to exercise its permitting authority over coastal dredging in connection with an LNG terminal. The court ruled that the incident dredging was “part of the construction and operation” of the LNG terminal, and thus any state agency permitting power was preempted by FERC’s jurisdiction.¹²¹²

Potential avoidance of preemption based on indirect effect and different purpose.

State and local laws that have only an indirect effect on interstate gas facilities generally are not preempted. Local regulation with respect to matters or activities that are separate and distinct from subjects of federal regulation “may be permissible if they do not impede or prevent the accomplishment of a legitimate federal objective.”¹²¹³ While state and local governments may be

¹²⁰⁹ *Algonquin Gas Transmission, LLC v. Weymouth*, 919 F.3d 54 (1st Cir. 2019). <https://law.justia.com/cases/federal/appellate-courts/ca1/18-1686/18-1686-2019-03-19.html>.

¹²¹⁰ *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, 244 (D.C. Cir.), judgment entered, 529 F. App’x 3 (D.C. Cir. 2013).

¹²¹¹ *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, 245 (D.C. Cir. 2013). <https://casetext.com/case/dominion-transmission-inc-v-summers>.

¹²¹² *Weaver’s Cove Energy LLC v. Rhode Is. Coastal Resources Mgt. Council*, 589 F.2d 458, 472-74 (1st Cir. 2009). Also see the following cases finding conflict preemption: *National Fuel Gas Supply Corp. v. Town of Wales*, No. 12-CV-034S, 2013 WL 5739033 (W.D.N.Y. Oct. 22, 2013) (noise levels); *Dominion Transmission v. Town of Myersville Town Council*, 982 F. Supp. 2d 570 (D.Md. 2013) (stormwater management, soil erosion); *Colorado Interstate Gas Co. v. Wright*, 707 F. Supp. 2d 1169 (D. Kan. 2010) (natural gas storage); *Northern Nat. Gas Co. v. Munns*, 254 F. Supp. 2d 1103 (S.D. Iowa 2003) (maintenance of agricultural land); *Algonquin LNG v. Loqa*, 79 F. Supp. 2d 49 (D.R.I. 2000) (zoning safety, and construction).

¹²¹³ *Algonquin LNG v. Loqa*, 79 F. Supp. 2d at 53. Also see *Schneidewind*, 485 U.S. at 308.

preempted from establishing LNG setback rules for safety purposes,¹²¹⁴ for example, a state or local government may be able to apply setback rules to preserve the aesthetics of an area if the rule is included in its Coastal Management Plan.¹²¹⁵

Relevance of state or local law to NEPA or CZMA review even when preempted.

Even where a local or state standard may be preempted by FERC, a concerned local government or advocate may wish to raise it as evidence of risk as part of the public interest review under the Natural Gas Act, the environmental review under NEPA or the CZMA balancing of risks and impacts. While FERC, as lead agency under NEPA, has chosen at times to ignore state laws requiring more stringent analysis of risk,¹²¹⁶ such dismissal of safety policies could be subject to challenge. The local government, after all, typically provides staff and resources for emergency response and may well be the first line of defense in a disaster, while the local community is likely to be the hardest hit by the disaster's impacts.

What about port authorities?

While port authorities in Louisiana and Texas do not have permit-granting powers for LNG facilities, they do play key roles in LNG siting. Port authorities typically lease facilities for LNG terminals. For example, Tellurian, Inc. announced that it will soon sign a long-term lease with the Louisiana Port Authority for its proposed Driftwood LNG terminal, so that the company can prepare the site for construction.¹²¹⁷

Their harbor dredging and maintenance activities can facilitate initiatives that involve larger ships. The Port of South Louisiana,¹²¹⁸ for example, recently persuaded the Army Corps to conduct dredging to deepen the Mississippi River Ship Channel from Baton Rouge to the Gulf of Mexico by 50 feet, to accommodate larger shipping vessels.¹²¹⁹

Port authorities develop capital improvement plans as well as operational plans that may involve multimodal transportation assets both on and off the immediate port property of relevance to LNG

¹²¹⁴ Federal regulations establish safety setbacks for LNG facilities. Each LNG container and transfer system must have a thermal radiation protection zone beyond the impoundment (spill control) area, and a flammable vapor dispersion exclusion zone around the facility large enough to address the part of a potential vapor cloud that could be flammable. 49 C.F.R. §§ 193.2057 and 193.2059. Similarly, FERC's rules for environmental review require the applicant to quantify "existing noise levels at noise-sensitive areas," including "any areas covered by relevant state or local noise ordinances," and show the project will comply with both federal and local "applicable noise regulations." 10 C.F.R. § 380.12(k)(2) and (4)(v).

¹²¹⁵ While not a Natural Gas Act case, a federal court upheld the power of the city of Grand Prairie, TX, to impose a setback rule despite the Pipeline Safety Act's express preemption of safety rules, 49 U.S.C. § 60104(c), finding the local law was "not a safety standard in letter, purpose, or effect." *Texas Midstream Gas v. City of Grand Prairie*, 608 F.3d 200 (5th Cir. 2010).

¹²¹⁶ One journal article noted, for example, that in the EIS process for an LNG project, the California Coastal Act required the hazard analysis to include consideration of worst-case events, but FERC did not include such analysis in its draft EIS, as its practice is to screen out low probability risks. The project, Sound Energy Resource's proposed Long Beach Terminal, was abandoned for other reasons. Similarly, FERC dismissed worst-case concerns in deliberations over the restart of the Cove Point LNG terminal where local citizens raised concern about the close proximity of the Calvert Cliffs Nuclear Plant. Nafday, Avinash. "Regulatory Compliance for Marine LNG Import Terminals in California." *J Leg. Aff. Dispute Resolut. Eng. Constr.* 4(3):55-66, 58 (2012). <https://ascelibrary.org/doi/pdf/10.1061/%28ASCE%29LA.1943-4170.0000090>.

