

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

THE POTOMAC RIVERKEEPER, INC.,)
THE CHESAPEAKE BAY)
FOUNDATION, INC., and the)
STATE OF MARYLAND)
DEPARTMENT OF THE)
ENVIRONMENT,)

Plaintiffs,)

CIVIL ACTION NO.: 8:14-CV-00417-TDC)

vs.)

WASHINGTON SUBURBAN)
SANITARY COMMISSION)

Defendant.)

CONSENT DECREE

Citizen Plaintiffs, the Potomac Riverkeeper, Inc. and the Chesapeake Bay Foundation, Inc. (Citizens), filed a Complaint for injunctive relief and penalties against the Washington Suburban Sanitary Commission (WSSC) on February 12, 2014, alleging violations of the Clean Water Act (CWA), 33 U.S.C. § 1251 *et seq.*, and National Pollutant Discharge Elimination System (NPDES) Permit No. MD0051586 (State Discharge Permit No. 95-DP-1055) (Existing Permit) at WSSC’s Potomac Water Filtration Plant (the Plant). On or about October 27, 2015 the State of Maryland, Department of the Environment (the Department) filed a Complaint for injunctive relief and penalties against WSSC alleging violations of the Environment Article of the Annotated Code of Maryland, the CWA, and the Existing Permit at the Plant, as well as a Motion to Consolidate the Department’s claims against WSSC with Citizen Plaintiffs’ lawsuit.

Citizens, the Department, and WSSC (the Parties), without the necessity of trial or adjudication of any issues of fact or law, and without any admissibility of liability by WSSC, consent to entry of this Consent Decree resolving the Department's and Citizens' claims.

WHEREAS, the Department has the powers, duties, and responsibilities vested in it pursuant to Sections 1-301 and 9-301 through 9-344, inclusive, of the Environment Article of the Annotated Code of Maryland, to implement and enforce the environmental laws of the State, including protection of the waters of the State;

WHEREAS, the Department is authorized to administer the NPDES permitting program under Section 402 of the CWA, 33 U.S.C. § 1342 in the State of Maryland;

WHEREAS, the discharge of any pollutant into waters of the State is prohibited by Section 9-322 of the Environment Article, Annotated Code of Maryland and Section 301 of the Clean Water Act, 33 U.S.C. § 1301, unless such discharge is in compliance with the terms, conditions, and requirements of a discharge permit issued pursuant to Section 9-323 of the Environment Article, Annotated Code of Maryland, and the regulations promulgated thereunder, and the CWA.

WHEREAS, the Department and Citizens are entitled to bring federal action for injunctive relief and penalties against WSSC for alleged violations of the CWA and the Existing Permit pursuant to Section 505 of the CWA, 33 U.S.C. § 1365;

WHEREAS, on June 1, 1997, the Department issued the Existing Permit to WSSC for the discharge of pollutants from the Plant to the Potomac River, which is a Use I-P water protected for water contact recreation, aquatic life, and public water supply. The Existing Permit had an effective date of June 1, 1997, and expired on May 31, 2002, but has been

administratively extended and remains in effect until a new permit is issued. A copy of the Existing Permit is attached hereto and incorporated herein as Exhibit A.

WHEREAS, the Plant provides drinking water to most of Montgomery County and parts of Prince George's County, Maryland. The Plant is owned by WSSC and located on the Potomac River, near Watts Branch, at 12200 River Road, in Montgomery County, Maryland. As part of its regular operations, the Plant withdraws millions of gallons of water per day from the Potomac River, filters and treats it to drinking water standards, and discharges the remaining wastewater back into the Potomac River (River). Between September 2009 and January 2015, the Plant discharged 8.73 million gallons per day (MGD) on average of wastewater into the River, which is part of the Chesapeake Bay watershed. This wastewater contains sediments, (measured as Total Suspended Solids (TSS)), Phosphorus and Aluminum, both of which are harmful to aquatic life and degrade water quality.

WHEREAS, the Existing Permit authorizes discharges of wastewater from the sedimentation and flocculation basins (basins) via Outfall 001 subject to effluent limitations and monitoring requirements. With certain limited exceptions based on solids in the intake water and River flow conditions, discharges of TSS are limited to a monthly average of 30 milligrams per liter (mg/l) and a daily maximum of 60 mg/l. Subject to the same exceptions, discharges of Total Aluminum (Al) are limited to a monthly average of 4 mg/l and a daily maximum of 8 mg/l. The discharges of TSS and Al are required to be sampled and monitored two times per week at Monitoring Point 101 and reported to the Department on monthly Discharge Monitoring Reports (DMRs);

WHEREAS, the Existing Permit authorizes discharge of filter backwash, and other flows disclosed in the permit application and not connected with the flocculation and sedimentation

basins, via Outfall 001 subject to monitoring requirements but not effluent limitations. Discharges of TSS and Al in the filter backwash are required to be monitored two times per week at Outfall 001 and reported to the Department on monthly DMRs. Discharges from the flocculation and sedimentation basins are subject to effluent limitations and are required to be monitored two times per week at an internal monitoring location known as Monitoring Point 101 and reported to the Department on monthly DMRs;

WHEREAS, the Existing Permit requires WSSC to provide notice to the Department within 24 hours of becoming aware of an effluent violation, and to provide within five days a written explanation of the violation and the steps taken to reduce or eliminate the violation. The Existing Permit also includes other provisions, such as the requirement to accurately report monthly averages and adequately operate and maintain the Plant and its systems of treatment and control;

WHEREAS, on May 20, 2014, the Department provided notice to WSSC of its intent to file suit under Section 505 of the CWA, 33 U.S.C. § 1365, to enforce violations by WSSC of the Clean Water Act and Section 9-322 of the Environment Article of the Annotated Code of Maryland. Citizens provided notice to WSSC of their intent to file suit under Section 505 of the CWA on November 13, 2013, and filed a Complaint with this Court on February 12, 2014, alleging violations of WSSC's NPDES permit.

I. GENERAL PROVISIONS

1. **Jurisdiction and Venue.** This Court has jurisdiction over the subject matter of this action and the parties pursuant to 28 U.S.C. § 1331 and 33 U.S.C. § 1365(a). For the purposes of this Consent Decree and the underlying actions, WSSC waives all objections and defenses that it may have to jurisdiction of this Court or venue in this District. WSSC does not challenge the

terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

2. Retention of Jurisdiction. Jurisdiction shall be retained by this Court for the purposes of issuing such further orders and directions as may be necessary and appropriate for the implementation or modification of this Consent Decree, and for effectuating implementation, enforcing compliance with, or resolving disputes regarding the provisions of this Consent Decree.
3. Reservation of Rights. The parties retain the right to seek to enforce the terms of this Consent Decree and take any action authorized by federal or state law not inconsistent with this Consent Decree.
4. Parties Bound. This Consent Decree shall be binding upon the Department, Citizens, and WSSC and its officers, agents, servants, employees, successors, and assigns.
5. Effective Date. This Consent Decree shall become effective upon the Court's entry. Where indicated, time frames for obligations under this Consent Decree begin to run prior to the effective date.

II. SCOPE OF THIS CONSENT DECREE

6. The express purpose of the parties entering into this Consent Decree is for WSSC to:
 - i. undertake short-term operational changes and capital improvements at the Plant that will enable WSSC to reduce significantly the pounds per day of solids discharged to the River;
 - ii. establish a long-term schedule for WSSC to implement upgrades to the existing Plant or to design and construct a new plant to achieve the effluent limits, conditions, and waste

- load allocations established by the Department and/or in this Consent Decree and incorporated in a new discharge permit to be issued by the Department;
- iii. pay a civil penalty to the Department and undertake Supplemental Environment Projects (SEPs) to resolve all past alleged violations.
7. The Department's approval of plans and specifications pursuant to this Consent Decree does not in any way warrant that the plans and specifications will be successful in controlling water pollution or reducing permit violations. Neither the Department nor Citizens, by their consent to entry of this Consent Decree, warrant or aver in any manner that WSSC's compliance with this Consent Decree demonstrates compliance with other provisions of the Clean Water Act, the Environment Article, or any permit unrelated to the allegations that are the subject of these proceedings.
8. This Consent Decree does not limit the right of Citizens to petition EPA for the Department's failure to reissue the Existing Permit or propose the Proposed Permit, as those terms are defined below, by the date set forth herein, participate in public hearings or submit comments regarding a proposed permit, or to challenge any proposed permit's terms should those terms be inconsistent with the terms of this Consent Decree or contrary to law.

