

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region III  
Philadelphia, Pennsylvania 19103-2029

In the Matter of:	:	
	:	
	:	<b>ADMINISTRATIVE ORDER</b>
	:	<b>ON CONSENT</b>
	:	
Amsted Graphite Materials, LLC	:	Docket No. CWA-03-2022-0019DN
2698 Philippi Pike	:	
Anmoore, West Virginia, 26323	:	
	:	
Respondent.	:	

**I. STATUTORY AND REGULATORY BACKGROUND**

1. The United States Environmental Protection Agency, Region III (“EPA”) makes the following findings of fact and conclusions of law below and thus issues this Administrative Compliance Order on Consent (“Order”) pursuant to the authority vested in the Administrator of EPA under Section 309(a) of the Clean Water Act (“CWA” or “Act”), 33 U.S.C. § 1319(a). The Administrator delegated this authority to the Regional Administrator of EPA Region III, who further delegated it to the Director, Enforcement & Compliance Assurance Division, Region III.
2. EPA has jurisdiction over the above-captioned matter.
3. Respondent, Amsted Graphite Materials, LLC (“Amsted Graphite”), has agreed to the issuance of this Consent Order.
4. Section 309(a) of the Act, 33 U.S.C. § 1319(a), provides, *inter alia*, that whenever on the basis of any information available, the Administrator finds that any person is in violation of any permit condition or limitation implementing certain CWA sections in a permit issued under Section 402 of the Act, 33 U.S.C. § 1342, the Administrator shall issue an order requiring such person to comply with such section or requirement.
5. Section 301(a) of the Act, 33 U.S.C. § 1311(a), prohibits the discharge of any pollutant (other than dredged or fill material) from a point source into waters of the United States except in compliance with a permit issued pursuant to the National Pollutant Discharge Elimination System (“NPDES”) program under Section 402 of the Act, 33 U.S.C. § 1342.
6. Section 402(a) of the Act, 33 U.S.C. § 1342(a), provides that the Administrator of EPA may issue permits under the NPDES program for the discharge of pollutants from point sources to waters of the United States, to ensure compliance with the requirements of the

CWA. The discharges are subject to specific terms and conditions, as prescribed in the permit. *See also* 33 U.S.C. § 1311.

7. Section 402(p) of the Act, 33 U.S.C. § 1342(p), and 40 C.F.R. sections 122.2 and 122.26 provide that, with some exceptions not relevant here, storm water discharges are “point sources” subject to NPDES permitting requirements under Section 402(a) of the Act, 33 U.S.C. § 1342(a).
8. “Storm water” is defined as “storm water runoff, snow melt runoff and surface runoff and drainage.” 40 C.F.R. § 122.26(b)(13).
9. An NPDES permit is required for discharges of storm water associated with industrial activity. Section 402(p) of the Act, 33 U.S.C. § 1342(p); 40 C.F.R. § 122.26(a),(c); 40 C.F.R. § 122.21.
10. Facilities under Standard Industrial Classification 36 (Electronic and Other Electrical Equipment and Components, Except Computer Equipment) are engaged in “industrial activity.” 40 C.F.R. § 122.26(b)(14)(xi).
11. EPA approved West Virginia to administer the NPDES program in the State.
12. Pursuant to the authority of the Act, the NPDES program approval, and the West Virginia Water Pollution Control Law, West Virginia issued West Virginia National Pollutant Discharge Elimination System (“WV NPDES”) Permit No. WV0004707 to Amsted Graphite’s predecessor, Advanced Graphite Materials, LLC, on June 29, 2010, which was set to expire on June 28, 2015 (“2010 Permit”) and was administratively extended until June 30, 2021.
13. The 2010 Permit authorizes the terms for the discharge of stormwater and industrial wastewater at the Facility in accordance with the provisions of the permits. The 2010 Permit requires a permittee to comply with all conditions in the Permit.
14. The 2010 Permit classified the Facility under Standard Industrial Classification Code 3624 (“Carbon and Graphite Products”), Industry Group 362 (Electrical Industrial Apparatus), Standard Industrial Classification 36 (Electronic and Other Electrical Equipment and Components, Except Computer Equipment).
15. On April 28, 2021, WVDEP issued WV/NPDES Permit Number WV0004707 to Amsted Graphite, effective June 1, 2021 with an expiration date of April 27, 2026 (“2021 Permit”).
16. EPA has consulted with the West Virginia Department of Environmental Protection (“WVDEP”) regarding this action and, subsequent to the Effective Date of this Order, EPA will mail a copy of this fully executed Order to the appropriate WVDEP official.

## **II. FINDINGS OF FACT AND CONCLUSIONS OF LAW**

17. Advanced Graphite Materials, LLC, was the owner and operator of a carbon and graphite manufacturing facility located at 2698 Philippi Pike, Anmoore, West Virginia, 26323 (“Facility”).
18. On June 1, 2020, Advanced Graphite Materials, LLC changed its name to Amsted Graphite Materials LLC (“Amsted Graphite”), when it was acquired by Amsted Rail Company, Inc. For purposes of this Order, Amsted Graphite is the successor of the liabilities of Advanced Graphite Materials, LLC under the Clean Water Act.
19. At all times relevant to this Order, Amsted Graphite, or its predecessors Advanced Graphite Materials, LLC and GrafTech International Holdings Inc., were the owner and operator of a carbon and graphite manufacturing facility located at 2698 Philippi Pike, Anmoore, West Virginia, 26323 (“Facility”).
20. Section 502(5) of the Act, 33 U.S.C. § 1362, provides: “The term ‘person’ means an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State or any interstate body.”
21. Amsted Graphite is a corporation and is a “person” within the meaning of Section 502(5) of the Act, 33 U.S.C. § 1362(5).
22. The Facility is located on the bank of the Anmoore Run, and all outfalls discharge to Anmoore Run, a “navigable water” as that term is defined in Section 502(7) of the Act, 33 U.S.C. § 1362(7), and are therefore waters of the United States. The discharges into Anmoore Run are approximately 2 miles from its confluence with Elk Creek, a tributary of the West Fork River, a tributary of the Monongahela River, also a “navigable water.”
23. The discharges of industrial wastewater (cooling water, process water, groundwater), storm water runoff or a combination thereof, were authorized by the 2010 Permit, Individual WV NPDES Permit No. WV0004707.
24. The 2010 Permit permitted the following types of discharges at the following permitted outlets:
  - a. A combination of cooling water, stormwater, process water and “other water” is permitted to be discharged from outlet numbers 003, 009, and 044.
  - b. Stormwater is permitted to be discharged from the following outlet numbers: 011, 017, 019, 023, 026, 036, 037, 038, 040, 041, 043, 045 and 047.
  - c. Stormwater, and “other water” is permitted to be discharged from outlet numbers: 027, 030, 032 and 039.
25. In March 2014, WVDEP issued WV/NPDES Water Pollution Control Permit Modification No. 1. This modification removed outlets 032, 039, 044, and 046 from the permit, and added Outlet 048 to the permit.