¹²¹⁷ Weber, Harry. "Tellurian to prepare Driftwood LNG site for construction, build new pipeline." S&P Global. (June 22, 2021) <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/062221-tellurian-to-prepare-driftwood-lng-site-for-full-construction-build-new-pipeline>.

¹²¹⁸ The Port of South Louisiana is governed by a seven-member Board of Commissioners. Its jurisdiction covers three parishes – St. Charles, St. James and St. John the Baptist.

¹²¹⁹ McCormack, Frank. "Lower Miss deepening will have regional, national impacts." *Waterways Journal*. (Oct. 16, 2020) <https://www.waterwaysjournal.net/2020/10/16/lower-miss-deepening-will-have-regional-national-impacts/>.

facilities. Monitoring of port authority development plans can provide insights into the potential for future private projects such as LNG terminals.

What permitting requirements apply to deepwater terminals?

This guide has largely focused on the permits required by on-shore LNG terminals. This guidance does not necessarily apply to deepwater (offshore) facilities. Deepwater ports are located beyond the territorial limits of the United States (generally beyond three nautical miles from the U.S. baseline which is typically the mean low-water mark, but the threshold is nine nautical miles in Louisiana and on the Gulf Coast of Mexico).¹²²⁰ Facilities closer to the shore are regulated by FERC—review the documentation for the specific project to determine which rules apply.

Deepwater LNG facilities benefit from an expedited license process established under the Deepwater Port Act (DPA).¹²²¹ The statute states that its mission is to “promote the construction and operation of deepwater ports as a safe and effective means of importing crude oil and gas into the United States while minimizing tanker traffic and risks attendant thereto,” while also protecting the marine and coastal environment, “to prevent or minimize any adverse impact which might occur as a consequence of the development of such ports.”¹²²² Deepwater terminals require authorization by: MARAD, EPA, the governors of adjacent coastal states, and FERC, as the next sections explain. Advocates looking to challenge a deepwater terminal should consult with an experienced attorney to determine which actors may be most sympathetic to advocates’ concerns about the project before proceeding with a challenge.

The U.S. Maritime Administration (MARAD), the Coast Guard, and other agencies

MARAD, which is part of the Department of Transportation (DOT), is empowered to decide whether to grant a Deepwater Port Act (DPA) license.¹²²³ The application for a DPA license must include not only the Deepwater Port Act application but all EPA permits/approvals applications.¹²²⁴

The U.S. Coast Guard administers the application process for a DPA license—including project engineering, operations, safety,¹²²⁵ and environmental reviews, and serves as lead agency for compliance with NEPA.¹²²⁶ MARAD reviews the financial information, prepares the record of decision, and makes the substantive decision. The Secretary of Transportation issues any DPA license.¹²²⁷ (A

¹²²⁰ 33 U.S.C. § 1501(a)(1); see also 33 U.S.C. § 1502(9)(A). The territorial limits can vary state-by-state.

¹²²¹ Deepwater Port Act, 33 U.S.C. §§ 1501-1524.

¹²²² 33 U.S.C. § 1501(a). Note that although the statute emphasizes import facilities, it governs export facilities too.

¹²²³ The statute grants the power to the USDOT, which delegates the power to MARAD. 49 C.F.R. § 146(s).

¹²²⁴ 33 C.F.R. § 148.105(z) and (bb), and 33 U.S.C. 6 1518(a)(1).

¹²²⁵ The Coast Guard is responsible for matters related to navigation safety, vessel engineering and safety standards, and all matters pertaining to equipment and facility safety in or adjacent to navigable waters up to the last valve immediately before the receiving LNG tanks. It also is tasked with informing FERC of safety issues. 33 U.S.C. § 1221 et seq. It also issues a Letter of Recommendation as to the suitability of the waterway for LNG-related marine traffic. Guidance for issuance of such letters is contained in the Coast Guard Navigation and Vessel Inspection Circular 01-2011. Also see 33 U.S.C. § 1504(f) regarding the need to comply with NEPA regarding deepwater port applications.

¹²²⁶ The DPA authorizes the Secretary of DOT to license deepwater ports. The Secretary delegated to the Coast Guard authority to process licenses under the DPA, which delegation was confirmed by the Homeland Security Act of 2002. See 49 C.F.R. § 1.46(s) and the Homeland Security Act of 2002, §§ 888 and 1512(d).

¹²²⁷ See “Memorandum of Understanding on Deepwater Port Licensing” White House Task Force on Energy Project Streamlining. (May 20, 2004) https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/5ps/Operating%20and%20Environmental%20Standards/OES-2/DWP/dwp_white_house_task_force_energy_streamlining.pdf?ver=2017-07-26-102702-223. This MOU was issued pursuant to Presidential Executive Order 13212: Actions to Expedite Energy Related Projects. 66 Fed. Reg. 28357 (May 18, 2001).

May 20, 2004 White House Task Force on Energy Project Streamlining memorandum was signed by 10 agencies outlining how these agencies coordinate in the licensing of deepwater ports.¹²²⁸)

The DPA gives MARAD 330 days from receipt of a complete license application to make a final determination, although it can suspend the “clock” if outstanding information needs exist.¹²²⁹ MARAD makes its determination with consultation or comments from the EPA and the nearest coastal state (which it identifies). The U.S. Coast Guard’s regulations require that deepwater LNG projects submit the information required for a Rivers and Harbors Act Section 10 permit and a Clean Water Act section 404 permit with their application for a deepwater port license.¹²³⁰

EPA must provide a recommendation—and must make and provide notification of its own permit decisions—to the Secretary of Transportation within 45 days after the last public hearing on the license application.¹²³¹ (For more on EPA’s role, see Section 10.E.2.)

The Secretary of Transportation cannot issue the DPA permit if EPA informs the Secretary that the port will not conform with applicable provisions of the Clean Air Act, Clean Water Act, or MPRSA.¹²³² EPA can request that the license for the deepwater port be “conditioned” upon the applicant receiving the required Clean Air Act permits from EPA before any construction or operational activity that requires a permit can occur.¹²³³ While applicants for deepwater port licenses purportedly must demonstrate that the requirements of Clean Water Act section 401(a)(1) for maintenance of state water quality standards will be satisfied,¹²³⁴ they do not have to submit this information to the state.