III. PERMIT RENEWAL CONDITIONS AND INTERIM REQUIREMENTS

9. Pursuant to this Consent Decree, the Department intends to share with Citizens and WSSC, for review and comment, a draft proposed permit for the Plant no later than November 1, 2015. This draft permit shall then form the basis for publishing a tentative determination to renew the permit for the Plant (Proposed Permit). At a minimum, the limitations and conditions in the Proposed Permit shall be no less stringent than the following for the combined discharge from all Plant sources: TSS monthly average concentration limits of 30

mg/l; daily maximum concentration limits of 60 mg/l; monthly average Nephelometric Turbidity Units (NTU) of 50 NTU and a maximum of 150 NTU that cannot be exceeded at any time; monthly average concentration limits of 4 mg/l for iron and Aluminum, respectively, and daily maximum limits of 8 mg/l for iron and Aluminum, respectively; pH range 6.5 to 8.5; and daily maximum of less than 0.1 mg/l total residual chlorine. The Department shall evaluate technology-based limits for the control of total Phosphorus (TP) for the purpose of establishing permit limits for TP. The concentrations and loadings of total nitrogen (TN), TSS, Al, and TP discharged to the Potomac River shall be monitored and concentrations shall be reported on a daily 24-hour composite sampling basis to determine compliance with all effluent limits in this Paragraph and to demonstrate no net annual discharge of TSS, TN or TP to the River. "No net annual discharge" means that the loading of TSS, TN or TP in WSSC's discharge is no greater than the loading of TSS, TN or TP in the River intake on an annualized basis.

10. Effluent monitoring specifications in the Proposed Permit shall include continuous and recorded flow measurement and daily 24-hour composite sampling for concentrations of TSS, TN, Al, and TP for all other parameters except TRC, pH, and WET; three daily grab samples for Total Residual Chlorine (TRC) and pH; and effluent turbidity samples to include hourly grab samples or online turbidity instrument results in addition to daily 24-hour composites. Influent monitoring specifications in the Proposed Permit shall include the following: continuous and recorded flow measurement and daily 24-hour composite sampling for TSS, TP, and TN, and hourly flow through turbidity measurement for NTU. No later than three months from MDE's publication of a tentative determination of a Proposed Permit, WSSC shall submit to the Department for review and approval a study plan to

evaluate wastewater toxicity of the effluent using biomonitoring consistent with the Department's published protocols.

11. Unless otherwise stated, the limits and conditions set forth in Paragraphs 9 and 10 shall be enforceable pursuant to this Consent Decree upon Lodging regardless of whether the Proposed Permit has been finalized. Any waste load allocations developed by the Department as well as any additional water quality or concentration limits imposed by the Department, shall be enforceable under this Consent Decree once finalized. Any monitoring obligations set forth in Paragraph 10 that cannot be met without installation of additional equipment shall become enforceable pursuant to this Consent Decree in accordance with the approved Monitoring Improvement Plan and schedule, as described in Paragraph 16. Notwithstanding any other provisions of this Consent Decree, 24-hour flow-proportioned composite sampling of TSS for the effluent shall commence immediately. Twenty-four hour time-proportioned composite sampling of TSS for the raw water influent shall commence no later than November 1, 2015, but shall be converted to 24-hour flow-proportioned composite sampling by December 1, 2015.

IV. INTERIM PERFORMANCE MEASURES AND PLANT IMPROVEMENTS

A) Monitoring Requirements

12. No later than July 1, 2015, WSSC shall monitor NTU and TSS by collecting at least one daily grab sample at the River intake for purposes of collecting the data necessary to establish the ratio of NTU to TSS under varying load conditions. Such data collection shall be submitted to the Department as an attachment to WSSC's DMRs and shall continue on at least a daily basis through April 30, 2016.

13. No later than August 1, 2016, WSSC shall submit a report and supporting documentation to Citizens for review and the Department for review and approval that identifies the ratio of NTU to TSS measurements under varying load conditions. Regardless of the NTU to TSS ratio, the NTU threshold in Paragraph 22(i)(b) will not be set at less than 85 NTU.
14. Upon Lodging of this Consent Decree, WSSC shall monitor NTU and monitor the concentration and amount (in pounds) of TSS, TN, Al, and TP in the effluent at existing Monitoring Point 101 on a daily basis. Once the new monitoring equipment is installed in accordance with the approved Monitoring Improvement Plan schedule pursuant to Paragraph 16, all monitoring shall occur at the new monitoring locations and pursuant to the new monitoring requirements.
15. The results of all monitoring required in Part A of this Section shall be submitted to the Department each month as an attachment to the DMRs. In addition, WSSC shall also indicate on such attachment:
 - i. each day that discharge from the basins occurred;
 - ii. whether such discharge occurred pursuant to Subparagraphs 22(i)–(iii) or another reason; and
 - iii. the estimated daily amount (in pounds) of TSS discharged to the River from the basins determined according to the methodology established pursuant to Paragraph 16.iii.

The monitoring requirements set forth in Part A of this Section shall be enforceable pursuant to the Consent Decree regardless of the Plant's NPDES permitting status.

16. No later than October 1, 2015, WSSC shall submit to Citizens for review and the Department for review and approval a detailed plan for monitoring the Plant's influent and effluent

(Monitoring Improvement Plan) that includes:

- i. installation of continuously recording flow meters, 24-hour composite monitors, and turbidity meters at appropriate and representative locations necessary to accurately monitor and report flow (MGD), NTU, TSS, TN, and TP loadings and concentrations in the River intake, and flow (MGD), NTU, TSS, TN, Al, and TP in WSSC's effluent;
- ii. installation of a turbidity meter at an appropriate and representative location to accurately monitor and report hourly NTU at the filter influent for purposes of determining compliance with Part C of this Section; and
- iii. a methodology or basis for estimating and reporting the amount in pounds of TSS discharged to the River from the basins on any day that discharge from the basins occurs.

The Monitoring Improvement Plan shall include a schedule for installation of the new monitoring equipment as expeditiously as possible, but no later than December 1, 2016, provided that, consistent with Paragraph 34, the Department issues its final written approval of the Monitoring Improvement Plan within 90 days of WSSC's submittal thereof. Once installed, WSSC shall immediately begin monitoring the parameters set forth in this Paragraph on a daily basis.

B) Maintenance Improvement Plan

17. No later than November 1, 2015, WSSC shall submit to Citizens for review and the Department for review and approval a plan to minimize the need for, and frequency of, basin

shut downs during planned or routine maintenance events and to minimize the discharge of solids from the flocculation and sedimentation basins when shut down is necessary during routine, planned, or emergency maintenance events (Maintenance Improvement Plan).

WSSC shall begin implementing the Maintenance Improvement Plan immediately upon the Department's approval and shall incorporate the Maintenance Improvement Plan into its maintenance manual.

C) Performance Measures and Interim Operating Conditions

18. Basin Discharge Monitoring. Along with DMRs and attachments to DMRs, WSSC will submit monthly supervisory control and data acquisition (SCADA) reports, in spreadsheet format, to the Department summarizing daily SCADA information for the purpose of identifying when basin discharges begin and end.
19. Wastewater with Filter Backwash. WSSC shall determine whether Blue Plains will accept wastewater that contains WSSC's filter backwash until such time as the Long-Term Capital Improvement Project, as that term is defined in Section V, is implemented and submit to the Department and Citizens, along with verifying documentation from Blue Plains, any agreement reached between Blue Plains and WSSC within 30 days of Entry of this Consent Decree.
20. Short-Term Solids Removal Requirement. For the period beginning November 1, 2015 to October 31, 2016, and continuing thereafter until the tasks identified in the Department's notification pursuant to Paragraph 27 are implemented or August 1, 2019, whichever comes first, WSSC shall demonstrate, based on a two-year rolling average, that it has dewatered and removed at least 40% of the River intake solids (dry weight equivalent) in addition to the dry

weight equivalent of the annual tons of solids resulting from the addition of chemicals, as calculated pursuant to the equation in Appendix A.