26. On August 7, 2014, Respondent submitted a permit modification request to the West Virginia Department of Environmental Protection requesting that a new outlet (050) be added to the 2010 Permit. The outlet will serve as the primary outlet for the recirculated cooling water currently permitted for discharge at Outlet 009.
27. On August 13-14, 2019, an EPA compliance inspection team inspected the Facility for compliance with its NPDES permit (“Inspection”).
28. EPA sent an inspection report dated October 17, 2019 to Amsted Graphite on October 17, 2019.
29. Amsted Graphite responded on December 20, 2019 and May 15, 2020 describing measures it had taken to address the observations made in the October 17, 2019 inspection report.
30. On April 28, 2021, WVDEP issued WV/NPDES Permit Number WV0004707 to Amsted Graphite, effective June 1, 2021 with an expiration date of April 27, 2026 (“2021 Permit”). This permit allows Amsted Graphite to use Outlet 050 to discharge recirculated cooling water that had been permitted for discharge at Outlet 009, among other changes.
31. On May 26, 2021, Amsted Graphite filed a notice of appeal of the 2021 Permit with the West Virginia Environmental Quality Board, requesting modifications to certain parts of the permit. Amsted Graphite did not appeal the use of Outlet 050 to discharge recirculated cooling water that had been permitted for discharge at Outlet 009.
32. Based on observations made in the August 13-14, 2019 inspection, and Amsted Graphite’s subsequent responses, EPA has identified the following violations of the 2010 Permit and Section 301 of the Clean Water Act.

### **Count 1**

#### **Failure to Comply with Proper Operation and Maintenance**

33. The allegations in the preceding paragraphs are incorporated by reference.
34. Appendix A.II.1 of the 2010 Permit requires that “[t]he permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures . . .”.
35. During the Inspection, EPA inspectors observed a sheen indicative of petroleum products on the surface of Anmoore Run downstream of Outlet 003. The sheen could be observed on the surface of Anmoore Run for approximately 250 feet downstream in the northerly direction.
36. During the Inspection, EPA inspectors observed oil on the surface of the liquid within

both of the oil and water separators, prior to Outlet 003. The rectangular oil and water separator had a layer of sludge that could not be removed by a conventional vac truck.

37. During the Inspection, EPA inspectors observed several sumps located throughout the press building and indoor processing areas of Buildings 23, 24, 31, and 3. A significant amount of oil was observed within these process areas, the sumps, and the manhole outside of Building 15. The Facility map depicted that the sumps located upgradient of the manhole led to the oil and water separators prior to Outlet 003. The Permittee had not deployed source control methods or BMPs to reduce oils for the process area from collecting in the sumps and inlets upgradient of the oil and water separators and Outlet 003.
38. During the Inspection, EPA inspectors observed that the water re-circulation and cooling tank referred to as the “pie tank” had little available freeboard and was leaking in several locations.
39. The observations of a sheen on Anmoore Run, oil in the oil and water separators, oil in process areas around sumps and manholes and leaking tanks demonstrate Respondent’s failure to comply with proper operation and maintenance. Respondent’s failures to comply with proper operation and maintenance are violations of the 2010 Permit and Sections 301 and 402 of the Act, 33 U.S.C. §§ 1311 and 1342.

**Count 2**  
**Failure to Comply with Good Housekeeping**

40. The allegations in the preceding paragraphs are incorporated by reference.
41. Section C of the 2010 Permit requires that “[t]he permittee shall practice good housekeeping including maintaining the facility grounds. There shall be no scattered parts, equipment, debris, etc. Any and all drums shall be either stored in a covered area or kept upon pallets and properly sealed.” 2010 Permit Section C.01.
42. During the Inspection, EPA inspectors made the following observations:
  - a. Amsted Graphite was storing exposed products and materials in the east-central area of the Facility near inlets leading to Outlet 043 without overhead coverage or containment. Dark puddles of stormwater accumulated on the impervious surface of the area.
  - b. Exposed products and materials were stored in the eastern area of the Facility, near inlets leading to Outlet 037.
  - c. Unbaked products, exposed rusted metal equipment and an open chemical container was stored on impervious surface in the northeastern area of the Facility, upgradient of storm drain inlets leading to Outlets 003, 011, and 048. Dark puddles of sediment-laden stormwater accumulated on the impervious

surface through the northern area of the Facility.

- d. Debris and fine sediments accumulated on the impervious surface of the northern and northeastern areas of the Facility. There was debris surrounding a dumpster and in the storm drain inlet leading to Outlet 011.
  - e. Sediment-laden water accumulated in a storm drain inlet that was under construction at the time of the inspection. The inlet led to Outlet 023. There was discolored water in Anmoore Run at Outlet 023 at the time of inspection.
  - f. Amsted Graphite stored uncovered totes, material, and debris in the western area of the Facility, upgradient of a storm drain inlet leading to Outlet 030.
  - g. Amsted Graphite stored uncovered and uncontained drums and containers of chemicals and waste stored throughout the Facility. Specifically, there were containers of pitch wastewater stored in an unlabeled container in the central area of the Facility without overhead coverage and secondary containment. Waste drums located in the central area of the Facility only had partial secondary containment and were near a storm drain inlet leading to Outlets 041 or 038. Liquid was present in the secondary containment structure impacting the available capacity of the structure to contain liquid in the event of a leak or spill.
43. The observations made in Paragraph 38, above, reflect Respondent's failure to practice good housekeeping. Respondent's failure to practice good housekeeping on site is a violation of the 2010 Permit and Sections 301 and 402 of the Act, 33 U.S.C. §§ 1311 and 1342.

**Count 3**  
**NPDES Discharge Exceedances**

44. The allegations in the preceding paragraphs are incorporated by reference.
45. Sections A.003 through A.047 of the 2010 Permit include discharge limitations for industrial discharges, stormwater discharges, and a combination thereof from permitted outlets.
46. According to data submitted by Respondent to WVDEP during the period of June 2016 to April 2021, Respondent had the following NPDES Exceedances:

**Table 1: NPDES Exceedances June 2016 to June 2021**

Monitoring Period End Date	Outfall	Parameter	DMR Value Type Desc	Effluent Limit Value	Exceedance	Percent Exceeding Limit
06/30/2016	003	pH	Daily Max	9	9.4	4.4%
06/30/2016	003	Total Suspended Solids (TSS)	Monthly Avg	30	122	306.7%
06/30/2016	003	TSS	Daily Max	60	241	301.7%
06/30/2016	003	Chloride	Monthly Avg	250	656	162.4%
06/30/2016	003	Chloride	Daily Max	390	1130	189.7%
06/30/2016	009	Temperature	Daily Max	5	5.3	6.0%
07/31/2016	009	Temperature	Daily Max	5	7.96	59.2%
07/31/2016	009	Temperature	Monthly Avg	75.2	80.25	6.7%
08/31/2016	009	Temperature	Daily Max	5	8.4	68.0%
08/31/2016	009	Temperature	Monthly Avg	75.2	80.2	6.7%
09/30/2016	009	Temperature	Daily Max	5	7.6	52.0%
09/30/2016	009	Temperature	Monthly Avg	75.2	79	5.1%
09/30/2016	038	Iron	Daily Max	1.5	1.78	18.7%
10/31/2016	003	Chloride	Monthly Avg	250	511	104.4%
10/31/2016	003	Chloride	Daily Max	390	511	31.0%
10/31/2016	009	Temperature	Daily Max	5	7.92	58.4%
11/30/2016	003	Chloride	Monthly Avg	250	367	46.8%
12/31/2016	003	Chloride	Monthly Avg	250	512	104.8%
12/31/2016	003	Chloride	Daily Max	390	516	32.3%
12/31/2016	009	Temperature	Daily Max	5	9.86	97.2%
12/31/2016	038	Iron	Daily Max	1.5	2.02	34.7%
01/31/2017	003	Oil and Grease	Monthly Avg	10	24.2	142.0%
01/31/2017	003	Oil and Grease	Daily Max	15	24.2	61.3%
01/31/2017	009	TSS	Monthly Avg	30	34	13.3%
02/28/2017	009	Temperature	Daily Max	5	6.3	26.0%
03/31/2017	003	TSS	Monthly Avg	30	42	40.0%
03/31/2017	003	Iron	Monthly Avg	1.5	9.06	504.0%
03/31/2017	003	Iron	Daily Max	2	9.06	353.0%
03/31/2017	009	Temperature	Daily Max	5	11	120.0%
03/31/2017	009	TSS	Monthly Avg	30	95	216.7%
03/31/2017	009	TSS	Daily Max	60	95	58.3%
03/31/2017	009	Iron	Monthly Avg	1.2	4.96	313.3%
03/31/2017	009	Iron	Daily Max	2.4	4.96	106.7%
03/31/2017	038	Iron	Daily Max	1.5	3.96	164.0%
04/30/2017	003	Chloride	Monthly Avg	250	318.5	27.4%
04/30/2017	009	Temperature	Daily Max	5	8.5	70.0%

06/30/2017	038	Iron	Daily Max	1.5	3.66	144.0%
07/31/2017	009	Temperature	Monthly Avg	75.2	75.9	0.9%
08/31/2017	003	Oil and Grease	Daily Max	15	27.2	81.3%
08/31/2017	009	Temperature	Daily Max	5	6.5	30.0%
08/31/2017	009	Temperature	Monthly Avg	75.2	77.2	2.7%
09/30/2017	003	Oil and Grease	Monthly Avg	10	14.1	41.0%
09/30/2017	003	Oil and Grease	Daily Max	15	23.2	54.7%
09/30/2017	009	Temperature	Daily Max	5	7	40.0%
09/30/2017	011	Iron	Daily Max	1.5	3.77	151.3%
09/30/2017	038	Iron	Daily Max	1.5	2.39	59.3%
10/31/2017	003	Oil and Grease	Monthly Avg	10	79.8	698.0%
10/31/2017	003	Oil and Grease	Daily Max	15	79.8	432.0%
11/30/2017	009	Temperature	Daily Max	5	5.9	18.0%
12/31/2017	009	Temperature	Daily Max	5	8.3	66.0%
12/31/2017	011	Iron	Daily Max	1.5	5.61	274.0%
12/31/2017	038	Iron	Daily Max	1.5	6.94	362.7%
01/31/2018	009	Temperature	Daily Max	5	13.7	174.0%
01/31/2018	009	Chloride	Monthly Avg	181	228	26.0%
02/28/2018	003	Oil and Grease	Monthly Avg	10	23.9	139.0%
02/28/2018	003	Oil and Grease	Daily Max	15	23.9	59.3%
02/28/2018	009	Temperature	Daily Max	5	30.4	508.0%
02/28/2018	009	Temperature	Monthly Avg	63.1	68.5	8.6%
02/28/2018	009	Iron	Monthly Avg	1.2	1.37	14.2%
03/31/2018	009	Temperature	Daily Max	5	7.88	57.6%
03/31/2018	038	Iron	Daily Max	1.5	1.8	20.0%
04/30/2018	003	Oil and Grease	Monthly Avg	10	25.2	152.0%
04/30/2018	003	Oil and Grease	Daily Max	15	44.4	196.0%
04/30/2018	009	Temperature	Daily Max	5	16.2	224.0%
04/30/2018	009	Temperature	Monthly Avg	63.1	64.2	1.7%
05/31/2018	003	Oil and Grease	Monthly Avg	10	26.5	165.0%
05/31/2018	003	Oil and Grease	Daily Max	15	26.5	76.7%
05/31/2018	009	Temperature	Daily Max	5	12.5	150.0%
06/30/2018	009	Temperature	Daily Max	5	8.1	62.0%
07/31/2018	009	Temperature	Daily Max	5	8.4	68.0%
07/31/2018	009	Temperature	Monthly Avg	75.2	80.4	6.9%
08/31/2018	003	Iron	Monthly Avg	1.5	2.6	73.3%
08/31/2018	003	Iron	Daily Max	2	2.6	30.0%
08/31/2018	009	Temperature	Daily Max	5	11.8	136.0%
08/31/2018	009	Temperature	Monthly Avg	75.2	86.5	15.0%
08/31/2018	009	TSS	Monthly Avg	30	35	16.7%
08/31/2018	009	Iron	Monthly Avg	1.2	1.28	6.7%
09/30/2018	009	Temperature	Daily Max	5	11.1	122.0%

09/30/2018	009	Temperature	Monthly Avg	75.2	80.4	6.9%
10/31/2018	009	Temperature	Daily Max	5	11.7	134.0%
10/31/2018	009	Temperature	Monthly Avg	75.2	81.1	7.9%
11/30/2018	009	Temperature	Daily Max	5	27.9	458.0%
11/30/2018	009	Temperature	Monthly Avg	75.2	78.3	4.1%
12/31/2018	009	Temperature	Daily Max	5	30.8	516.0%
12/31/2018	009	Temperature	Monthly Avg	63.1	70.2	11.3%
12/31/2018	011	Iron	Daily Max	1.5	1.88	25.3%
12/31/2018	038	Iron	Daily Max	1.5	5.46	264.0%
01/31/2019	003	Oil and Grease	Monthly Avg	10	69.4	594.0%
01/31/2019	003	Oil and Grease	Daily Max	15	69.4	362.7%
01/31/2019	009	Temperature	Daily Max	5	22.1	342.0%
01/31/2019	009	Temperature	Monthly Avg	63.1	64	1.4%
02/28/2019	009	Temperature	Daily Max	5	24.3	386.0%
02/28/2019	009	Temperature	Monthly Avg	63.1	64.2	1.7%
03/31/2019	009	Temperature	Daily Max	5	23.2	364.0%
03/31/2019	009	Chloride	Monthly Avg	181	212	17.1%
03/31/2019	011	Iron	Daily Max	1.5	2.22	48.0%
03/31/2019	038	Iron	Daily Max	1.5	10.8	620.0%
04/30/2019	009	Temperature	Daily Max	5	25.76	415.2%
04/30/2019	009	Temperature	Monthly Avg	63.1	76.3	20.9%
04/30/2019	009	Temperature	Daily Max	73	76.3	4.5%
05/31/2019	009	Temperature	Daily Max	5	21.4	328.0%
05/31/2019	009	Temperature	Monthly Avg	75.2	85.5	13.7%
06/30/2019	009	Temperature	Daily Max	5	6.2	24.0%
06/30/2019	011	Iron	Daily Max	1.5	2.18	45.3%
06/30/2019	038	Iron	Daily Max	1.5	1.99	32.7%
07/31/2019	009	Temperature	Daily Max	5	14	180.0%
07/31/2019	009	Temperature	Monthly Avg	75.2	85.1	13.2%
08/31/2019	003	Oil and Grease	Monthly Avg	10	17.9	79.0%
08/31/2019	003	Oil and Grease	Daily Max	15	17.9	19.3%
08/31/2019	009	Temperature	Daily Max	5	11.7	134.0%
08/31/2019	009	Temperature	Monthly Avg	75.2	83.8	11.4%
09/30/2019	009	Temperature	Monthly Avg	75.2	75.4	0.3%
10/31/2019	009	Temperature	Daily Max	5	9	80.0%
11/30/2019	009	Temperature	Daily Max	5	9.3	86.0%
12/31/2019	009	Temperature	Daily Max	5	13	160.0%
12/31/2019	011	Iron	Daily Max	1.5	1.74	16.0%
12/31/2019	038	Iron	Daily Max	1.5	2.94	96.0%
01/31/2020	009	Temperature	Daily Max	5	15.5	210.0%
02/29/2020	009	Temperature	Daily Max	5	11.1	122.0%