The Department of Transportation has jurisdiction to regulate oil spill prevention requirements for deepwater ports and their associated vessels as well as transportation-related onshore facilities.¹²³⁵

Additionally, for Clean Air Act purposes, deepwater ports will typically be permitted by EPA rather than states, as discussed in Section 8.D. Other statutes that may come into play include the Endangered Species Act,¹²³⁶ Coastal Zone Management Act, Magnuson Stevens Fishery Conservation and Management Act,¹²³⁷ Marine Mammal Protection Act,¹²³⁸ and National Historic Preservation Act.

¹²²⁸ “Memorandum of Understanding on Deepwater Port Licensing” White House Task Force on Energy Project Streamlining. (May 20, 2004)

https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/5ps/Operating%20and%20Environmental%20Standards/OES-2/DWP/dwp_white_house_task_force_energy_streamlining.pdf?ver=2017-07-26-102702-223.

¹²²⁹ 33 U.S.C. § 1504.

¹²³⁰ 33 C.F.R. § 148.105(aa).

¹²³¹ 33 U.S.C. § 1504(e)(2). MARAD may issue the license without EPA’s approval if EPA does not meet that 45-day deadline. 33 U.S.C. § 1503(c)(6).

¹²³² 33 U.S.C. § 1503(c)(6).

¹²³³ EPA, “EPA’s Liquefied Natural Gas Regulatory Roadmap.” EPA-230-B-06-001. Nov. 2006, p. 6.

https://www.epa.gov/sites/default/files/2015-08/documents/lng_regulatory_roadmap.pdf.

¹²³⁴ 33 C.F.R. § 148.105(i)(1)-(2).

¹²³⁵ Clean Water Act, § 311(j)(1)(c) and Executive Order 127777.

¹²³⁶ 16 U.S.C. § 1856, et seq. The National Oceanic and Atmospheric Administration (NOAA), which has a National Marine Fisheries Service, advises on Endangered Species Act compliance for deepwater port applications. See “Memorandum of Understanding Related to the Licensing of Deepwater Ports.” White House Task Force on Energy Project Streamlining. (May 20, 2004) at 5

https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/5ps/Operating%20and%20Environmental%20Standards/OES-2/DWP/dwp_white_house_task_force_energy_streamlining.pdf?ver=2017-07-26-102702-223.

¹²³⁷ 50 C.F.R. § 600.

¹²³⁸ 16 U.S.C. § 1382, implemented by the National Marine Fisheries Service (NMFS) within NOAA.

Also, if a deepwater or onshore/near-shore LNG facility has a structure that could affect navigable airspace, Federal Aviation Administration (FAA) rules would require marking and lighting.¹²³⁹

EPA's responsibilities

EPA has the power to decide whether to grant an air pollution permit for a deepwater LNG port under the Clean Air Act.¹²⁴⁰ Included in the scope of the air permit are emissions from the deepwater port itself and from “activities connected, associated, or potentially interfering with the use or operation of any such port,”¹²⁴¹ such as any carrier that is moored to the LNG port (the air pollutant emissions resulting from the transfer of gas to the port.¹²⁴² Its decision is based not only on federal law, but also on the air pollution regulations that would otherwise apply within the “nearest adjacent coastal State” consistent with federal law—*i.e.*, the state whose seaward boundaries, if extended beyond 3 miles, would encompass the site of the deepwater port.¹²⁴³

EPA also has the authority to decide whether to grant or deny a water pollution discharge permit under the Clean Water Act, pursuant to the National Pollution Discharge Elimination System (NPDES). Also, for discharges into the territorial sea or beyond, the NPDES permit must comply with EPA’s Ocean Discharge Criteria.¹²⁴⁴ The Clean Water Act provides that EPA issuance of a section 402 NPDES permit to a “new source” is subject to review under NEPA.¹²⁴⁵ Generally, the facility must fall within an industrial category for which new source performance standards have been developed,¹²⁴⁶ and EPA has not promulgated new source performance standards for deepwater ports or LNG terminals, whether based on land or water. But the DPA specifies that deepwater ports shall be considered “new sources” under the Clean Water Act,¹²⁴⁷ and that the Secretary of Transportation “shall comply” with NEPA for all Deepwater Port Act license applications.¹²⁴⁸ As a result, by operation of the DPA, NEPA applies to EPA’s proposal to issue an NPDES permit to a deepwater LNG terminal. EPA reviews the deepwater port EIS as a cooperating agency and must use that EIS in connection with its own permit decisions.¹²⁴⁹

As noted above, EPA has 45 days after the end of the last hearing to make its decision on any applications under the Clean Air Act, Clean Water Act, or MPRSA. If complete information for the project’s NPDES permit is not available in time to meet this deadline, however, then MARAD may condition the license upon the applicant receiving the EPA water discharge permit before the discharge activity an occur.¹²⁵⁰

¹²³⁹ For example, if the facility is more than 200 feet above ground level, such approval must be obtained. Stack flares, for example, may exceed the height threshold. Other standards apply depending on proximity to an airport runway or heliport. 14 C.F.R. § 77.

¹²⁴⁰ A deepwater port is a “new source” under both the Clean Air Act and the Clean Water Act. 33 U.S.C. § 1502(9).

¹²⁴¹ 33 U.S.C. § 1518(a)(1).

¹²⁴² A useful discussion of EPA air permitting requirements for deepwater LNG ports is included in a letter from EPA Region 1 regarding a proposed Northeast Gateway Deepwater LNG import facility off the coast of Massachusetts. EPA Region 1. Ltr. to Mr. Buck Booth, Excelerate Energy, L.P. and Christopher Williams, Tetra Tech, Incl. (Aug. 13, 2020) https://www.epa.gov/sites/production/files/2021-02/documents/neg_lng_tranfers2020.pdf.