21. Long-Term Solids Removal Requirement. Upon implementation of all of the tasks identified in the Department's notification pursuant to Paragraph 27 or August 1, 2019, whichever comes first, and continuing until the Long-Term Capital Improvement Project in Section V is fully implemented, WSSC shall demonstrate, based on a two-year rolling average, that it has dewatered and removed at least 50% of the River intake solids (dry weight equivalent) in addition to the dry weight equivalent of the annual tons of solids resulting from the addition of chemicals, as calculated pursuant to the equation in Appendix A.

In the event WSSC uses a chemical not identified in Appendix A that contributes to the annual amount in tons of solids resulting from the additional of chemicals, WSSC shall include the dry weight equivalent in its Appendix A calculations and shall notify the Citizens and the Department of same within 30 days thereof.

22. Interim Operation Conditions. Upon Lodging of this Consent Decree, WSSC shall cease discharging from the flocculation and sedimentation basins at all times except under the conditions in Subparagraphs 22(i)–(iii):

- i. Water Quality Based Triggering Event for Sequential Sedimentation Basin Discharge to the Potomac River. Sequential basin discharge to the Potomac River may occur where WSSC is also simultaneously pumping solids from alternate basins to the Solids Handling Facility for treatment when all four of the following conditions are met:
 - a) the average turbidity of the in-service basins, measured at the basin effluent/filter influent, is greater than or equal to 2.0 NTU;
 - b) the raw water turbidity is greater than 85 NTU;

- c) the intake loading rate is greater than 90,000 pounds per day based upon either the NTU to TSS ratio of 1.28 currently in use by WSSC or the NTU to TSS relationship curve approved by the Department pursuant to Paragraph 13, whichever is in effect at the time; and
- d) River flow rate is greater than 10,000 cubic feet per second, as measured at the U.S. Geological Survey Little Falls Gauging Station.

The 85 NTU threshold in subsection (b) of this Subparagraph shall be proportionately adjusted upward if the NTU to TSS ratio is lower than 1.28. Under no circumstance shall the 85 NTU threshold in subsection (b) of this Subparagraph be set at less than 85 NTU.

- ii. Water Quality Based Suspension of Sequential Sedimentation Basin Discharge to the Potomac River. Discharge from the basins to the River pursuant to Subparagraph 22(i), above, shall cease immediately once all of the following conditions are met:
 - a) average turbidity of the in-service basins measured at the basin effluent/filter influent drops to less than or equal to 1.5 NTU;
 - b) the raw water turbidity falls below 85 NTU; and
 - c) The intake loading rate falls below 90,000 pounds per day.
- iii. Maintenance, Repair or Upgrade:
 - a) WSSC may discharge from the flocculation and sedimentation basins due to maintenance events only pursuant to the terms of the approved Maintenance Improvement Plan under Paragraph 17.
 - b) The Maintenance Improvement Plan may allow basin discharges during routine maintenance; planned maintenance; capital improvements specifically targeted to the sedimentation basins; and non-routine process upset events such as SCADA,

mechanical, or chemical feed failures affecting coagulation, flocculation, or sedimentation processes that could impact water quality. Upset events shall not include failures due to events that were reasonably foreseeable and within WSSC's control, including failures arising from a lack of preventative maintenance or that were caused by operator error.

- c) Where discharge from one or more basins is required, whether prior to approval of the Maintenance Improvement Plan or after such approval is obtained, WSSC shall notify the Department five days in advance of any planned discharge. Where discharge from one or more basins is required for an emergency event, WSSC shall provide notification to the Department pursuant to Subparagraph 22(iv).
- iv. In the event that WSSC discharges pursuant to Paragraph 22, WSSC shall provide oral notification to the Department within 24 hours of commencing discharge and written notification within five days of the cessation of discharge.
- v. WSSC shall maintain logs demonstrating continuous operation and compliance with the conditions in Subparagraphs 22(i)-(iv).

23. For purposes of Paragraphs 20 and 21:

- i. the term "annual" shall mean the 12-month rolling average, starting from the date the obligation begins;
- ii. compliance will be determined based on a two year rolling average;
- iii. the amount of solids in the River intake shall be based on dry weight and measured through 24-hour composite sampling of TSS as required under Paragraph 10.
- iv. the amount of solids removed shall be based on dry weight, and determined by records for off-site shipments of solids for proper treatment, storage or disposal that meets all

applicable federal or state standards, and by purchase and delivery records for chemicals that produce additional solids.

WSSC shall submit monthly reports to the Department, as an attachment to the DMRs, certifying the monthly total of solids (dry weight) in the River intake, the monthly dry weight amount of chemicals that produce additional solids, and the monthly total of dewatered solids (dry weight) shipped off-site.

D) Third Party Audit

24. Provided that, consistent with Paragraph 34, the Department issues its final written approval of the proposed scope-of-work for the Auditor within 60 days of receipt of WSSC's submittal thereof, no later than January 1, 2017, WSSC shall complete an Audit Report that identifies Short-Term Improvement Projects to:

- i. achieve the greatest solids removal possible by no later than April 1, 2020 within a cost ceiling of \$ 8.5 million, but in no event less than the solids removal requirements of Paragraphs 20 and 21;
- ii. ensure accurate monitoring of pollutant concentrations and amounts in the Plant influent and effluent, consistent with Paragraph 10;
- iii. determine the amount of solids removed to the Solids Handling Facility and ensure that such data can be reconciled with influent and effluent solid measurements, off-site removal of solids, and chemical addition rates;
- iv. identify and reduce discharge of solids from stormwater Plant infiltration and filter backwash and achieve additional reductions in discharge of Phosphorus, Aluminum, and TSS; and
- v. reduce losses from finished water basins that contribute to discharge flow rates.

25. Design and Cost Limitations.

- i. The Short-Term Improvement Projects shall reflect sound engineering principles and recognize the design of the Plant.
- ii. Expenditures to achieve the objectives of Paragraph 24 shall not exceed \$8.5 million, so long as the solids removal requirements of Paragraphs 20 and 21 are satisfied.
- iii. Expenditures beyond amounts needed to satisfy requirements of Paragraph 21 shall only be required if, based upon the cost-benefit information in the Audit Report (Paragraph 26, below) the Department determines that an identified project or projects will achieve additional reductions in the discharge of solids, Aluminum, or Phosphorus, and that the cost of achieving those additional reductions is proportional to and reasonable in light of the benefits to be achieved.
- iv. Any costs associated with the following tasks are not subject to the limitation of Subparagraphs 25(ii) and (iii):
 - a) shipping any additional dewatered solids off-site;
 - b) maintenance, operational, waste tracking measures, or other repairs recommended by the Audit Report under Paragraph 26 if such work would also be required to maintain, achieve or demonstrate compliance with the Existing Permit.

26. Contents of Audit Report. The Audit Report shall include:

- i. an evaluation of capital projects and operational improvements needed to achieve the Short Term Improvements of Paragraph 24. Such evaluation shall identify, for each capital project or operational improvement:
 - a) total cost, independent of any expenditures required to comply with the Existing Permit;

- b) expected reductions in the discharge of TSS, Phosphorus or Aluminum;
 - c) potential cost savings, e.g., through more efficient use of chemicals or reduced loss of finished water; and
 - d) the time required for implementation.
- ii. any obstacles, delays, or other known problems encountered by the Auditor as well as any other information relevant to the Auditor's work under this Consent Decree.