03/31/2020	009	Temperature	Daily Max	5	18.5	270.0%
03/31/2020	009	Temperature	Monthly Avg	63.1	64	1.4%
03/31/2020	038	Iron	Daily Max	1.5	3.76	150.7%
04/30/2020	009	Temperature	Daily Max	5	14	180.0%
05/31/2020	009	Temperature	Daily Max	5	23.6	372.0%
06/30/2020	009	Temperature	Daily Max	5	14.1	182.0%
06/30/2020	038	Iron	Daily Max	1.5	1.85	23.3%
07/31/2020	009	Temperature	Daily Max	5	14.3	186.0%
07/31/2020	009	Temperature	Monthly Avg	75.2	82.8	10.11%
07/31/2020	009	Temperature	Daily Max	87	89.4	2.76%
08/31/2020	009	Temperature	Daily Max	5	10.8	116.0%
08/31/2020	009	Temperature	Monthly Avg	75.2	75.6	0.5%
09/30/2020	009	Total Suspended Solids	Monthly Avg	30	33	10.0%
10/31/2020	009	Temperature	Daily Max	5	10.9	118.0%
11/30/2020	009	Temperature	Daily Max	5	11.7	134.0%
12/31/2020	009	Temperature	Daily Max	5	10.8	116.0%
12/31/2020	009	Oil and grease	Monthly Avg	10	34.9	249.0%
12/31/2020	009	Oil and grease	Daily Max	15	34.9	132.7%
12/31/2020	038	Iron	Daily Max	1.5	1.52	1.3%
01/31/2021	003	Oil and grease	Monthly Avg	10	12.5	25.0%
01/31/2021	009	Temperature	Daily Max	5	5.9	18.0%
01/31/2021	009	Oil and grease	Daily Max	15	15.2	1.3%
01/31/2021	009	Chloride	Monthly Avg	181	186	2.8%
02/28/2021	009	Temperature	Daily Max	5	11.9	138.0%
03/31/2021	003	Oil and grease	Daily Max	15	90	500.0%
03/31/2021	009	Temperature	Daily Max	5	14.4	188.0%
03/31/2021	038	Iron	Daily Max	1.5	3	100.0%
04/30/2021	009	Temperature	Daily Max	5	16.6	232.0%
04/30/2021	009	Chloride	Monthly Avg	181	192	6.1%
05/31/2021	009	Chloride	Monthly Avg	181	292	61.3%
06/30/2021	003	TSS	Daily Max	60	132	120.0%
06/30/2021	009	Temperature	Daily Max	5	17.4	248.0%
06/30/2021	009	TSS	Monthly Avg	30	33.6	12.0%
06/30/2021	050	Temperature	Daily Max	5	7.7	54.0%

47. The discharge exceedances in Table 1 reported by Respondent are violations of the 2010 Permit and Sections 301 and 402 of the Act, 33 U.S.C. §§ 1311 and 1342.

**Count 4**

**Failure to Implement and Update Stormwater Pollution Prevention Plan Following Stormwater Benchmark Exceedances**

- 48. The allegations in the preceding paragraphs are incorporated by reference.
- 49. Section C.14 of the 2010 Permit states, “the following storm water requirements apply to Outlet(s) 011, 017, 019, 022, 023, 026, 036, 037, 038, 040, 042, 043, 045 and 047 . . .”, and includes a table at Section C.14.c. with a list of pollutants and benchmark values for each pollutant. The end of Section C.14.c. states, “. . . If the concentration of a pollutant exceeds the corresponding benchmark concentration or a pH value is not within the range of 6.0 to 9.0 S.U., monitoring shall be continued and storm water pollution prevention practices shall be revised and implemented. A letter stating that revised and implemented storm water pollution prevention practices shall be submitted to the Division of Water and Waste Management at the address listed in Section C.07.”
- 50. According to the data submitted by the Respondent to WVDEP, it experienced 526 stormwater benchmark exceedances at the Facility from June 2018 to April 2020 as summarized in the table below and detailed in Exhibit A, attached herein.

**Table 2: Stormwater Benchmark Exceedances, June 2018 to April 2020**

<b>Outlet</b>	<b>Exceedances</b>
011	71
019*	48
023	48
026	48
038*	76
036	76
037	76
043*	1
040	1
041	1
042	1
045*	3
047	3
048	73
<b>Total</b>	<b>526</b>

\*representative outlet

- 51. At the time of the August 2019 EPA Inspection, Amsted Graphite Materials last updated its SWPPP in September 2017.
- 52. The benchmark exceedances that occurred after the SWPPP was updated in September 2017 trigger the requirement in Section C.14.c. of the Permit to continue monitoring, revise and implement stormwater pollution prevention practices, and send a letter to the

WVDEP Division of Water and Waste Management reporting the revised practices that were implemented. Respondent had not updated the Stormwater Pollution Prevention Plan (“SWPPP”) between September 2017 and EPA’s Inspection in August 2019, nor sent letters regarding a change in storm water pollution prevention practices to the WVDEP Division of Water and Waste Management as required by the 2010 Permit. Respondent updated its SWPPP in December 2019, however, benchmark exceedances continued to occur after this update, and Respondent did not communicate how the SWPPP update addressed benchmark exceedances.

53. Respondent’s failure to send letters regarding a change in storm water pollution prevention practices to WVDEP and update the SWPPP following stormwater benchmark exceedances are violations of the 2010 Permit and Sections 301 and 402 of the Act, 33 U.S.C. §§ 1311 and 1342.

