

**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE ADMINISTRATOR**

In the Matter of:)
)
BASF Corporation,) **Docket No. CWA-05-2018-0008**
)
Respondent.)

COMPLAINANT’S INITIAL PREHEARING EXCHANGE

In accordance with the Prehearing Order issued by this Honorable Court on 28 September 2018, Complainant, the Acting Director, Water Division, Region 5, United States Environmental Protection Agency (“U.S. EPA,” “Complainant” or “Agency”), through her undersigned attorney, hereby files the instant Complainant’s Initial Prehearing Exchange pursuant to Section 22.19 of the *Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, Issuance of Compliance or Corrective Action Orders, and the Revocation, Termination or Suspension of Permits* (“Consolidated Rules”), codified at 40 C.F.R. § 22.19.

COMPLAINANT’S WITNESS LIST

Fact Witnesses

Maureen O’Neill
Civil Investigator
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Generally, Maureen O’Neill may testify about her educational background and employment experience; her research, receipt and review of relevant documentary evidence (attached), and how that evidence supports the factual allegations set forth in the Complaint.

Specifically, Ms. O'Neill may testify about her knowledge of the Respondent's legal ownership of the BASF Corporation facility at 1000 Harvard Avenue, Cleveland, Ohio, which may include, but not be limited to the following facts:

1. In 1898, the Harshaw, Fuller & Goodwin Company began ownership and operation of a 40-acre site located at 1000 Harvard Avenue, Cleveland, Ohio (the Site).
2. In 1929, the Harshaw, Fuller & Goodwin Company changed its name to the Harshaw Chemical Company. It completed chemical processing and manufacturing, including the processing and manufacturing of catalysts, inorganic fluorides, and metal finishing compounds.
3. From 1944 to 1959, the U.S. Government contracted with the Harshaw Chemical Company to refine uranium.
4. In 1966, the Kewanee Oil Company of Bryn Mawr, Pennsylvania, (Kewanee Oil) purchased the Harshaw Chemical Company, and it merged into Kewanee Oil.
5. In 1977, the Gulf Oil Corporation (Gulf) purchased Kewanee Oil.
6. In 1983, Gulf organized a joint venture with the Kaiser Aluminum & Chemical Corporation (Kaiser), and combined their two chemical units into the Harshaw/Filtrol Partnership to produce specialty chemicals. The Harshaw/Filtrol Partnership was the owner of the Site, and the Gulf and Kaiser Partnership was the operator of the Site.
7. In 1984, Standard Oil of California merged into Gulf and the company became the Chevron Corporation (Chevron). The Gulf and Kaiser Partnership was the operator of the Site.
8. From 1976 through 1978, the OEPA allowed the Harshaw Chemical Corporation, Division of Kewanee Oil, and then the Harshaw/Filtrol Partnership, and then the Harshaw Chemical Company again, to discharge pollutants from point sources into the waters of Big Creek and the Cuyahoga River: OEPA Permit No. E 306 *AD, entered March 3, 1976; OEPA Permit No. E306*BD, effective April 27, 1978; OEPA Permit No. 3IE00006*CD, effective September 30, 1987; OEPA Permit No. 3IE00006*DD, effective January 29, 1993; OEPA Permit No. 3IE00006*FD, effective October 1, 1993 (the Permits).
9. The Permits permitted Harshaw Chemical Corporation, Division of Kewanee Oil, and then the Harshaw/Filtrol Partnership, and then the Harshaw Chemical Company again, to discharge non-contact cooling water, boiler blow water, storm water, and ground water free from any process wastewater containing total suspended solids, nickel, fluoride, lead,

ammonia, temperature, phosphorous, residue, acute toxicity, cadmium, copper, and zinc, from Site Outfall 007 (Latitude 41 ° 26 ' 54 " ; Longitude 81 ° 41 ' 06 ") into the Cuyahoga River.

10. In 1988, the Engelhard Corporation (Engelhard), a specialty chemical and metallurgical maker, purchased the Harshaw/Filtrol Partnership, including its ownership of the Site, except for Building G-1. The Chevron and Kaiser Partnership became the owner and operator of Building G-1.
11. In June 1994, Engelhard installed and began operation of a Groundwater Extraction and Treatment System on the Site to control the infiltration of nickel-impacted groundwater into an interceptor beltline sewer that passes through the Site adjacent to the former nickel chloride and nickel sulfate production areas. The system captured groundwater, removed nickel, adjusted the groundwater for pH, then discharged the treated groundwater into the sanitary sewer pursuant to a permit issued by the Northeast Ohio Regional Sewer District (NEORS). The system and permit continue to date.
12. In 2006, BASF Catalyst purchased Engelhard including the Site, except for Building G-1. The Chevron and Kaiser Partnership remained the owner and operator of Building G-1.
13. In 2010, BASF Catalyst changed its name to BASF Corporation (BASF or Respondent).
14. BASF remains the owner and operator of the Site, except for Building G-1. The Chevron and Kaiser Partnership remain the owner and operator of Building G-1.