¹²⁴³ The DPA effectively federalizes the law of the nearest adjacent state. 33 U.S.C. § 1518(b).

¹²⁴⁴ 40 C.F.R. Part 125, Subpart M.

¹²⁴⁵ 33 U.S.C. § 1371(c)(1). See 33 U.S.C. § 1316 and 40 C.F.R. § 6, Subparts A, B, D, and F.

¹²⁴⁶ 33 U.S.C. § 1316(a)(2) and 40 C.F.R. §§ 122.2 and 122.29(b)(2).

¹²⁴⁷ 33 U.S.C. § 1502(9)(D).

¹²⁴⁸ 33 U.S.C. § 1504(f).

¹²⁴⁹ 33 U.S.C. § 1504(f).

¹²⁵⁰ 33 C.F.R. § 148.105(z).

Whether deepwater or onshore/near shore, operators of LNG projects must determine if any wastes the facility generates will be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) regulations,¹²⁵¹ and determine whether such wastes such as used oil or antifreeze should be categorized as hazardous waste or used oil.¹²⁵² LNG facility operators may accumulate hazardous waste on site without a permit for 90 days if deemed a large quantity generator or 180 days if deemed a small quantity generator.

The involvement of adjacent coastal states' governors

The governors of each “adjacent coastal state” as identified by the Secretary of Transportation, have the power to review and approve the license.¹²⁵³ Each adjacent coastal state governor must approve, or be presumed to have approved, the license—otherwise, the Secretary of Transportation cannot issue the DPA license.¹²⁵⁴ If a governor fails to transmit approval or disapproval within 45 days after the last day of public hearing on the license application, then that governor’s approval is presumed.¹²⁵⁵

Louisiana’s governor Kathleen Babineaux Blanco, for example, vetoed a proposed Main Pass Energy Hub offshore LNG import project in May 2006, expressing concerns about its open rack vaporizer system.¹²⁵⁶ In another example, Governor Bob Riley of Alabama rejected offshore LNG import projects that used an ocean-water-based “open-loop” technology for warming LNG,¹²⁵⁷ eventually giving his approval to an import facility proposing to use a “closed-loop” system of warming the gas.¹²⁵⁸

This one-stop veto could be a powerful tool to stop a deepwater terminal, if the governor is sympathetic. Just recall that this gubernatorial veto power of deepwater LNG ports does not exist for onshore/near-shore LNG facilities.¹²⁵⁹

The involvement of the nearest adjacent coastal state governor

The air and water pollution laws of the nearest adjacent coastal state, to the extent that they are consistent with federal law, would apply to the deepwater port project if the state’s seaward boundaries—if extended beyond three miles—would encompass the port site.¹²⁶⁰ (Recall that ports closer to shore than three miles will likely be under FERC’s jurisdiction.) In this situation, the state’s

¹²⁵¹ 40 C.F.R. § 262.10. They also must determine if the wastes are ignitable, corrosive, reactive or toxic pursuant to 40 C.F.R. § 261, Subpart C.

¹²⁵² Used oil is defined at 40 C.F.R. § 279.

¹²⁵³ 33 U.S.C. § 1502(1) defines an adjacent coastal state as one that would be directly connected to the deepwater port by pipeline or located within 15 miles of the port, or that is “so designated by the Secretary.” A state can request designation.

¹²⁵⁴ 33 U.S.C. § 1508(c)(8).

¹²⁵⁵ 33 U.S.C. § 1508(b)(1).

¹²⁵⁶ Dismukes, *supra* note 1, 76.

¹²⁵⁷ Rivera Newsletters. “Two LNG months in a nutshell 27” (Feb. 9, 2009) <https://www.rivieramm.com/news-content-hub/news-content-hub/two-lng-months-in-a-nutshell-27-53749>.

¹²⁵⁸ Altman, George. “Liquefied natural gas terminal south of Dauphin Island approved.” AL.com. (Sept. 16, 2010) https://www.al.com/live/2010/09/liquefied_natural_gas_terminal.html.

¹²⁵⁹ This fact was noted by the Congressional Research Service in its 2009 report on LNG import terminals. Congressional Research Service. “Liquefied Natural Gas (LNG) Import Terminals: Siting, Safety, and Regulation.” (Dec. 14, 2009) p. 17. <https://crsreports.congress.gov/product/pdf/RL/RL32205>.

¹²⁶⁰ 33 U.S.C. § 1518(b). “Under the Deepwater Port Act, Deepwater Port projects locating beyond 9 nautical miles from the Louisiana shoreline or 3 nautical miles from the Texas shoreline will likely need an EPA Region 6 issued preconstruction and operating permit” for its air emissions. “Air Permitting for Deepwater Port Act Projects in the South Central Region.” EPA. <https://www.epa.gov/caa-permitting/air-permitting-deepwater-port-act-projects-south-central-region>.

law is said to be “federalized” and would apply to the actions of MARAD, the U.S. Coast Guard, and the EPA.

FERC’s authority over pipelines for deepwater ports

FERC has authority over permitting of any pipeline portion of a deepwater port that is located landward of the high-water mark. It also has authority over interconnecting facilities that are not part of the deepwater port itself.¹²⁶¹ Such pipelines are subject to Section 7 of the Natural Gas Act, which authorizes FERC to issue certificates of “Public Convenience and Necessity” for “the construction or extension of any facilities...for the transportation in interstate commerce of natural gas.”¹²⁶² For these projects, the Energy Policy Act of 2005 designates FERC as the lead agency for coordinating all federal permits and authorizations, as well as complying with NEPA. It establishes the schedule of the decision-making procedures, sets deadlines, and maintains a complete consolidated record of all federal administrative decisions regarding the project.¹²⁶³

Underwater pipelines have an unsettling safety record: the U.S. Government Accountability Office issued a report in 2021 finding that the Department of the Interior’s Bureau of Safety and Environmental Enforcement has a weak program for ensuring underwater pipeline safety. It also notes that the BSEE has allowed over 97% of all decommissioned pipeline mileage on the Gulf of Mexico seafloor, since the 1960s, to remain in place.¹²⁶⁴ The GAO found that the Bureau doesn’t sure the standards for cleaning and burying this decommissioned pipeline is met, increasing the risk of environmental and safety hazards now and in the future.¹²⁶⁵

¹²⁶¹ See 33 U.S.C. § 150(b)(9)(C).