27. Audit Report Review and Completion Date.

- i. WSSC shall submit the Audit Report to the Department and to Citizens no later than January 1, 2017, provided that, consistent with Paragraph 34, the Department issues its final written approval of the proposed scope-of-work for the Auditor within 60 days of receipt of WSSC's submittal thereof.
- ii. After consultation with Citizens, the Department shall review the Audit Report and select:
 - a) improvements in operations, monitoring, and waste tracking recommended in the Audit Report;
 - b) capital projects that can be completed no later than April 1, 2020 and that are necessary to achieve the goals identified in Paragraph 24.
- iii. The Department shall provide WSSC and Citizens with written notification of its selections as expeditiously as possible, and include:
 - a) an implementation schedule for each task selected;
 - b) identification of any additional solids removal that can be achieved at a cost proportional to and reasonable in light of the benefits to be achieved beyond the requirements of Paragraph 21, no later than April 1, 2020.

28. Deadline for Implementing Short-Term Improvements.

- i. WSSC shall implement the tasks selected by the Department in accordance with the schedules contained in the notification, but no later than April 1, 2020, provided that, consistent with Paragraph 34, the Department issues its selections in Subparagraph 27ii within 90 days of WSSC's submittal of the Audit Report.
- ii. The obligation to complete the tasks set forth in the notification within the specified time frames shall thereafter become enforceable pursuant to this Consent Decree.

29. Selection of Auditor.

- i. WSSC shall consult with the Department and retain an independent third party Auditor to prepare the Audit Report and evaluate and recommend the Short-Term Improvements required under Paragraph 24.
- ii. No later than October 1, 2015, WSSC shall submit to the Department for its review and approval a proposed scope-of-work for the independent third-party Auditor.
- iii. The Department shall endeavor to approve the proposed scope-of-work for the Auditor within 60 days of receipt of WSSC's submittal.
- iv. Provided that, consistent with Paragraph 34, the Department issues its final written approval of the proposed scope-of-work for an independent third-party Auditor within 60 days of WSSC's submittal thereof, WSSC, in accordance with its Procurement Regulations, shall prepare, distribute, and publicize a Request for Proposals (RFP) regarding the Auditor no later than December 31, 2015. Responses to this RFP shall be evaluated in accordance with WSSC Procurement Regulations.
- v. In accordance with those Procurement Regulations and other applicable WSSC Regulations and Standard Procedures, an Auditor shall be selected from among the

proposals, approved by the appropriate authority, and a Notice-to-Proceed (NTP) shall be issued in accordance with those Regulations and Procedures.

- vi. WSSC shall procure an Auditor no later than April 1, 2016, provided that, consistent with Paragraph 34, the Department issues its final written approval of the proposed scope-of-work for the Auditor within 60 days of receipt of WSSC's submittal thereof.
- vii. If the Auditor becomes unable or unwilling to perform or complete the duties described in Part D of this Section, or for other good cause, the parties shall confer in good faith regarding the selection of a replacement Auditor.

30. Auditor Access.

- i. WSSC shall require the Auditor to perform all evaluations needed to complete the Audit Report and to be reasonably available to consult with the Department upon the Department's request.
- ii. WSSC shall provide the Auditor with a Copy of this Consent Decree, bear all costs associated with the Auditor and the Audit, and provide the Auditor with access upon reasonable notice and with consideration of operational impacts to all records, employees, contractors and facilities within the Plant that the Auditor deems reasonably necessary to effectively perform the duties described in this Part, subject to WSSC Standard Procedures and Regulations governing access to sensitive engineering records and security procedures to be followed by visitors to WSSC plants and facilities.

V. LONG-TERM UPGRADE PLAN

31. No later than October 1, 2015, WSSC shall submit to Citizens for their review and comment, and to the Department for review and approval, a proposed scope of work for a Study to determine the plan for the design and construction of an upgrade or upgrades (the Long-Term

Upgrade Plan) needed for the Plant to achieve compliance with all of the effluent limits, conditions described in Paragraphs 9 and 10, and any other limits or conditions included in a new permit if already issued by the Department. The Department will review the proposed scope of work during the same time period that it reviews the scope of work for the Auditor, pursuant to Paragraph 29, and will issue both approvals simultaneously. By December 31, 2015, WSSC, in accordance with its standard procurement procedures, shall prepare, distribute and publicize a Request for Proposals (RFP) for the Study, provided that, consistent with Paragraph 34, the Department has provided its final written approval of the proposed scope of work for the Study within 60 days of receipt of WSSC's submittal thereof. In the event the Department is required by law to impose more stringent effluent limits in the new discharge permit, then WSSC shall incorporate, with the Department's approval, the more stringent limits in the RFP. By January 1, 2017 WSSC shall submit the Long-Term Upgrade Plan to MDE for its review and approval. The Long-Term Upgrade Plan shall include a schedule with deadlines for the following milestones:

- i. completion of the design of the upgrade or upgrades for the Plant (the Long-Term Capital Improvement Project);
- ii. commencement of construction;
- iii. completion of construction; and
- iv. start-up of improvements.

32. Upon approval by the Department, and subject to Section VI below, the work required to implement the Long-Term Capital Improvement Project shall be fully implemented in accordance with the schedule set forth in the Long-Term Upgrade Plan. WSSC shall be subject to a lump-sum stipulated penalty in accordance with Section VIII for failure to fully

implement the Long-Term Capital Improvement Project by January 1, 2026, provided that, consistent with Paragraph 34, the Department has provided its final written approval of the Long-Term Capital Improvement Project within 90 days of receipt of WSSC's submittal thereof.

33. While WSSC's requirement to implement the Long-Term Capital Improvement Project is not contingent upon the availability of State or federal funds, the Department will make its best efforts, within the existing laws, regulations and Department policies, to identify any available State or federal funding to assist WSSC in implementing the Long-Term Capital Improvement Project. The lack of State or federal funding, however, does not constitute a force majeure event under Section X of this Consent Decree and cannot relieve WSSC from its obligations under the law or this Consent Decree. For purposes of this Consent Decree, the Department shall determine WSSC's eligibility for State funding from the Maryland Water Quality State Revolving Loan Fund or any other source in accordance with its standard procedures.

VI. APPROVAL OF PLANS

34. Unless otherwise specified, the Department shall endeavor to review, approve, or disapprove all plans or reports submitted by WSSC pursuant to this Consent Decree within 60 or 90 days of receipt, as specified in the applicable Paragraphs of Sections IV, V, and IX. The time frame for implementation by WSSC of plans, schedules or reports that require the Department's approval shall be extended whenever the Department's review and or approval period goes beyond the designated time period and WSSC can demonstrate in writing that additional time for Department review and/or approval is unrelated to WSSC's failure to respond timely to the Department's written communications. Where such an extension is

warranted, WSSC's deadline for compliance shall be extended by the number of days the Department's review and/or final approval went beyond 60 or 90 days, whichever is applicable. The Department shall notify WSSC in writing within 30 days of submission if it determines that a plan or report is substantially deficient or flawed and shall set forth the bases for that determination in such notification. WSSC shall receive no extension for the time WSSC takes to respond to such notification.

35. Citizens shall have the right to review all plans, schedules, and reports submitted by WSSC pursuant to this Consent Decree and provide the Department and WSSC with written comments within 30 days of receipt. During the period of the Department's review, the Department and Citizens shall consult and make best efforts to collaboratively resolve any disagreements or concerns that may arise regarding the adequacy of WSSC's submittals. To the extent Citizens disagree with the Department's approval or disapproval of a plan, schedule, or report submitted by WSSC pursuant to this Consent Decree, Citizens may invoke Dispute Resolution pursuant to Section XI. Citizens shall also have the right to request copies of any other information submitted by WSSC to the Department in fulfillment of its obligations of this Consent Decree, including DMRs and attachments thereto; provided, that any such requests to WSSC are in writing and otherwise comply with WSSC's Standard Procedure governing requests for copying or inspection of WSSC records, which is currently SP L-07-01 or the Stipulation and Protective Order signed by Judge Chuang on August 6, 2015 regarding confidential material and Sensitive Engineering Records (as defined therein).
36. All plans and schedules submitted by WSSC and approved by the Department pursuant to this Section, subject to any Party's invocation of Dispute Resolution, shall become enforceable pursuant to this Consent Decree immediately upon approval.