### **Count 5**

#### **Failure to Implement Stormwater Pollution Prevention Plan**

54. The allegations in the preceding paragraphs are incorporated by reference.
55. Section C.13 of the 2010 Permit requires that, “[t]he permittee implement and maintain the approved storm water pollution prevention plan (“SWPPP”) for the site. The SWPPP shall be prepared in accordance with good engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with the industrial activity. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with the industrial activity at the facility and to assure compliance with the terms and conditions of this permit. A copy of this document shall be retained at the site for review upon request.”
56. At the time of the Inspection, Respondent’s SWPPP had last been updated in September 2017.
57. In Appendix G, “Pollutant Source Identification,” the SWPPP states that drainage from outdoor containment structures must be observed before discharging and to remove any oil or hydrocarbon contamination prior to discharge and to document each drainage event. SWPPP at Appendix G.
58. During the Inspection, EPA Inspectors observed a visible sheen on the surface of the stormwater accumulated within the secondary containment structure of the fuel storage area in the central area of the Facility. The Facility representatives did not have documentation of drainage events. This violates the requirement in the SWPPP to remove oil or hydrocarbon contamination prior to discharge and the requirement to document drainage events.
59. In Appendix G, “Pollutant Source Identification,” the SWPPP states for controlling carbon dust on roadways periodic sweeping is to occur and that the Permittee will

increase the sweeping frequency and install additional filter media and conduct preventative maintenance activities for the filter media in drop inlets that lead to stormwater outlets.” SWPPP at Appendix G.

60. During the Inspection, EPA Inspectors observed sediment and dust accumulated throughout the Facility, demonstrating Respondent’s failure to perform periodic sweeping as required under the SWPPP. Approximately three of the storm drain inlets had filter fabric BMPs, each of which needed maintenance, violating the SWPPP requirement to conduct preventative maintenance activities for filter media in the drop inlets that lead to stormwater outlets. The Facility Representatives provided the log of sweeper activity which was largely incomplete for 2018 and 2019.
61. Respondent’s failures to follow its SWPPP are violations of the 2010 Permit and Sections 301 and 402 of the Act, 33 U.S.C. §§ 1311 and 1342.

**Count 6**  
**Failure to Maintain Records**

62. The allegations in the preceding paragraphs are incorporated by reference.
63. The “personnel training program” section of the SWPPP provided that, “All plant personnel receive initial and annual refresher training which includes BMP [Best Management Practice] stormwater pollution prevention information. This training is conducted as ‘on-line’ training and individual records are maintained by the HSEP office.” SWPPP at Page 11 of 11.
64. At the Inspection, the Facility Representatives did not have training records for 2018.
65. Appendix A.III.6 of the 2010 Permit requires that, “The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.”
66. During the Inspection, EPA Inspectors observed a lack of consistent and thorough recordkeeping at the Facility. Specifically:
  - a. **SWPP and SPCC Plans:** The SWPPP and SPCC plans had not been updated to reflect changes in personnel, such as the emergency contact information for the HSEP representative.
  - b. **Weekly Discharge Point Inspection Forms:** The Weekly Discharge Point Inspection Form was used to document weather conditions, flow observed at the various outlets, and housekeeping deficiencies. The entries on this form included

a permanent “X” in the column marking that no flow was observed at Outlet 050 because it was not approved, and therefore it was unknown if flow was observed at this location. Several forms were missing dates and time of completion and did not identify if corrective actions were needed. Inspection reports for various dates included identical information about the presence and flow and condition of the Facility.

- c. **Monthly Spill Clean-up Drum Inspection Forms and Monthly Visible Tankline Inspection Forms:** Many of these forms were incomplete, missing the name of the inspector who completed the form and the date when the form was completed. These forms and the **PCB Storage of Containers Monthly Inspection Report** identified poor housekeeping practices and did not include requirements for corrective actions.

67. Respondent’s failure to comply with the recordkeeping requirements of the 2010 Permit and the SWPPP are violations of the 2010 Permit and Sections 301 and 402 of the Act, 33 U.S.C. §§ 1311 and 1342.

### III. ORDER

AND NOW, pursuant to section 309(a) of the Act, 33 U.S.C. 33 U.S.C. § 1319(a), having taken into account the seriousness of the violations and good faith efforts by Respondent to comply with section 301(a) of the Act, Respondent is hereby ORDERED to do the following:

- 68. The Respondent shall take all actions necessary to comply with the 2021 Permit (or subsequent permits or permit modifications, including permit compliance schedules, issued by WVDEP) at the Facility. In addition, the Respondent shall take the following actions:
  - a. Within 90 days of the effective date of this Order, develop and submit electronically for EPA’s review and comment, a Standard Operating Procedure describing proper operation and maintenance of the Facility and systems of treatment and control to prevent oil from entering Outlet 003 and Anmoore Run, including:
    - i. Frequency of inspections of oil and water separators;
    - ii. A schedule for maintenance and cleaning of oil and water separators; and
    - iii. A plan and schedule for implementing source control measures or BMPs to reduce oils in the process area from collecting in the sumps and inlets upgradient of the oil and water separators and Outlet 003.
  - b. Within 30 days of the effective date of this Order, remove any “green product” (defined as formed material consisting mainly of an agglomeration of coke particles, graphite particles, and binder pitch prior to the baking operation) from exposure to stormwater, and certify that these materials have been removed in accordance with the certification provision in Section IV, below.

- c. Within 90 days of the effective date of this Order, develop and submit electronically, for EPA’s review and comment, a Standard Operating Procedure describing ongoing good housekeeping practices, including:
    - i. Frequency and record-keeping of street sweeping; and
    - ii. Procedures for keeping green product from exposure to stormwater on-site.
  - d. Within 30 days of the effective date of this Order, update and submit electronically, for EPA’s review and comment, the Spill Prevention Control and Countermeasure Plan (“SPCC”) to ensure that liquid collected in secondary containment does not reach the sewer system.
  - e. Within 30 days of receipt of EPA’s comments on both of the Standard Operating Procedures as set forth in subparagraphs a. and c. of this paragraph, develop and submit electronically, for EPA’s comment and review, an updated SWPPP that includes:
    - i. Revisions to address NPDES exceedances at Outlets 003, 009, 011, and 038;
    - ii. Revisions to address stormwater benchmark exceedances at Outlets 011, 019, 038, 043, and 048;
    - iii. A schedule for checking and replacing filter fabric BMPs on outlets;
    - iv. Incorporation of the SOPs developed in Paragraphs 62(a) and 62(c), above;
    - v. Updated personnel contacts;
    - vi. Ensure that employees are trained on the SWPPP and its implementation and that these trainings are reflected in records; and
    - vii. A comparison of the changes made to the updated SWPPP compared with the September 2017 SWPPP and explanations for the changes.
  - f. Implement the updated SWPPP as identified in subparagraph e of this paragraph.
  - g. Ensure compliance with recordkeeping requirements in SWPPP and NPDES Permit.
69. For a 24-month period after the effective date of this Order, Respondent shall electronically submit to EPA on a quarterly basis:
- a. Any updates to the SWPPP.
  - b. Any and all of the following reports required by the 2021 Permit to be submitted to WVDEP:
    - i. Quarterly Progress Reports, Plan(s) of Action, and other reports required by the 2021 Permit in Section B, Schedule of Compliance.
    - ii. Benchmark monitoring required by the 2021 Permit in Section C. 14.c.
    - iii. Reporting required under the 2021 Permit at Appendix A Section IV, including any “bypasses,” “upsets,” “planned changes” and “anticipated noncompliance” as defined by the permit.