Carolyn Bury

Project Manager

Land and Chemicals Division

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Generally, Carolyn Bury may testify about her educational background and employment experience; her research, receipt and review of relevant documentary evidence (attached), and how that evidence supports the factual allegations set forth in the Complaint. Specifically, Ms. Bury may testify about her knowledge of the Respondent's legal ownership of, and legal responsibilities

at, the BASF Corporation facility at 1000 Harvard Avenue, Cleveland, Ohio, which may include, but not be limited to the following facts:

1. In 1898, the Harshaw, Fuller & Goodwin Company began ownership and operation of a 40-acre site located at 1000 Harvard Avenue, Cleveland, Ohio (the Site).
2. In 1929, the Harshaw, Fuller & Goodwin Company changed its name to the Harshaw Chemical Company. It completed chemical processing and manufacturing, including the processing and manufacturing of catalysts, inorganic fluorides, and metal finishing compounds.
3. From 1944 to 1959, the U.S. Government contracted with the Harshaw Chemical Company to refine uranium.
4. In 1966, the Kewanee Oil Company of Bryn Mawr, Pennsylvania, (Kewanee Oil) purchased the Harshaw Chemical Company, and it merged into Kewanee Oil.
5. In 1977, the Gulf Oil Corporation (Gulf) purchased Kewanee Oil.
6. In 1983, Gulf organized a joint venture with the Kaiser Aluminum & Chemical Corporation (Kaiser), and combined their two chemical units into the Harshaw/Filtrol Partnership to produce specialty chemicals. The Harshaw/Filtrol Partnership was the owner of the Site, and the Gulf and Kaiser Partnership was the operator of the Site.
7. In 1984, Standard Oil of California merged into Gulf and the company became the Chevron Corporation (Chevron). The Gulf and Kaiser Partnership was the operator of the Site.
8. From 1976 through 1978, the OEPA allowed the Harshaw Chemical Corporation, Division of Kewanee Oil, and then the Harshaw/Filtrol Partnership, and then the Harshaw Chemical Company again, to discharge pollutants from point sources into the waters of Big Creek and the Cuyahoga River: OEPA Permit No. E 306 *AD, entered March 3, 1976; OEPA Permit No. E306*BD, effective April 27, 1978; OEPA Permit No. 3IE00006*CD, effective September 30, 1987; OEPA Permit No. 3IE00006*DD, effective January 29, 1993; OEPA Permit No. 3IE00006*FD, effective October 1, 1993 (the Permits).
9. The Permits permitted Harshaw Chemical Corporation, Division of Kewanee Oil, and then the Harshaw/Filtrol Partnership, and then the Harshaw Chemical Company again, to discharge non-contact cooling water, boiler blow water, storm water, and ground water free from any process wastewater containing total suspended solids, nickel, fluoride, lead, ammonia, temperature, phosphorous, residue, acute toxicity, cadmium, copper, and zinc,

from Site Outfall 007 (Latitude 41 ° 26 ' 54 " ; Longitude 81 ° 41 ' 06 ") into the Cuyahoga River.

10. In 1988, the Engelhard Corporation (Engelhard), a specialty chemical and metallurgical maker, purchased the Harshaw/Filtrol Partnership, including its ownership of the Site, except for Building G-1. The Chevron and Kaiser Partnership became the owner and operator of Building G-1.
11. In June 1994, Engelhard installed and began operation of a Groundwater Extraction and Treatment System on the Site to control the infiltration of nickel-impacted groundwater into an interceptor beltline sewer that passes through the Site adjacent to the former nickel chloride and nickel sulfate production areas. The system captured groundwater, removed nickel, adjusted the groundwater for pH, then discharged the treated groundwater into the sanitary sewer pursuant to a permit issued by the Northeast Ohio Regional Sewer District (NEORS). The system and permit continue to date.
12. In 2006, BASF Catalyst purchased Engelhard including the Site, except for Building G-1. The Chevron and Kaiser Partnership remained the owner and operator of Building G-1.
13. In 2010, BASF Catalyst changed its name to BASF Corporation (BASF or Respondent).
14. In 2010 U.S. EPA issued to BASF a Resource Conservation and Recovery Act 3008(h) Administrative Corrective Action Order which BASF did not dispute.
15. BASF remains the owner and operator of the Site, except for Building G-1. The Chevron and Kaiser Partnership remain the owner and operator of Building G-1.