VII. REPORTING AND NOTIFICATION

37. Beginning with the first fiscal year quarter following the Entry of the Consent Decree, WSSC shall submit written status reports to the Department and Citizens no later than 60 days after the end of each fiscal year quarter. Status reports shall be submitted in addition to any other reporting, plan, schedule, or certification required under this Consent Decree or pursuant to law, regulation, or permit. The status reports shall state and describe the cause of any failure to comply with this Consent Decree and at a minimum shall include:

- i. the deadlines and other milestones that WSSC was required to meet during the reporting period;
- ii. the progress it made toward meeting them;
- iii. the identification of and reasons for any noncompliance with any condition or obligation established by this Consent Decree; and
- iv. a description of any other matters relevant to the status of its compliance with this Consent Decree.

38. Notification to the Department and Citizens of any noncompliance with any provision of this Consent Decree or anticipated delay in performing any obligation herein shall not excuse WSSC's noncompliance or anticipated delay.

39. WSSC shall promptly submit (in electronic format where possible) any documentation related to the compliance with and enforcement of this Consent Decree, including copies of DMRs and attachments thereto, upon request by Citizens, unless previously submitted by WSSC to Citizens.

40. Unless otherwise specified or required by law, reports, correspondence, approvals, disapprovals, notices, requests, or other submissions relating to or required by this Consent Order shall be provided as follows:

To the Department:

Chief, Enforcement Division
Compliance Program
Water Management Administration
Maryland Department of the Environment
1800 Washington Blvd., Suite 605
Baltimore MD 21230-1719
(410) 537-4175

To Citizens:

On Behalf of Potomac Riverkeeper:

Mary E. Greene
Deputy Director
Environmental Integrity Project
1000 Vermont Avenue, NW, Suite 1100
Washington, DC 20005
(202) 263-4449
mgreene@environmentalintegrity.org

On Behalf of Chesapeake Bay Foundation:

Paul Smail
Staff Litigation Attorney
Chesapeake Bay Foundation
6 Herndon Avenue
Annapolis, MD 21403
(410) 268-8816
psmail@cbf.org

To WSSC:

Jerome K. Blask, General Counsel
WSSC General Counsel's Office
14501 Sweitzer Lane
Laurel, MD 20707-5901(301) 206-8164
Jerome.Blask@wsscwater.com

James R. O'Day, Associate Counsel
WSSC General Counsel's Office
14501 Sweitzer Lane
Laurel, MD 20707-5901
(301) 206-8159
James.ODay@wsscwater.com

41. Each notification of communication sent to or from WSSC, the Department, or Citizens shall be deemed submitted on the date it is electronically submitted. If a party chooses to submit hard copies, such party shall submit via certified mail, return receipt requested, and the submittal date shall be the date such hard copy is postmarked. WSSC shall maintain records of each notification or communication sent to the Department and/or Citizens or received from the Department and/or Citizens for the duration of the Consent Decree.
42. All submissions provided to the Department and Citizens pursuant to this Consent Decree shall be signed by a duly authorized representative of WSSC who has personal knowledge of each submission's contents. Each submission shall include the following certification:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

VIII. STIPULATED PENALTIES

43. Beginning on the date of Entry of this Consent Decree and continuing until the Consent Decree is terminated pursuant to Section XVII, WSSC shall pay stipulated penalties within 30 days of written demand by the Department, in accordance with the following criteria:
- i. Subject to Section VI, which extends the time in which WSSC must comply with deadlines in certain situations, if WSSC fails to meet any deadline under this Consent

Decree, including deadlines established in schedules submitted to and approved by the Department pursuant to Section IV of the Consent Decree, WSSC shall pay \$250 per day for each day beyond the due date required by the Consent Decree until the requirement is met. Subject to Section VI, failure to meet more than one deadline shall subject WSSC to cumulative penalties for each day that each separate requirement is not met by its due date.

- ii. If WSSC exceeds any effluent concentration limitation in effect pursuant to this Consent Decree or any NPDES permit prior to the implementation of the tasks identified in Section IV, including Short-Term Improvement Projects, or April 1, 2020, whichever occurs first WSSC shall pay the following stipulated penalties:
 - a) \$1,000 for each monthly average limit that is exceeded
 - b) \$200 for each daily limit that is exceeded
- iii. If WSSC exceeds any effluent concentration limitation in effect pursuant to this Consent Decree or any NPDES permit after implementation of the tasks approved by the Department pursuant to Paragraph 27, or April 1, 2020, whichever occurs first, WSSC shall pay the following stipulated penalties:
 - a) \$2,000 for each monthly average limit that is exceeded
 - b) \$400 for each daily limit that is exceeded
- iv. If WSSC fails to conduct any monitoring or testing or DMR reporting, including any supplements or attachments to the DMRs, required by this Consent Decree or any NPDES permit, WSSC shall pay a stipulated penalty of \$250 per day for each violation of any monitoring, testing, or DMR reporting requirement that is not fulfilled.

- v. Except as authorized in Subparagraphs 22(i)–(iii), WSSC shall pay a stipulated penalty of \$2,500 per day for any discharge from the basins. Prior to approval of the Maintenance Improvement Plan, failure to notify the Department of a maintenance event as required by Subparagraph 22(iv) shall subject WSSC to the stipulated penalty provision of this Subparagraph.
- vi. Based on a two-year rolling average, if WSSC fails to remove, dewater, and ship-off site at least 40% of the River intake solids (dry weight equivalent) plus the dry weight equivalent of the annual tons of solids resulting from the addition of chemicals, as set forth in Paragraph 20, WSSC shall pay a lump sum stipulated penalty equal to 1.5 times the amount of the cost of off-site disposal of the shortfall. The start of the first two-year rolling average period for this performance measure shall begin on November 1, 2015, end on October 31, 2016, and shall continue thereafter on a rolling average basis through July 31, 2019.
- vii. Based on a two-year rolling average, if WSSC fails to remove, dewater, and ship-off site at least 50% of the River intake solids (dry weight equivalent) plus the dry weight equivalent of the annual tons of solids resulting from the addition of chemicals, as set forth in Paragraph 21, WSSC shall pay a lump sum stipulated penalty equal to 1.5 times the amount of the cost of off-site disposal of the shortfall. The start of the first two-year rolling average period for this performance measure shall begin on August 1, 2019, end on July 31, 2020, and shall continue thereafter on a rolling average basis until full implementation of the Long-Term Capital Improvement Project.
- viii. If WSSC fails to fully implement the approved Long-Term Capital Improvement Project by January 1, 2026, WSSC shall pay a lump sum stipulated penalty of \$1,000,000 in

addition to any other stipulated penalties that may accrue pursuant to this Consent Decree. Full implementation of the Long-Term Capital Improvement Project shall mean the completion of all interim deadlines and milestones in the approved Long-Term Upgrade Plan pursuant to Paragraph 32.

44. Payment of stipulated penalties shall be by check made payable to the Maryland Clean Water Fund, and mailed to the Maryland Department of the Environment, P.O. Box 2057, Baltimore, Maryland 21203-2057.
45. All stipulated penalties shall begin to accrue on the date that complete performance was due or a violation occurs and shall continue to accrue through the final day of noncompliance. Nothing herein shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
46. Stipulated penalties shall continue to accrue as provided in this Section during Dispute Resolution pursuant to Section XI, but need not be paid until the following:
 - i. If the dispute is resolved by agreement or by a decision of the Department for which Dispute Resolution is not sought by WSSC or Citizens, WSSC shall pay such penalties as are agreed upon or decided upon, respectively, to the Department within 30 days of the effective date of the agreement or the receipt of the Department's decision or order.
 - ii. If Dispute Resolution is sought and the Department and/or Citizens prevail in whole or in part, WSSC shall pay all penalties awarded within 60 days of receiving the decision or order on resolution of a Covered Dispute, as that term is defined in Section XI, except as provided in Subparagraph 46(iii).