- c. Any exceedances of 2021 Permit effluent limits at any outlet.
- d. Per Appendix A, Section IV, Section 4 (and Section 2(a) referenced therein) of the 2021 Permit, provide a description of the effluent limit exceedance in 69.c., above, its cause, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

**IV. PROCEDURES FOR SUBMISSIONS**

70. Respondent shall include with all documents required to be submitted by this Order and any Request for Termination a certification signed by a responsible officer, as defined in 40 CFR § 122.22(d), that reads as follows:

I certify under penalty of law that this document and all attachments were 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 on my inquiry of the person or persons who manage the system, or those persons 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.

Signed \_\_\_\_\_

Title \_\_\_\_\_

71. Any submission or communication relating to this Order shall be submitted via electronic transmission) to:

Shane McAleer (3ED32)  
Enforcement and Compliance Assurance Division  
U.S. EPA, Region III  
Philadelphia, PA 19103  
[McAleer.shane@epa.gov](mailto:McAleer.shane@epa.gov)

and

Aviva Reinfeld  
Assistant Regional Counsel (3RC40)  
U.S. EPA, Region III  
Philadelphia, PA 19103  
[reinfeld.aviva@epa.gov](mailto:reinfeld.aviva@epa.gov)  
R3\_ORC\_mailbox@epa.gov  
[attn: Aviva Reinfeld, Dkt. No. CWA-03-2021-0036DN]

72. For each submission required pursuant to this Order, except for any Quarterly Status Report, EPA will review the submission and provide comments. If EPA comments on a submission, Respondent agrees to respond in writing within 30 calendar days.
73. Respondent may assert a business confidentiality claim covering part or all of the information which this AOC requires it to submit to EPA, but only to the extent and only in the manner described in Part 2 Subpart B of Title 40 of the C.F.R. The EPA will disclose information submitted under a confidentiality claim only as provided in Part 2 Subpart B of Title 40 of the C.F.R. If Respondent does not assert a confidentiality claim, EPA may make the submitted information available to the public without further notice to Respondent.

## **V. GENERAL PROVISIONS**

74. The intent of this Order is to address the violations described herein. EPA reserves the right to commence action against any person, including Amsted Graphite, in response to any condition which EPA determines may present an imminent and substantial endangerment to the public health, public welfare, or the environment.
75. EPA reserves any existing rights and remedies available to it under the CWA, 33 U.S.C. § 1311, *et seq.*, the regulations promulgated thereunder, and any other federal laws or regulations for which EPA has jurisdiction. Further, EPA reserves any rights and remedies available to it under the CWA, the regulations promulgated thereunder, and any other federal laws or regulations for which EPA has jurisdiction, to enforce the provision of this Order, following its Effective Date (as defined below).
76. This Consent Order does not constitute a waiver or modification of the terms or conditions of the Respondent's NPDES Permit. Compliance with the terms and conditions of this Order does not relieve Respondent of its obligations to comply with any applicable federal, state, or local law, regulation or permit.
77. Respondent waives any and all remedies, claims for relief and otherwise available rights to judicial or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Order, including any right of judicial review pursuant to Chapter 7 of the Administrative Procedure Act, 5 U.S.C. §§ 701-706.
78. EPA reserves all existing inspection authority otherwise available to EPA pursuant to Section 308 of the CWA, 33 U.S.C. § 1318, or pursuant to any other statute or law.
79. The undersigned representative of Respondent certifies that he or she is fully authorized by the party represented to enter into the terms and conditions of this Order and to execute and legally bind the party.
80. For the purpose of this proceeding only, Respondent admits each jurisdictional allegation set forth in this Order and agrees not to contest the jurisdiction of EPA with respect to the execution or enforcement of this Order.

81. For purposes of this proceeding only, Respondent hereby expressly waives its right to contest the allegations set forth in this Order except as expressly provided herein, including but not limited to Paragraph 80 regarding admission to jurisdictional allegations, this waiver is not intended to be nor should it be interpreted to be an admission of fact or waiver of defenses in any proceeding brought by a third party against Respondent.”
82. Respondent shall bear its own costs and attorney’s fees in connection with this Order.
83. By signing this Order, Respondent acknowledges that this Order will be available to the public and represents that, to the best of Respondent’s knowledge and belief, this Order does not contain any confidential business information or personally identifiable information from Respondent.
84. Respondent certifies that any information or representation it has supplied or made to EPA concerning this matter was, at the time of submission true, accurate, and complete and that there has been no material change regarding the truthfulness, accuracy or completeness of such information or representation. EPA shall have the right to institute further actions to recover appropriate relief if EPA obtains evidence that any information provided and/or representations made by Respondent to the EPA regarding matters relevant to this Order, including information about respondent’s ability to pay a penalty, are false or, in any material respect, inaccurate. This right shall be in addition to all other rights and causes of action that EPA may have, civil or criminal, under law or equity in such event. Respondent and its officers, directors and agents are aware that the submission of false or misleading information to the United States government may subject a person to separate civil and/or criminal liability.
85. This Order shall apply to and be binding upon the Respondent and the officers, directors, employees, contractors, successors, agents and assigns of Respondent. By his or her signature below, the person who signs this Order on behalf of Respondent is acknowledging that he or she is fully authorized by the Respondent to execute this Order and to legally bind Respondent to the terms and conditions of this Order.
86. For purposes of the identification requirement in Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 162-21(b)(2), performance of Section III of this Order is restitution, remediation, or required to come into compliance with the law.

## **VI. TERMINATION AND SATISFACTION**

87. After 24 months of submitting records on a quarterly basis, and the completion of all items in Section IV, above, Respondent shall submit to EPA a Request for Termination of this Order.
88. EPA reserves the right to unilaterally terminate this Order in its unreviewable discretion.
89. EPA shall provide Respondent with written notification of termination of this Order.