¹²⁶² 15 U.S.C. § 717f.

¹²⁶³ Energy Policy Act of 2005, Pub. L. No. 109-58, Sect. 313, amending 15 U.S.C. § 717n.

¹²⁶⁴ “Offshore Oil and Gas: Update Regulations Needed to Improve Pipeline Oversight and Decommissioning.” U.S. GAO. GAO-21-293. (Mar. 29, 2021) <https://www.gao.gov/products/gao-21-293>.

¹²⁶⁵ *Id.*

GLOSSARY

CAUTION: THESE AREN'T LEGAL DEFINITIONS

The legal definition of these terms may vary! These definitions are provided as an aid to understanding the LNG guide only. When making legal arguments, refer to the relevant law (statute / regulation / guidance) to confirm these definitions apply.

Approved jurisdictional determination (AJD) – a document provided by the Army Corps stating the presence or absence of “waters of the United States” on a parcel or a written statement and map identifying the limits of “waters of the United States” on a parcel. This information is used during the permitting process to compute impacts, compensatory mitigation requirements, and other resource protection measures. Used in **404 permitting**.

Aquatic resources – a natural resource that wholly or partially contains water including, but not limited to wetlands, rivers, streams, lakes, channelized waterbodies or estuarine waterbodies. Not all aquatic resources fall within the Army Corps’ jurisdiction, which covers only waters of the United States. Used in **404 permitting**.

Arbitrary and capricious – A shorthand for the standard of review that a court uses when deciding if a permitting agency has complied with its obligations when permitting a project. This standard originates in Administrative Procedures Act § 706. It is a deferential standard that usually results in the court upholding an agency’s decision unless an advocate can show that the agency’s decision does not have a reasonable basis or adequate consideration of the law or facts. A few ways to show arbitrary and capricious behavior could include: showing that the agency failed to consider a relevant issue / facts raised in comments that it should have addressed; showing that the agency considered something it was prohibited from considering by law; or showing that it interpreted its regulations in a contradictory manner when compared to previous decisions. It can be difficult to show that an agency’s actions are arbitrary and capricious, but it is not impossible to do so.

Air Dispersion Modeling – Computer modeling used to estimate the concentration of an air pollutant in the ambient air as a result of new emissions and from existing sources; Air Dispersion Modeling is required as part of the Prevention of Significant Deterioration permitting process to assess impacts of a new or modified source on the National Ambient Air Quality Standards. Air dispersion modeling is also sometimes required by states to assess the impacts of Toxic Air Pollutants. Used in **Clean Air Act Permitting**.

Area of potential effects (APE) - the geographic area within which the project may cause direct and/or indirect effects (including physical, visual, vibratory, or audible effects) to the character or use of historic properties. This includes all areas of construction, such as rights-of-way, compressor stations, meter stations, staging areas, extra work spaces, storage yards, communication sites, access roads, and other ancillary facilities. Used in **NEPA reviews**.

Area Source – An Area Source is a ‘minor’ source of Hazardous Air Pollutants, i.e. a source whose Potential to Emit Hazardous Air Pollutants is less than the Major Source Thresholds for Hazardous

Air Pollutants (25 tons per year for total Hazardous Air Pollutants and 10 tons per year for any single Hazardous Air Pollutant). See 42 U.S.C. § 7412(a)(2). Used in **Clean Air Act Permitting**.

Attainment Area – An Attainment Area is any area (often a county or parish) that EPA has designated as meeting the National Ambient Air Quality Standards for a given Criteria Pollutant. Note that an area may be in Attainment for certain Criteria Pollutants but Nonattainment for others. Used in **Clean Air Act Permitting**.

Best available control technology (BACT) – BACT is the air pollution control technology requirement for new or modified sources subject to Prevention of Significant Deterioration (i.e. Major NSR Sources located in Attainment Areas). Despite its name, BACT is not truly a particular control technology, but instead a short-term emission limit based on the use of a given control technology or operating practice. BACT is defined at 40 C.F.R. § 52.21(b)(12), but in short BACT is meant to be an emission limit based on the best-controlled (i.e. lowest emitting) similar source, unless the proposed facility can demonstrate that the control technology would not be technically feasible or would result in excessively burdensome energy, environmental, and economic impacts and other costs. Used in **Clean Air Act Permitting**.

Biological assessment – The result of an informal consultation between a permitting agency and Fish & Wildlife Services (for terrestrial species) or the National Marine Fisheries Service (for marine species), a document that describes the listed species and critical habitat that may be affected by a project, reports the results of the site surveys that were conducted to identify the species and habitat, analyzes the effects of the proposed project and the project alternatives on these species and habitat, and proposes mitigation that would eliminate or minimize these potential impacts. Flaws in a biological assessment may make a permit invalid. Used in **NEPA reviews**.

Biological opinion - the document that states the opinion of the U.S. Fish & Wildlife Service or the National Marine Fisheries Services as to whether or not a Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. A more scrutinizing review than a biological assessment. Flaws in a biological opinion may make a permit invalid. Used in **NEPA reviews**.

Comment – A way to officially raise concerns about a project during a permitting process. Each agency has its own rules about how and when to file a valid comment. Issues raised in comments usually must be addressed by the permitting agency during the permitting process. Often, an issue must have been raised in a comment for it to be raised as an issue in court litigation. But commentators do not get to litigate a permit in court unless they also have intervened.