- iii. If the decision is appealed, WSSC shall pay any penalties ultimately awarded by the Court within 15 days of issuance of the mandate following the final Court decision.
47. Except as otherwise expressly set forth in this Consent Decree, payment of any stipulated penalty shall neither relieve WSSC from the obligations imposed by this Consent Decree, any effective permit, or any other statute or regulation, nor shall such payment limit the right of the Department or Citizens to seek enforcement of the terms of this Consent Decree or any other state or federal statute or regulation.
48. The Department may reduce or waive any stipulated penalty if there is a determination that the noncompliance is due to an event of Force Majeure or Excusable Delay as set forth in Section X or for any other reason mutually deemed appropriate. Citizens shall have the right to implement the Dispute Resolution procedures in Section XI should they disagree with the Department's decision to reduce or waive any stipulated penalty accrued under this Consent Decree.

IX. CIVIL PENALTY

49. Civil Penalty. Within 30 calendar days of the Entry of this Consent Decree, WSSC shall pay to the Department a civil penalty in the amount of \$100,000.00. Payment shall be made by check payable to the Maryland Department of the Environment and mailed to the Maryland Department of the Environment, P.O. Box 2057, Baltimore, Maryland 21203-2057. An invoice for the payment will be mailed to WSSC. The lack of receipt of an invoice has no effect on the obligation to make timely payment to the Department.
50. Supplemental Environmental Projects to Resolve Citizens' Claims. WSSC shall pay \$1,000,000 to undertake or fund projects that reduce or mitigate the impact of excess sediment in the Potomac River and Chesapeake Bay. Within 45 days of Entry of the Consent

Decree, WSSC shall submit one or more proposals for qualifying SEPs to the Department for review and approval. WSSC prefers to identify and submit to the Department for review and approval projects within the Washington Suburban Sanitary District, but qualifying projects may also include projects, preferred by Citizens, that provide upstream source protection, including those located in Antietam Creek, the Monocacy River, and the Shenandoah River. The Department shall use its best efforts to review and approve the SEP proposal(s) within 60 days of receipt.

51. If the Department rejects a proposed SEP, WSSC shall have an opportunity to submit an alternative proposal, but shall, in any event have no more than 180 days from the Entry of this Consent Decree for WSSC and the Department to agree on the proposed SEP(s), provided that, consistent with Paragraph 34, the Department has provided its final written approval or disapproval of the SEP(s) within 60 days of receipt of WSSC's submittal thereof. If WSSC and the Department cannot agree on an alternate proposal within 180 days, either party may invoke the Dispute Resolution procedures in Section XI of this Consent Decree.
52. Upon approval by the Department of the proposed SEP(s), WSSC shall complete all work and expend all required funds to implement such SEP(s) in accordance with an implementation schedule to be submitted and approved by the Department. WSSC shall be solely responsible for completion of the SEP(s).
53. In the event that WSSC fails to satisfy the SEP submission requirements in Paragraphs 50 or 51, or if an approved SEP is not completed within the time required by the approved implementation schedule, WSSC shall pay to the Department within 30 days of written demand by the Department any unexpended portion of the \$1,000,000.00 to be allocated to SEPs under Paragraph 50. If WSSC completes all the SEP(s) for less than \$1,000,000, the

difference shall be paid to the Department within 45 days of written demand by the Department. In spite of the foregoing, the parties will endeavor to resolve any disputes among themselves by direct discussion and negotiation and any dispute among the parties regarding the value, timeliness or performance of the SEPs shall be subject to the dispute resolution procedures in this Consent Decree. WSSC's obligation to pay under this provision upon demand by the Department shall be stayed pending resolution of any dispute initiated pursuant to this provision.

X. FORCE MAJEURE AND EXCUSABLE DELAYS

54. WSSC shall perform all requirements under this Consent Order in the manner and within the time limits established herein, unless performance is delayed or prevented by Force Majeure or Excusable Delays, which are defined for purposes of this Consent Order as events or circumstances arising from causes not reasonably foreseeable and beyond the control of WSSC, or any entity controlled by WSSC or WSSC's contractors, which delay or prevent performance of any obligation under this Consent Order despite due diligence and best efforts to fulfill the obligation. Events and circumstances beyond the control of WSSC may include, without limitation, earthquake, flood, hurricane, severe weather or other act of God, war, riot, fire, injunction, labor stoppage, freight embargo, material shortages, and compliance with any law, rule, or decree of any governmental body, either now existing or hereafter created, that conflicts with the requirements or obligations of this Consent Order. Such events and circumstances do not include normal inclement weather, financial inability to complete the work, increased cost of performance, changes in WSSC's business or economic circumstances, inability to attain media cleanup standards, or the failure to obtain federal, State, or local permits, authorizations and approvals (including, without limitation,

the permits, authorizations and approvals specifically mentioned in this Consent Decree Order), unless WSSC has made timely and complete application for such permits, authorizations, and approvals.

55. WSSC shall notify the Department and Citizens in writing within 10 business days after becoming aware of an event or circumstance that WSSC believes constitutes an unforeseeable event or circumstance beyond its reasonable control that may prevent or delay performance of an obligation under this Consent Decree. WSSC's notification shall describe in detail the cause of the delay, the anticipated length of the delay, the precise cause or causes of the delay, the measures taken and to be taken by WSSC to prevent or minimize the delay, and a timetable by which those measures will be implemented. WSSC shall adopt all reasonable measures to avoid or minimize any such delay. WSSC shall include in the notification a request to extend the deadline associated with any obligation under this Consent Decree whose performance may be prevented or delayed by unforeseeable events or circumstances beyond WSSC's reasonable control.
56. Failure by WSSC to comply with the notice requirements set forth in the preceding Paragraph constitutes a waiver of WSSC's right to request an extension of the applicable deadline associated with an obligation to be performed under this Consent Decree.
57. If the Department determines that the circumstance, event, or anticipated event that has caused or will cause the delay constitutes a Force Majeure or Excusable Delay, the Department shall approve WSSC's request for an extension and extend the time for performance by an appropriate period substantially equal to the necessary delay. WSSC shall have the burden of proving that any delay is caused by circumstances beyond WSSC's reasonable control. If WSSC's performance is prevented or delayed by a Force Majeure or

an Excusable Delay, then no stipulated penalties shall accrue during the length of the approved period of extension. The Department shall notify WSSC in writing, and provide a copy of such notification to Citizens, of its approval or denial of WSSC's request for extension.

58. Citizens and WSSC shall have the right to implement Dispute Resolution pursuant to Section XI should either disagree with the Department's decision regarding a request for extension and/or toll of stipulated penalties due to a Force Majeure or Excusable Delay event.

XI. DISPUTE RESOLUTION

59. The Dispute Resolution procedures of this Section shall be the exclusive mechanism for the parties to raise and resolve disputes arising under or with respect to this Consent Decree (Covered Dispute).

60. A Covered Dispute shall be considered to have arisen when one party sends the other parties a written Notice of Dispute. In the instance where Citizens did not invoke Dispute Resolution, they may notify the Department and WSSC in writing of their intent to not participate in the process within 10 days of receipt of a Notice of Dispute.

61. Any Covered Dispute shall, in the first instance, be the subject of informal negotiations between the parties in an attempt to resolve the dispute in good faith and in an expeditious manner. The parties shall have 30 days following receipt of a Notice of Dispute to reach agreement. WSSC shall be entitled to meet with the Director of the Department's Water Management Administration and counsel for Citizens during this 30-day period for the purpose of attempting to resolve the dispute. If the parties cannot reach agreement on the dispute, then each party shall provide to the other party a written statement setting forth its proposed resolution of the dispute (Statement of Position) within 15 days after the expiration

of the 30-day period. Within 15 days following receipt of WSSC's and Citizen's Statements of Position, the Department shall provide to WSSC and Citizens a written Statement of Decision, signed by the Director of the Water Management Administration, and the reasons therefore. In the event the filing of a Statement of Decision is delayed, any applicable schedule(s) shall be deemed extended by the period of days that exceeds the 15-day deadline for filing the Statement of Decision.