**VII. EFFECTIVE DATE**

90. This ORDER is effective after receipt by Respondent, or Respondent's counsel, of a fully executed document.

**SO ORDERED:**

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Karen Melvin  
Director, Enforcement  
& Compliance Assurance Division  
U.S. EPA Region III

AGREED TO FOR THE RESPONDENT

Date: 11-12-2021

  
\_\_\_\_\_  
Jared Knight  
General Manger  
Amsted Graphite Materials LLC

# Appendix A

## Stormwater Benchmark Exceedances: June 2018 to April 2020

<b>Outlet 011</b>										
<b>Sample Date</b>			<b>6/27/2018</b>	<b>11/9/2018</b>	<b>2/6/2019</b>	<b>6/24/2019</b>	<b>3rd QTR</b>	<b>10/22/2019</b>	<b>2/4/2020</b>	<b>4/23/2020</b>
<i>Parameter</i>	<i>Limits</i>	<i>Units</i>								
Flow		MGD	0.04194	0.0685699	0.003802	0.003802	No Events	0.00158	0.000383	0.001037
pH		SU	6.8	6.7	7.8	8.3	produced	6.7	7.3	7.7
Aluminum (mg/L)	0.75	mg/L	0.133	0.853	1.31	1.05	samples	1.44	0.487	0.761
Arsenic	0.17	mg/L	<0.001	<0.001	0.0019	<0.001		<0.0020	<0.0010	<0.0010
Copper	0.0636	mg/L	0.0157	0.0257	0.0377	0.029		0.0527	0.0069	0.0168
Lead	0.0816	mg/L	0.0016	0.0065	0.008	0.0089		0.0112	0.0026	0.0027
Nickel	0.47	mg/L	0.0049	0.0117	0.0201	0.0234		0.274	0.041	0.0074
Vanadium	0.08	mg/L	0.0111	0.0108	0.0366	0.0137		0.011	0.0041	0.0054
Selenium	0.005	mg/L	<0.0003	<0.0003	<0.0003	0.0003		<0.0003	0.0003	0.00047
Chloride	230	mg/L	3.66	0.57	51.3	1.16		3	2.5	2.2
Total Suspended Solids	100	mg/L	5	80	8	150		46	16	9.5
Oil & Grease	15	mg/L	<4.9	<4.9	<4.9	<4.9		<4.9	<5.0	<4.9
Acenaphthene	MDL (1.80)	µg/L	8.65	<1.76	8.99	<0.163		0.14	<0.095	0.076
Anthracene	MDL (.66)	µg/L	<0.100	<1.03	<0.103	0.0989		0.011	<0.095	0.092
Benz(a)anthracene	MDL (.01)	µg/L	0.955	5.05	1.27	3.74		1.5	1.4	1.3
Benzo(a)pyrene	MDL (.02)	µg/L	1.48	9.47	1.91	7.48		2.3	1.8	1.9
Benzo(b)fluoranthene	MDL (.018)	µg/L	2.17	11.2	3.14	10.2		4.1	4	3.5
Benzo(k)fluoranthene	MDL (.017)	µg/L	0.884	4.19	1.22	3.74		1.1	1.5	1.1
Chrysene	MDL (.15)	µg/L	1.76	6.24	1.86	5.04		1.9	1.7	1.6
Dibenz(a,h)anthracene	MDL (.03)	µg/L	<0.0300	<0.310	<0.0308	<0.0287		0.67	0.32	0.5
Fluoranthene	MDL (.21)	µg/L	1.91	5.75	2.29	3.52		1.9	2	1.7
Fluorene	MDL (.21)	µg/L	0.276	0.72	0.6	0.85		<0.096	<0.095	0.052
Indeno(1,2,3-cd)pyrene	MDL (.043)	µg/L	1.67	8.79	<0.0411	7.57		2.3	1.8	1.7
Pyrene	MDL (.27)	µg/L	1.54	7.17	1.85	6.74		1.7	1.8	1.5

<b>Outlet 019</b>		<b><i>Also Representative for Outlets 023 and 026</i></b>				
<b>Sample Date</b>			<b>11/9/2018</b>	<b>2/6/2019</b>	<b>11/7/2019</b>	<b>4/23/2020</b>
<b><i>Parameter</i></b>	<b><i>Limits</i></b>	<b><i>Units</i></b>				
Flow		MGD	0.08150832	0.06171264	0.0216	0.0052848
pH		SU	6.3	7.52	6.04	7.4
Aluminum	0.75	mg/L	0.354	0.754	0.0572	0.984
Iron	1	mg/L	0.993	2.36	0.204	0.221
Arsenic	0.17	mg/L	<0.001	0.0022	<0.002	<0.0010
Copper	0.0636	mg/L	0.0274	0.0938	0.0159	0.0431
Lead	0.0816	mg/L	0.0115	0.0284	0.0034	0.0032
Nickel	0.47	mg/L	0.0071	0.023	<0.006	0.0085
Vanadium	0.08	mg/L	0.0098	0.0308	0.0127	0.0109
Selenium	0.005	mg/L	<0.0003	<0.0003	<0.0003	0.00048
Chloride	230	mg/L	2.92	636	4.2	2.6
Total Suspended Solids	100	mg/L	90	470	26	13
Oil & Grease	15	mg/L	<4.9	<4.9	<5.0	<4.9
Acenaphthene	MDL (1.80)	µg/L	<0.871	<0.856	1.4	1
Anthracene	MDL (.66)	µg/L	0.775	0.678	0.58	1.1
Benz(a)anthracene	MDL (.01)	µg/L	8.28	4.91	13.9	10.9
Benzo(a)pyrene	MDL (.02)	µg/L	13.2	6.57	17.2	11.9
Benzo(b)fluoranthene	MDL (.018)	µg/L	16.5	11.1	14.0	20.9
Benzo(k)fluoranthene	MDL (.017)	µg/L	6.46	3.6	8.4	6.7
Chrysene	MDL (.15)	µg/L	9.05	7.05	13.2	9.8
Dibenz(a,h)anthracene	MDL (.03)	µg/L	<0.154	1.69	2.4	2.1
Fluoranthene	MDL (.21)	µg/L	11.3	9.04	18.4	15.6
Fluorene	MDL (.21)	µg/L	6.09	3.91	0.34	0.57
Indeno(1,2,3-cd)pyrene	MDL (.043)	µg/L	11.6	5.65	12.4	8.9
Pyrene	MDL (.27)	µg/L	11	8.9	16.3	13.3