Comment period – The times during the permitting process that the public can officially raise concerns about a permit or proposed permit with the permitting agency. The comment period is usually defined in a public notice, but can be extended by the agency on its own behalf or after an extension request has been made by an agency, the public, or the applicant. A comment period may expire quickly—in as little as 10 days—or may extend months. An agency might decline to consider comments that are filed outside of the comment period.

Compensatory mitigation - the restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the

purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved. Used in **404 permitting**.

Cultural resources – any prehistoric or historic site, district, object, cultural feature, building or structure, cultural landscape, or traditional cultural property (including artifacts, records, and related material remains). The project sponsor identifies all cultural resources in the area of potential effects, and agencies and consulting parties consult to determine if any qualify as historic properties. Used in **NEPA reviews**.

Cumulative Impact - the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time. Used in **NEPA reviews, FERC, DOE, and 404 permitting**.

Criteria pollutant – Criteria Pollutants are the six common air pollutants for which EPA has established National Ambient Air Quality Standards: Ozone (regulated as Volatile Organic Compounds and Nitrogen Oxides, as these are Ozone precursors), Particulate Matter, Sulfur Dioxide, Nitrogen Dioxide, Carbon Monoxide, and Lead. Used in **Clean Air Act Permitting**.

Direct impact – impacts directly caused by the project that occur simultaneously and at the same place as the action. For example, a direct effect of construction may be the felling of trees and leveling of the land where the terminal is to be built, destroying habitat or cultural resources. Used in **NEPA reviews, FERC, DOE, and 404 permitting**.

Emission Factor – An emission factor is the rate an air pollutant is emitted per unit of production, throughput, combustion, or other measurable, planned activity. A simple example would be that for every ton of coal burned in a power plant, the plant emits nine pounds of NO_x; the emission factor here would be expressed as 9 lb/ton. If a planned coal power plant intends to burn 1 million tons of coal per year, that emission factor would indicate the plant will emit 9 million pounds of NO_x (9 * 1,000,000 = 9,000,000), or 4,500 tons of NO_x per year. Used in **Clean Air Act Permitting**.

Formaldehyde – Formaldehyde (often abbreviated HCHO based on its chemical formula) is both a Hazardous Air Pollutant and a Volatile Organic Compound. Formaldehyde is typically the highest-emitted Hazardous Air Pollutant at LNG facilities. It is a known human carcinogen and also causes irritation to the lungs, throat, and eyes; it is especially harmful for those with asthma. Used in **Clean Air Act Permitting**.

Fugitive Emissions – Fugitive (air) emissions are defined as “those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.” 40 C.F.R. § 52.21(b)(20). Fugitive emissions are contrasted with point sources, and are typically emitted at LNG facilities from leaking infrastructure and some venting activities. Used in **Clean Air Act Permitting**.

Hazardous Air Pollutants (HAPs) – Hazardous Air Pollutants are pollutants listed by Congress or EPA as especially toxic and/or carcinogenic even in small quantities, and are not regulated as Criteria Pollutants (other than lead, which is both a Criteria Pollutant and a HAP). HAPs are regulated under the National Emissions Standards for Hazardous Air Pollutants as well as the Clean Air Act’s

Maximum Achievable Control Technology standards. See 42 U.S.C. § 7412. Used in **Clean Air Act Permitting**.

Indirect impact – impacts caused by the project that are reasonably foreseeable at the time of the action but may occur later or at a distance. Used in **NEPA reviews, FERC, DOE, and 404 permitting**.

Intervening – an act an advocate must take to preserve the right to litigate an agency’s permitting decision. Each agency sets its own rules on how and when intervention must happen. Intervention is usually done by filing a short motion with the permitting agency and often does not require the advocate to file comments at the same time. An agency might not explicitly confirm that you have fully complied with the steps needed to intervene so it is important to follow its rules on intervention. The intervention period is often stated in a public notice about the project, but can be extended by the agency. It sometimes overlaps with the comment period. Intervening is distinct from commenting or protesting a project.

Jurisdiction – whether an agency or court has power over an issue. The jurisdiction of agencies and courts is set by statute. For example, the Natural Gas Act defines which courts have jurisdiction over permit appeals; the Clean Water Act triggers the Army Corps’ permitting authority only when certain aquatic resources are present. Raising issues to an agency that has no jurisdiction to consider them may result in those issues being ignored, so it is important to target the correct agency. However, which agency has jurisdiction over an issue can be unclear and may need to be litigated. In general, it is better to raise an issue with as many agencies that might have jurisdiction even if their jurisdiction is questionable, rather than forfeit the issue entirely. In terms of court jurisdictions, failure to file a lawsuit in the right jurisdiction can be more expensive and time consuming than targeting the correct jurisdiction. In the worst case it may cause you to forfeit your ability to challenge the permit.

Litigate – in the context of LNG permitting, to bring a lawsuit against the administrative agency that issues permits in court. Most LNG-related lawsuits are brought in federal appeals court because of the Natural Gas Act.

LNG terminal – as defined by 15 USC § 717a(11), includes all gas facilities located onshore or in State waters that are used to receive, unload, load, store, transport, gasify, liquefy, or process natural gas that is imported to the United States from a foreign country, exported to a foreign country from the United States, or transported in interstate commerce by waterborne vessel, but does not include waterborne vessels used to deliver natural gas to or from any such facility; or any pipeline or storage facility subject to FERC’s jurisdiction under 15 USC § 717f. Used in **FERC and DOE permitting**.

Lowest Achievable Emission Rate (LAER) – This is the control technology requirements for Major Nonattainment New Source Review. For example, if a Major Source of Sulfur Dioxide is to be located in an area that is Nonattainment for Sulfur Dioxide, the source must apply comply with Lowest Achievable Emission Rate. This is similar to BACT except that there is no consideration of environmental, economic, or energy costs; if a similar source has demonstrated the lowest emission rate, a new source must meet that same emission rate unless very exceptional circumstances apply. Used in **Clean Air Act Permitting**.