62. The Parties thereafter shall comply either with the agreement reached as a result of informal negotiations, including any extension of time to comply with a schedule or deadline as granted by the Department in its discretion, or with the Department's Statement of Decision. Alternatively, WSSC or Citizens may seek resolution of the Covered Dispute by filing with the Court and serving on the other parties a motion requesting resolution of the Covered Dispute.

63. The existence of any Covered Dispute, as defined in this Section, and the Department's consideration of matters placed into dispute, shall not excuse, toll, or suspend any compliance obligation or deadline required, or stipulated penalty accruing, pursuant to this Consent Decree during the pendency of the Dispute Resolution process. Thus, in the event WSSC does not prevail in a dispute regarding an obligation for which WSSC sought an extension, such obligation must be completed in the remaining amount of time originally specified in the Consent Decree.

64. Subject to the procedures in this Section, nothing herein shall be construed to prohibit the Department or Citizens from exercising any other remedy available at law or equity to enforce the terms of this Consent Decree.

XII. ENFORCEABILITY AND RESERVATION OF RIGHTS

65. This Consent Decree resolves, with prejudice, the civil claims of the Department and Citizens for the violations alleged in the Complaints filed in this action.
66. The Department specifically reserves, and this Consent Decree is without prejudice to, all rights against WSSC with respect to criminal enforcement actions or violations of any other State or Federal law not alleged in complaints filed in this action. Citizens specifically reserve, and this Consent Decree is without prejudice to, all rights against WSSC with respect to violations of any other State or federal law not alleged in Citizens' complaint filed in this action.

XIII. MODIFICATION

67. This Consent Decree contains the entire agreement of the Parties and shall not be modified by any prior oral or written agreement, representation, or understanding. Any modification of this Consent Decree may be made without approval of the Court but must be in writing and approved by the parties. A party shall not petition the Court for modification without having first made a good faith effort to reach agreement with the other parties on such modification. Notwithstanding the above, any party may, after having made such effort, petition the Court for a modification of this Consent Decree and the Court shall rule on any such petition pursuant to law in effect at such time. Any ruling by the Court on a petition for modification may be appealed by a party in accordance with law.

XIV. RIGHT OF ENTRY

68. WSSC shall allow authorized representatives of the Department to enter the Plant during business hours for the purpose of collecting samples, information and/or photographs, and any other activity necessary to ascertain and evaluate whether WSSC and the Plant are in

compliance with this Consent Decree and State or federal law. Upon request of the Department, WSSC shall provide the Department with access to any records or information that may be related to the Plant, this Consent Decree or WSSC's compliance with State or federal law; unless such records or information are protected from disclosure by the attorney-client privilege, attorney work-product doctrine, or other similar doctrine protecting them from disclosure. Citizens may also request in writing that the Department inspect, sample, or monitor at WSSC to determine compliance with this Consent Decree and Citizens may invoke the Dispute Resolution procedures in Section XI if the Department fails to conduct the requested activities within a reasonable time frame following the request.

XV. ATTORNEYS FEES AND COSTS

69. WSSC shall reimburse Citizens for their reasonable attorney's fees and costs pursuant to a separate agreement or Order of this Court.

XVI. COMPLETION OF THE WORK AND TERMINATION

70. Once WSSC completes all work under this Consent Decree, it shall submit a written report to the Department and Citizens certifying that it has fully satisfied all Consent Decree requirements. This report shall indicate the case name and civil action number, and shall contain the following signed statement:

"To the best of my knowledge, after thorough investigation in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted, I certify, based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, that WSSC has completed the work required by and in accordance with this Consent Decree, and that the information contained in or accompanying this submission is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

71. After consultation with Citizens and review of the final written reports submitted pursuant to this Section, the Department shall provide written Completion of Work acknowledgement to

WSSC and Citizens if it agrees with WSSC's determination that the work is complete. The Department shall provide the Completion of Work acknowledgement within 30 days of WSSC's written report pursuant to Paragraph 70. Such acknowledgement shall thereafter relieve WSSC of any further requirements under this Consent Decree.

72. If the Department determines that any portion of the work has not been completed in accordance with this Consent Decree, the Department shall notify WSSC in writing and provide copy of such notification to Citizens of the activities and steps that must be undertaken to complete the remaining portion of the work. Upon completion of the activities set forth in the Department's notification, WSSC shall submit a revised written report pursuant to this Section, including a revised certification, for the completion of the work.
73. Should Citizens or WSSC disagree with the Department's determination regarding completion of the work, the disagreeing party shall invoke Dispute Resolution pursuant to Section XI within 10 days of receipt of the Department's determination.
74. After the Department has issued a Completion of Work acknowledgement, and upon payment of any and all penalties or costs that are due pursuant to this Consent Decree, the parties may move this Court to jointly terminate this Consent Decree based on their representation that all requirements have been satisfied. In the alternative, if the Department fails to issue the Completion of Work acknowledgement within 30 days of WSSC's submittal, WSSC may move this Court, on notice to the parties, to terminate this Consent Decree. The Court may order such termination after conducting such inquiry as it deems appropriate.

IT IS SO AGREED:

FOR THE WASHINGTON SUBURBAN SANITARY COMMISSION

Date

Adrienne Mandel, Chair
Washington Suburban Sanitary Commission

Date

Chris Lawson, Vice-Chair
Washington Suburban Sanitary Commission

FOR POTOMAC RIVERKEEPER, INC.:

Date

Mary E. Greene
Deputy Director
Environmental Integrity Project

FOR CHESAPEAKE BAY FOUNDATION, INC.:

Date

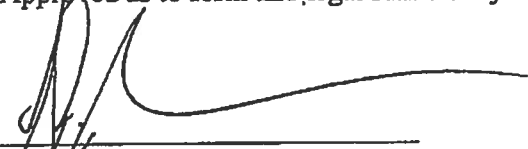
Paul Smail
Staff Litigation Attorney
Chesapeake Bay Foundation

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT:

10/27/2015
Date

Lynn Buhl
Lynn Buhl, Director
Water Management Administration

Approved as to form and legal sufficiency this 27th day of October, 2015.


Steven R. Johnson
Assistant Attorney General

IT IS SO AGREED:

FOR THE WASHINGTON SUBURBAN SANITARY COMMISSION

Date

Adrienne Mandel, Chair
Washington Suburban Sanitary Commission

Date

Chris Lawson, Vice-Chair
Washington Suburban Sanitary Commission

FOR POTOMAC RIVERKEEPER, INC.:

10/26/15
Date

Mary E. Greene
Mary E. Greene
Deputy Director
Environmental Integrity Project

FOR CHESAPEAKE BAY FOUNDATION, INC.:

Date

Paul Smail
Staff Litigation Attorney
Chesapeake Bay Foundation

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT:

Date

~~Virginia Kearney, Acting Director~~ Lynn Buhl, Director
Water Management Administration

Approved as to form and legal sufficiency this ____ day of _____, 2015.

Steven R. Johnson
Assistant Attorney General

IT IS SO AGREED:

FOR THE WASHINGTON SUBURBAN SANITARY COMMISSION

Date

Adrienne Mandel, Chair
Washington Suburban Sanitary Commission

Date

Chris Lawson, Vice-Chair
Washington Suburban Sanitary Commission

FOR POTOMAC RIVERKEEPER, INC.:

Date

Mary E. Greene
Deputy Director
Environmental Integrity Project

FOR CHESAPEAKE BAY FOUNDATION, INC.:

October 27, 2015
Date

Paul Smail
Paul Smail
Staff Litigation Attorney
Chesapeake Bay Foundation

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT:

Date

Lynn Buhl, Director
Water Management Administration

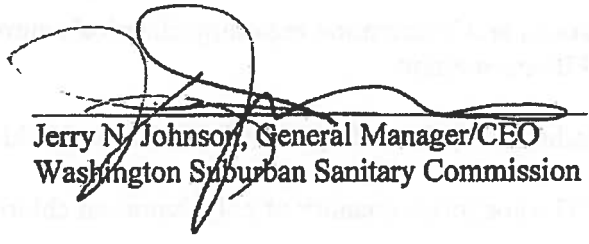
Approved as to form and legal sufficiency this ___ day of _____, 2015.