Mark Conti

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Generally, Mark Conti may testify about his educational background and employment experience, his observations and knowledge of the BASF facility, and his review of relevant documentary evidence (attached), and how that evidence supports the factual allegations set forth in the Complaint. Specifically, Mr. Conti may testify about his knowledge of the Respondent's

additions of metals from its Outfalls into the Cuyahoga River, which may include, but not be limited to the following facts:

1. Respondent was and remains the owner of a 40-acre facility located at 1000 Harvard Avenue, Cleveland, Ohio.
2. On October 25 and 29, 2013, the EPA conducted a water sampling inspection at the Site and found BASF discharged effluent from Outfall 007 into the Cuyahoga River.
3. The National Analytical Radiation Environmental Laboratory (NAREL) found these water samples from Outfall 007 on the Site to contain nickel, lead, cadmium, copper, and selenium. It also found the water samples contained uranium and other radionuclides.
4. Respondent added nickel, lead, cadmium, copper, selenium, uranium, and other radionuclides from Outfall No. 007 into the Cuyahoga River, Cleveland, Ohio, on at least the following 27 dates: July 1, 2012; May 31, October 25, 29, 2013; and August 28, September 3, 4, 8, 9, 15, 16, 22, 23, 24, 25, 29, 30, October 1, 2, 6, 7, 8, 9, 13, 14, and 15, 2014.
5. Therefore, Respondent “discharged” into waters as defined at section 502(16) and (12) of the Act, 33 U.S.C. § 1362(16) and (12).
6. Nickel, lead, cadmium, copper, selenium, uranium, and other radionuclides, were “chemical wastes,” or “radioactive materials,” or “industrial waste.”
7. Therefore, Respondent discharged “pollutants” into waters as defined at section 502(6) of the Act, 33 U.S.C. § 1362(6).
8. Respondent discharged from Outfall No. 007, a “discernible, confined, and discrete conveyance,” specifically a metal pipe within a concrete and iron structure on the western bank of the Cuyahoga River.
9. Therefore, Respondent discharged pollutants from a “point source” into waters as defined at section 502(14) of the Act, 33 U.S.C. § 1362(14).
10. The Cuyahoga River was “used in the past” and is “currently used” “in interstate or foreign commerce.”
11. Therefore, the Cuyahoga River was and remains “waters of the United States” as defined at 40 C.F.R. § 122.2.
12. Therefore, the Cuyahoga River was and remains “navigable waters” as defined at section 502(7) of the Act, 33 U.S.C. § 1362(7).

13. The Cuyahoga River also flowed and flows into Lake Erie.
14. Therefore, the Cuyahoga River also was and remains a “tributary” to Lake Erie as defined at 40 C.F.R. § 122.2.
15. Lake Erie was “used in the past” and is “currently used” “in interstate or foreign commerce” and was and remains an interstate water.
16. Therefore, Lake Erie was and remains “waters of the United States” as defined at 40 C.F.R. § 122.2.
17. Therefore, the Cuyahoga River, as a “tributary” to Lake Erie, also was and remains “waters of the United States” as defined at 40 C.F.R. § 122.2.
18. Therefore, the Cuyahoga River was and remains “navigable waters” as defined at section 502(7) of the Act, 33 U.S.C. § 1362(7).

Eugene Jablonowski
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Generally, Eugene “Gene” Jablonowski may testify about his educational background and employment experience, and his review of relevant documentary evidence (attached), and how that evidence supports the factual allegations set forth in the Complaint. Specifically, Mr. Jablonowski will testify to Respondent’s additions of nickel, lead, cadmium, copper, selenium, uranium, and other radionuclides, into the Cuyahoga River, its failure to comply with EPA’s Information Request and Order, and their potential and actual harm to human health and the environment.

Todd Brown

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Generally, Todd Brown may testify about his educational background and employment experience, and his review of relevant documentary evidence (attached), and how that evidence supports the factual allegations set forth in the Complaint. Specifically, Mr. Brown will testify to Respondent's addition of nickel, lead, cadmium, copper, selenium, uranium, and other radionuclides, into the Cuyahoga River, its failure to comply with EPA's Information Request and Order, their potential and actual harm to human health and the environment, the proposed civil penalty, which may include, but not be limited to:

1. The Respondent in this matter is BASF Corporation, Cleveland, Ohio.
2. Respondent was and remains a corporation doing business in the state of Ohio.
3. Respondent was and remains the owner of a 40-acre facility located at 1000 Harvard Avenue, Cleveland, Ohio.
4. Respondent added nickel, lead, cadmium, copper, selenium, uranium, and other radionuclides from Outfall No. 007 into the Cuyahoga River, Cleveland, Ohio, on at least the following 27 dates: July 1, 2012; May 31, October 25, 29, 2013; and August 28, September 3, 4, 8, 9, 15, 16, 22, 23, 24, 25, 29, 30, October 1, 2, 6, 7, 8, 9, 13, 14, and 15, 2014.
5. Respondent's Outfall No. 007, was a "discernible, confined, and discrete conveyance," specifically a metal pipe within a concrete and iron structure on the western bank of the Cuyahoga River.
6. The Cuyahoga River was "used in the past" and is "currently used" "in interstate or foreign commerce."