Major Source – A Major Source is a source whose Potential to Emit air pollutants exceeds particular thresholds set out by various Clean Air Act requirements. For example, under Major New Source Review, the Major Source Threshold applicable to LNG facilities will be 250 tons per year of any

Criteria Pollutant (or associated precursor); if a facility's potential particulate matter emissions are 250 tons per year or greater, it is a Major Source for purposes of New Source Review. Note that there are also Major Sources under Title V (potential emissions of Criteria Pollutants greater than 100 tpy or is major for Hazardous Air Pollutants) and Major Sources of Hazardous Air Pollutants (potential emissions of Hazardous Air Pollutants greater than 25 tpy total or 10 tpy for any individual Hazardous Air Pollutant). Used in **Clean Air Act Permitting**.

Maximum Achievable Control Technology (MACT) – This is the air pollution control technology required for Major Sources of Hazardous Air Pollutants, typically implemented as part of the National Emission Standards for Hazardous Air Pollutants. See 42 U.S.C. § 7412(d)(3). For Major Sources of Hazardous Air Pollutants for which no NESHAP standard has been promulgated, MACT shall be determined by the permitting authority on a case-by-case basis. 40 C.F.R. § 63.40 *et seq.* Used in **Clean Air Act Permitting**.

Minor New Source Review – Minor Sources of Criteria Pollutants are governed by Minor New Source Review, typically through a permit program. Requirements will vary by state. Used in **Clean Air Act Permitting**.

National Ambient Air Quality Standards (NAAQS) – EPA-established standards for the allowable concentration in the air for the six Criteria Pollutants. Areas meeting the NAAQS are called Attainment Areas; areas not meeting the NAAQS are called Nonattainment Areas. Used in **Clean Air Act Permitting**.

National Emission Standards for Hazardous Air Pollutants (NESHAP) – National Emission Standards for Hazardous Air Pollutants, found at 40 C.F.R. § 63, are the technology-based emissions and performance standards set by EPA for Hazardous Air Pollutants. As to LNG facilities, several NESHAPs are applicable, for instance, stationary combustion turbines are subject to a NESHAP (40 CFR 63, Subpart YYYY). Standards promulgated after 1990 are referred to as “Maximum Achievable Control Technology” or “MACT” standards. Used in **Clean Air Act Permitting**.

New Source Performance Standards (NSPS) – New Source Performance Standards, found at 40 C.F.R. § 60, are the technology-based emissions and performance standards set by EPA for Criteria Pollutants. For instance, and of relevance to LNG facilities, all new stationary combustion turbines must meet the NSPS emission limits for criteria pollutants like Particulate Matter as set out in Subpart KKKK of the NSPS rules (40 C.F.R. § 60.4300). Used in **Clean Air Act Permitting**.

New Source Review (NSR) – New Source Review are the Clean Air Act provisions applicable to new or modified Major Sources of Criteria Pollutants. If a new Major Source is located in an Attainment Area, the applicable New Source Review requirements are the Prevention of Significant Deterioration requirements (40 C.F.R. § 52.21). If the Major Source will be located in a Nonattainment Area for a given pollutant, and will emit that pollutant, Nonattainment New Source Review will be required for that pollutant. Used in **Clean Air Act Permitting**.

Nonattainment New Source Review (NNSR) – If a Major Source will be located in a Nonattainment Area and will emit the corresponding Nonattainment pollutant (or precursor, such as NO_x in an Ozone Nonattainment Area), it must be permitted under Nonattainment New Source Review. This requires use of control technology pursuant to Lowest Achievable Emission Rate requirements and the

requirement to offset new emissions with enforceable reductions from other sources in the area. Used in **Clean Air Act Permitting**.

Ozone – Ozone, specifically ground-level Ozone, is a key contribution to smog and harmful to humans, especially the elderly, the young, or individuals with lung conditions such as Asthma. Ground-level Ozone is formed through the reaction of NO_x, VOCs, and sunlight. Ozone is a Criteria Pollutant. Used in **Clean Air Act Permitting**.

Potential to Emit (PTE) – Potential to Emit is a legally defined calculation of the maximum emissions of a source, after taking into account control technology and enforceable permit conditions. See 40 C.F.R. § 52.21(b)(4). For instance, if a source has the physical capability to operate continuously for an entire year, the Potential to Emit calculation must assume full-time operations, unless an enforceable permit condition restricts the hours of operation. Potential to Emit is used to assess whether sources a Major or Minor sources under New Source Review, Title V, and NESHAP. Used in **Clean Air Act Permitting**.

Preliminary jurisdictional determination (PJD) – during the Army Corps' permitting process, when the question of which waterbodies are jurisdictional is set aside voluntarily by the applicant to expedite review of its project during the permit process. A PJD is not a legally binding determination of whether the aquatic resources on site are jurisdictional. For purposes of computation of impacts, compensatory mitigation requirements, and other resource protection measures, a permit decision made on the basis of a PJD treats all aquatic resources that would be affected in any way by the permitted activity on the site as jurisdictional aquatic resources, even if they are not. Used in **404 permitting**.

Prevention of Significant Deterioration (PSD) – Prevention of Significant Deterioration is the set of permitting requirements for a new or modified Major Source in an Attainment Area. PSD requires the use of the Best Available Control Technology and a demonstration via Air Dispersion Modeling that the source's emissions will not cause or contribute to an exceedance of the National Ambient Air Quality Standards. Used in **Clean Air Act Permitting**.

Protest – A protest is a type of response that the public or anyone else can file in a DOE proceeding for an application to import or export gas. It does not grant the protesting party the same rights that an intervenor has (e.g., to litigate the approved application in court) but it does convert the proceeding into a contested proceeding, meaning that more communications between the applicant and DOE must be on the record. Unlike a comment, which is simply filed with FERC, a protest must be served (officially sent) to the applicant by the protestor. Used in **DOE permitting**.