Steven R. Johnson
Assistant Attorney General

IT IS SO AGREED:

FOR THE WASHINGTON SUBURBAN SANITARY COMMISSION

Date 10/28/15


Jerry N. Johnson, General Manager/CEO
Washington Suburban Sanitary Commission

CONSENT DECREE**APPENDIX A****Solids From Chemical Addition and Trucked Solids Calculations**

Calculations and information regarding chemicals currently used or stored at WSSC's Potomac Water Filtration Plant:

1. Polyaluminum Chloride (DeIPAC 2500 from USALCO, LLC is currently used)

The coagulant quantity of polyaluminum chloride is recorded as Al_2O_3 .

Reaction with water and resulting chemical solids:



Atomic Weights:

$$Al = 27$$

$$O = 16$$

$$H = 1$$

Molecular Weights:

$$PACl \text{ added: } Al_2O_3 = (2 \times 27) + (3 \times 16) = 102$$

$$\text{Solids produced: } 2Al(OH)_3 \cdot 3H_2O = 2 \times [(27 + 3 \times (16 + 1)) + 3 \times (2 + 16)] = 264$$

102 units of PACl reported as Al_2O_3 produces 264 units of solids as $2Al(OH)_3 \cdot 3H_2O$.

Thus, adding one unit of PACl reported as Al_2O_3 to water results in 2.6 units of solids as $Al(OH)_3 \cdot 3H_2O$ ($264/102 = 2.6$).

1 mg/L of aluminum will produce 4.89 mg of solids. See AWWA "Water Quality and Treatment" (Fifth Edition, page 16.3). Consequently, PACl reported as Al_2O_3 is $(2 \times 27) / [(2 \times 27) + (3 \times 16)] = 53\%$ aluminum, 53% of 4.89 mg = 2.6 mg.

Thus, solids equal 2.6 times the dry weight of polyaluminum chloride added.

2. Ferric chloride

Ferric chloride is used infrequently; its coagulant quantity is recorded as $FeCl_3$.

Reaction with water and resulting chemical solids:



Atomic Weights:

$$Fe = 55.8$$

$$Cl = 35.5$$

$$O = 16$$

$$H = 1$$

Molecular Weights:

$$FeCl_3 \text{ added: } FeCl_3 = 55.8 + (3 \times 35.5) = 162.3$$

Solids produced: $\text{Fe}(\text{OH})_3 \cdot 3\text{H}_2\text{O} = 55.8 + 3 \times (16 + 1) + 3 \times (2 + 16)] = 160.8$

162.3 units of ferric chloride reported as FeCl_3 produces 160.8 units of solids as $\text{Fe}(\text{OH})_3 \cdot 3\text{H}_2\text{O}$.

Thus, adding one unit of FeCl_3 reported as FeCl_3 to water results in 1 unit of solids as $\text{Fe}(\text{OH})_3 \cdot 3\text{H}_2\text{O}$ ($160.8 / 162.3 = 0.99$).

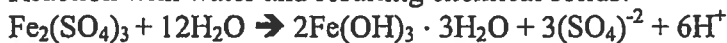
Solids produced with ferric coagulants is 2.9 times the mg/L of Fe added. See AWWA "Water Quality and Treatment" (Fifth Edition, page 16.4). Consequently, FeCl_3 reported as Fe is $55.8 / [55.8 + (3 \times 35.5)] = 34.4\%$ iron, 34.4% of 2.9 mg = 1.0 mg.

Thus, solids equal 1.0 times the dry weight of ferric chloride added.

3. Ferric sulfate:

Ferric sulfate may be used as an alternative to ferric chloride; it is expected to be used infrequently. Ferric sulfate coagulant quantity is recorded as $\text{Fe}_2(\text{SO}_4)_3$.

Reaction with water and resulting chemical solids:



Atomic Weights:

Fe = 55.8

S = 32.1

O = 16

H = 1

Molecular Weights:

$\text{SO}_4 = 32.1 + (4 \times 16) = 96.1$

$\text{Fe}_2(\text{SO}_4)_3$ added: $\text{Fe}_2(\text{SO}_4)_3 = (2 \times 55.8) + (3 \times 96.1) = 399.9$

Solids Produced: $2\text{Fe}(\text{OH})_3 \cdot 3\text{H}_2\text{O} = 2 \times [55.8 + 3 \times (16 + 1) + 3 \times (2 + 16)] = 321.8$

399.9 units of ferric sulfate reported as $\text{Fe}_2(\text{SO}_4)_3$ produces 321.8 units of solids reported as $\text{Fe}(\text{OH})_3 \cdot 3\text{H}_2\text{O}$.

Thus, adding one unit of $\text{Fe}_2(\text{SO}_4)_3$ reported as $\text{Fe}_2(\text{SO}_4)_3$ to water results in 0.8 units of solids as $2\text{Fe}(\text{OH})_3 \cdot 3\text{H}_2\text{O}$ ($321.8 / 399.9 = 0.8$).

Solids produced with ferric coagulants is 2.9 times the mg/L of Fe added. AWWA "Water Quality and Treatment" (Fifth Edition, page 16.4). Consequently, $\text{Fe}_2(\text{SO}_4)_3$ reported as Fe is $(2 \times 55.8) / 399.9 = 27.9\%$ iron, 27.9% of 2.9 mg = 0.8 mg.

Thus, solids equal 0.8 times the dry weight of ferric sulfate added.

4. Potassium Permanganate:

Potassium Permanganate quantity is recorded as dry KMnO_4

Reaction shown in AWWA "Water Quality and Treatment" (Fifth Edition, page 12.22) and resulting chemical solids (MnO_2):



Atomic Weights:

$$\text{K} = 39.1$$

$$\text{Mn} = 54.9$$

$$\text{O} = 16$$

$$\text{H} = 1$$

Molecular Weights:

$$\text{KMnO}_4 \text{ added: } \quad \text{KMnO}_4 = 39.1 + 54.9 + (4 \times 16) = 158$$

$$\text{Solids Produced: } \quad \text{MnO}_2 = 54.9 + (2 \times 16) = 86.9$$

158 units of potassium permanganate reported as KMnO_4 produces 86.9 units of solids reported as MnO_2 .

Thus, adding one unit of KMnO_4 reported as KMnO_4 to water results in 0.55 units of solids as MnO_2 ($86.9/158 = 0.55$).

Thus, solids equal 0.55 times the dry weight of potassium permanganate added.

5. Cationic Polymer or other coagulant aids

Solids from cationic polymer equal the dry weight equivalent added. See AWWA "Water Quality and Treatment" (Fifth Edition, page 16.3) ("It can be assumed that other additives, such as polymer and activated carbon, produce sludge on a one-to-one basis.").

6. Powdered Activated Carbon (emergency use only; has never been used full-scale)

Solids from powdered activated carbon addition equal the dry weight equivalent added. See AWWA "Water Quality and Treatment" (Fifth Edition, page 16.3) ("It can be assumed that other additives, such as polymer and activated carbon, produce sludge on a one-to-one basis.").

Trucked Solids Calculations:

Dry weight of solids trucked offsite shall be calculated as follows:

Each truck that hauls solids offsite is weighed at the plant, empty and after loading, to determine net weight of dewatered (wet) solids trucked offsite.

A dewatered solids sample is taken from each belt filter press each day that a press operates (samples are taken at the belt filter press discharge before conveying to truck loading).

The total dry weight of solids trucked offsite each day equals the total net weight of dewatered (wet) solids loaded onto trucks that day times the average percent total solids of all belt filter press dewatered solids samples taken that day.

For example, on a day when 100,000 pounds net weight of dewatered solids is loaded into trucks and shipped offsite, and three dewatered solids samples are taken at the operating belt filter press discharges, with percent total solids results of 25%, 26%, and 28%, the daily total dry weight shipped equals:

$$(100,000 \text{ lb wet net weight shipped}) \times (25\% + 26\% + 28\%) / 3 = 26,333 \text{ dry lb shipped}$$

Monthly and annual total dry weight of solids trucked offsite equals the sum of daily totals in the period.