<b>Outlet 038</b>		<b>Also Representative for Outlets 036 and 037</b>										
<b>Sample Date</b>			<b>6/27/2018</b>	<b>11/9/2018</b>	<b>12/20/2018</b>	<b>2/6/2019</b>	<b>6/24/2019</b>	<b>3rd QTR</b>	<b>10/22/2019</b>	<b>2/4/2020</b>	<b>3/25/2020</b>	<b>4/23/2020</b>
<b>Parameter</b>	<b>Limits</b>	<b>Units</b>										
Flow		MGD	0.035122	0.100463		0.100463	0.072	No Events	0.00922	0.001483		0.000907
pH		SU	7.5	6.7		7.9	8.3	produced	7.1	7.3		8.1
Aluminum (mg/L)	0.75	mg/L	0.603	3.29	0.366 (ave 1.83)	6.17	1.13	samples	2.49	3.08		2.04
Arsenic	0.17	mg/L	<0.001	0.0022		0.0065	<0.0010		<0.0020	0.0018		0.0016
Copper	0.0636	mg/L	0.0063	0.0336		0.0699	0.0095		0.0191	0.0162		0.0156
Lead	0.0816	mg/L	0.0048	0.0256		0.0454	0.0084		0.012	0.0135		0.0124
Nickel	0.47	mg/L	0.112	0.351		0.808	0.246		0.23	0.439		0.151
Vanadium	0.08	mg/L	0.0056	0.0096		0.0156	0.003		0.0075	0.0078		0.0064
Selenium	0.005	mg/L	<0.0003	0.0006		0.0009	0.0005		0.00073	0.00078		0.00085
Chloride	230	mg/L	6.58	4.19		165	11.8		38.2	28.2		11.7
Total Suspended Solids	100	mg/L	9	170	80 (ave 125)	440	54		76	110	44	17
Oil & Grease	15	mg/L	<4.9	<4.9		<4.9	<4.9		<5.1	<5.0		<5.0
Acenaphthene	MDL (1.80)	µg/L	3.24	12.2		<0.178	<0.163		0.13	<0.096		0.092
Anthracene	MDL (.66)	µg/L	<0.100	0.113		0.399	<0.0957		0.099	<0.096		0.18
Benz(a)anthracene	MDL (.01)	µg/L	0.362	1.2		5.64	0.554		0.78	0.62		1.3
Benzo(a)pyrene	MDL (.02)	µg/L	0.531	1.62		7.89	0.872		0.79	0.53		1.6
Benzo(b)fluoranthene	MDL (.018)	µg/L	0.952	3.01		12.9	1.51		1.8	1.5		3
Benzo(k)fluoranthene	MDL (.017)	µg/L	0.351	1.16		4.49	0.463		0.47	0.53		1
Chrysene	MDL (.15)	µg/L	0.858	2.36		8.43	1.45		1.1	0.91		2.1
Dibenz(a,h)anthracene	MDL (.03)	µg/L	<0.0300	<0.0305		<0.0314	<0.0287		0.23	<0.096		0.35
Fluoranthene	MDL (.21)	µg/L	0.647	3.01		13.8	1.07		1.5	1.7		2.8
Fluorene	MDL (.21)	µg/L	0.262	0.872		3.89	0.413		<0.097	<0.096		0.069
Indeno(1,2,3-cd)pyrene	MDL (.043)	µg/L	0.651	1.75		7.61	0.919		0.83	0.58		1.3
Pyrene	MDL (.27)	µg/L	0.696	2.75		7.34	1.21		1	1.1		1.9

<b>Outlet 043</b>			<b>Also Representative for Outlets 040, 041, and 042</b>			
<b>Sample Date</b>			<b>11/9/2018</b>	<b>2/6/2019</b>	<b>11/7/2019</b>	<b>4/23/2020</b>
<b>Parameter</b>	<b>Limits</b>	<b>Units</b>				
Flow		MGD	0.0022824	0.00057024	0.005328	No Flow
pH		SU	7	6.3	6.6	
Iron	1	mg/L	0.1	0.463	0.104	
Chloride	230	mg/L	0.67	1050	1.6	
Total Suspended Solids	100	mg/L	3	15	2.5	

<b>Outlet 045</b>			<b>Also Representative for Outlet 047</b>			
<b>Sample Date</b>			<b>11/9/2018</b>	<b>2/6/2019</b>	<b>11/7/2019</b>	<b>4/23/2020</b>
<b>Parameter</b>	<b>Limits</b>	<b>Units</b>				
Flow		MGD	0.0249696	0.00285264	0.01728	0.0014256
pH		SU	6.6	7.12	6.4	8.1
Iron	1	mg/L	0.786	1.61	0.154	0.218
Chloride	230	mg/L	2.97	267	3.4	8.3
Total Suspended Solids	100	mg/L	37	116	4.5	5.5

<b>Outlet 048</b>											
<b>Sample Date</b>			<b>6/27/2018</b>	<b>11/9/2018</b>	<b>12/20/2018</b>	<b>2/6/2019</b>	<b>6/24/2019</b>	<b>3rd QTR</b>	<b>10/22/2019</b>	<b>2/4/2020</b>	<b>4/23/2020</b>
<b>Parameter</b>	<b>Limits</b>	<b>Units</b>									
Flow		MGD	0.001426	0.0464501		0.00095	0.002851	No Events	0.00291	0.000878	0.0001526
pH		SU	7.1	7		7.6	8.2	which produced	7.3	7.8	8
Aluminum (mg/L)	0.75	mg/L	0.266	6.02	1.02 (ave 3.52)	2.81	1.88	samples	0.59	0.292	0.62
Iron (mg/L)	1	mg/L	0.764	12.9	1.74 (ave 7.32)	4.16	4.36		1.27	0.31	0.799
Arsenic	0.17	mg/L	<0.001	0.0014		0.0022	<0.0010		<0.0020	<0.0010	<0.0010
Copper	0.0636	mg/L	0.0049	0.0463		0.0194	0.023		0.0073	0.0033	0.0081
Lead	0.816	mg/L	0.0023	0.0411		0.0123	0.0131		0.0027	0.001	0.0014
Nickel	0.47	mg/L	0.0063	0.0575		0.0227	0.0253		0.0094	0.0035	0.0071
Vanadium	0.08	mg/L	0.0158	0.0445		0.0221	0.0635		0.0125	0.0058	0.0054
Selenium	0.005	mg/L	<0.0003	<0.0003		<0.0003	0.0005		<0.0003	<0.00030	0.00032
Chloride	230	mg/L	1.79	0.69		66.7	0.65		2.5	0.7	0.59
Total Suspended Solids	100	mg/L	3	172	56 (ave 112)	70	48		78	8	42
Oil & Grease	15	mg/L	<4.9	<4.9		<4.9	<4.9		<5.0	<5.0	<5.0
Acenaphthene	MDL (1.80)	µg/L	6.61	52.2		15.4	<0.165		0.16	0.19	0.076
Anthracene	MDL (.66)	µg/L	0.146	0.665		0.271	<0.0968		<0.096	<0.098	0.11
Benz(a)anthracene	MDL (.01)	µg/L	1.91	6.16		3.33	3.67		2.2	0.95	1.8
Benzo(a)pyrene	MDL (.02)	µg/L	3.17	13.1		6.64	7.81		3.5	1.3	2.9
Benzo(b)fluoranthene	MDL (.018)	µg/L	4.19	14		9.23	10.1		0.69	2.4	4.6
Benzo(k)fluoranthene	MDL (.017)	µg/L	1.86	6		3.66	3.98		1.7	0.87	1.4
Chrysene	MDL (.15)	µg/L	3.27	7.82		5.62	6.34		2.3	1.1	2
Dibenz(a,h)anthracene	MDL (.03)	µg/L	<0.0300	17.5		1.84	<0.0290		0.84	0.23	0.76
Fluoranthene	MDL (.21)	µg/L	2.91	7.58		4.11	3.13		2.3	1.1	1.8
Fluorene	MDL (.21)	µg/L	0.188	2.08		0.755	0.823		<0.096	<0.098	<0.033
Indeno(1,2,3-cd)pyrene	MDL (.043)	µg/L	3.25	12.4		<0.0405	7.84		2.9	1.2	2.3
Pyrene	MDL (.27)	µg/L	2.92	11.4		6.21	2.66		2.4	1.2	1.8
Temperature		°F	71.2	46.58					62.2	54.5	55.4
Dissolved Oxygen		mg/L	9.2	11.9							
Total PAH (µg/L)						57.066	46.353		18.99	10.54	19.546