Public interest – a term used in a variety of permitting situations, often one that is fairly open to agency discretion to define. In FERC permitting, a LNG facility is to be authorized unless FERC finds that the terminal “will not be consistent with the public interest” It is a less strict standard than the permitting standard for interstate gas pipelines that feed LNG facilities, which requires “public convenience and necessity.” In 404 permitting, an explicit list of 21 public interest factors must be considered before a 404 permit issues. Anything that may affect the public interest is generally fair game to raise in comments, even if a court ultimately may decide it does not matter when reviewing the agency's permitting decision. Used in **FERC and 404 permitting**.

Public convenience and necessity – the standard of review a pipeline used for a LNG facility must meet to receive a certificate under the Natural Gas Act. Like the standard review for a facility, it requires FERC to balance the public benefits of a project against the adverse consequences. It requires additional analysis by FERC as to whether the project is needed. The term is not defined in the statute and fairly open to agency discretion to define.

Regulated pipeline – to be regulated by FERC, the pipeline transporting gas to the LNG facility must cross interstate lines. For export facilities, only once the gas is processed by the LNG facility does it become liquified.

Regulations – Rules that are written by administrative agencies (like FERC, DOE, the Army Corps of Engineers, EPA) to interpret the statutes passed by Congress. Examples include the 404(b)(1) Guidelines. Regulations provide more detail on how an agency complies with a statute (e.g., during permitting) and should be subject to a public notice and comment period before becoming final. Courts typically defer to an agency's interpretation of its own regulations when deciding whether an agency has committed an error during the permitting process.

Scoping comments – a comment period unique to FERC's permitting process for large projects, this is an opportunity for agencies, tribes, developers, advocates and other interested persons to comment on the scope of review that FERC should conduct, given the proposed project. It is an opportunity to help FERC identify information that it should solicit from the applicant during the permitting process and NEPA review. Advocates can use this opportunity to raise issues that are site-specific that the applicant or FERC might not be aware of or otherwise pay attention to, such as the existence of unique cultural resources, or specific uses of the shipping channels and land by neighboring communities that might be impacted. Scoping is also useful to identify possible indirect and cumulative impacts that should be addressed in NEPA documents. Scoping comments do not take a position on the merits of a project or permit; such merits-related comments should be filed during the regular comment period. Used in **FERC permitting**.

Services – the benefits that human populations receive from functions that occur in ecosystems. Used in **404 permitting**.

Special aquatic sites – a subset of waters of the United States that are large or small areas possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. Special aquatic sites include wetlands, sanctuaries and refuges, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes. These sites are generally recognized as significantly influencing or positively contributing to the overall environmental health of the entire ecosystem and receive special attention under EPA's Section 404(b)(1) guidelines. Used in **404 permitting**.

State Implementation Plan (SIP) – The State Implementation Plan is the set of state regulations (and sometimes statutes) that are approved by EPA to ensure a state is meets the NAAQS (or takes necessary steps towards achievement). SIPs will set forth Major New Source Review Requirements and other regulations implemented by the state to meet the NAAQS. Note that SIPs typically will not include regulations regarding HAPs or Title V. Used in **Clean Air Act Permitting**.

Statutes – Laws that are passed by Congress. Examples include the Clean Water Act, Natural Gas Act, Administrative Procedures Act, and National Environmental Policy Act. A clear violation of a

statute during the permitting process can be grounds for overturning an issued permit. If a statute is silent or ambiguous regarding the issue in question, a court may defer to the interpretation of the statute used by the administrative agency charged with interpreting that statute.

Synthetic Minor Source – A Synthetic Minor Source is a source that would otherwise be a Major Source (for New Source Review, Title V, and/or NESHAP) and require Major Source permitting under the applicable requirements, but that has sought and received enforceable permit limits (known as “synthetic minor limits”) that reduce potential emissions to below the Major Source threshold. For example, if a source that would be major if it operated 365 days per year but minor if it only operates 200 days has requested an enforceable permit limit allowing only 200 days of operation per year, and thus is not a Major Source, it is called a Synthetic Minor Source. Used in **Clean Air Act Permitting**.

Title V (and Title V Operating Permits) – Congress passed Title V of the Clean Air Act in 1990 to help fight widespread non-compliance with the Clean Air Act. Title V’s purpose is to simplify enforcement and promote compliance by requiring each major stationary air pollution source (and certain smaller sources) to obtain an operating permit that identifies all applicable Clean Air Act requirements as well as monitoring, recordkeeping, and compliance certification requirements to assure the source’s compliance with those requirements. A Title V permit also must include an enforcement schedule of compliance for any source that will not be in compliance at the time of permit issuance. Used in **Clean Air Act Permitting**.

Toxic Air Pollutants – Toxic Air Pollutants are largely the same as Hazardous Air Pollutants, but the term Toxic Air Pollutants, or air toxics, typically refers state-level regulatory provisions. Used in **Clean Air Act Permitting**.

Volatile Organic Compounds (VOCs) – Volatile Organic Compounds are a large family of gaseous pollutants that combine with sunlight and NO_x to form ground-level Ozone. As such, VOCs are not a Criteria Pollutant but are regulated under New Source Review due to their contribution to the Ozone, which is a Criteria Pollutant. VOCs also include many chemical compounds that are also Hazardous Air Pollutants, such as Formaldehyde and benzene. Unlike many air pollutants discussed in this Guide, VOCs are not primarily the result of combustion (although they are also emitted by combustion sources) but instead are emitted by physical processes and as fugitive emissions. If one pictures a vat of gasoline or turpentine left open to the atmosphere, the odors from that vat are largely VOCs. Used in **Clean Air Act Permitting**.

Waters of the United States – a legal term used in the Clean Water Act to describe features that are subject to Clean Water Act permitting. This term is not defined in the statute, but by regulations. The definition of this term has also been shaped by court opinions and as of the Guide’s publication the definition is in flux. EPA’s website usually maintains the most up-to-date definition of the term. In general, the term includes water bodies that are or have been used in interstate or foreign commerce, wetlands, and some other waters that can be connected to interstate commerce. Used in **401 certifications** and **404 permitting**.