7. The Cuyahoga River also flowed and flows into Lake Erie.
8. Lake Erie was “used in the past” and is “currently used” “in interstate or foreign commerce” and was and remains an interstate water.
9. On August 29, 2014, Complainant issued to Respondent an Information Request pursuant to section 308 of the Act, 33 U.S.C. § 1318, which required Respondent to complete 1) Visual Monitoring of Outfalls and Effluent Flows; 2) Monitoring of Precipitation and Effluent Flow; and 3) Representative Outfall Effluent Sampling and Analysis.
10. On Tuesday, September 9, 2014, Respondent received the Information Request.
11. Complainant incorporates into these counts all of the above allegations.
12. Respondent added nickel, lead, cadmium, copper, selenium, uranium, and other radionuclides from Outfall No. 007 into the Cuyahoga River, Cleveland, Ohio, on at least the following 27 dates: July 1, 2012; May 31, October 25, 29, 2013; and, August 28, September 3, 4, 8, 9, 15, 16, 22, 23, 24, 25, 29, 30, October 1, 2, 6, 7, 8, 9, 13, 14, and 15, 2014.
13. Respondent discharged pollutants from a point source into navigable waters without a permit in violation of section 301 of the Act, 33 U.S.C. § 1311.
14. Complainant’s Information Request, dated August 29, 2014, Paragraph No. 1, required Respondent to provide Complainant written confirmation of its intent to comply with it within three business days of its receipt.
15. Respondent failed to provide Complainant written confirmation of its intent to comply with the Information Request in violation of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.
16. Complainant’s Information Request, dated August 29, 2014, Paragraph No. 21, required that no later than 3 days following receipt of the Request, Respondent visually examine the outfall structure at Outfall 007, and immediately commence construction or modification of any channel or conveyance works at Outfall 007 necessary to ensure accurate volumetric flow monitoring and representative sampling of the effluent.
17. Respondent failed to commence construction or modification of any channel or conveyance works at Outfall 007 necessary to ensure accurate volumetric flow monitoring and representative sampling of the effluent for the 33 days from September 13, 2014 through October 15, 2014 in violation of Paragraph No. 21 of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.

18. Complainant Information Request, dated August 29, 2014, Paragraph No. 22, required that, no later than 3 days following receipt of this request, Respondent visually monitor the effluent discharged from Outfall 007, on each business day, during daylight hours, including observations of the presence or absence of flow, as well as descriptions of color, odor, clarity, floating solids, foams, or oil sheen in the effluent.
19. Respondent failed to visually monitor the effluent discharged from Outfall 007 for the five business days between Saturday, September 13, 2014, through Sunday, September 21, 2014, in violation of Paragraph No. 22 of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.
20. Complainant Information Request, dated August 29, 2014, Paragraph No. 22, also required that Respondent provide Complainant with weekly reports of its visual monitoring of its Outfall 007 effluent discharged.
21. Respondent failed to provide Complainant with weekly reports of its visual monitoring of effluent discharged from Outfall 007 for the 12 weeks of September 14, 2014 through December 6, 2014, in violation of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.
22. Complainant Information Request, dated August 29, 2014, Paragraph No. 23, required that, no later than 5 days following receipt of this request, Respondent visually monitor the effluent discharged from Outfalls 001 – 006, as well as any other point source discharges to the Cuyahoga River or Big Creek, on each business day, during daylight hours, including observations of the presence or absence of flow, as well as descriptions of color, odor, clarity, floating solids, foams, or oil sheen in the effluent.
23. Respondent failed to visually monitor the effluent discharged from Outfalls 001 - 006 for the 5 business days from September 15, 2014, through September 21, 2014, in violation of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.
24. Complainant Information Request, dated August 29, 2014, Paragraph No. 23, also required that Respondent provide Complainant with weekly reports of its visual monitoring of its Outfall 001 – 006 effluent discharged, as well as any other point source discharges to the Cuyahoga River or Big Creek.
25. Respondent failed to provide Complainant with weekly reports of its visual monitoring of its effluent discharged from Outfall 007 for the 12 weeks of September 14, 2014 – December 6, 2014, in violation of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.
26. Complainant Information Request, dated August 29, 2014, Paragraph No. 24, required that, no later than 5 days following receipt of this request, Respondent shall establish a

network of automatic rain gauge(s) on Site that is representative of precipitation falling on the Site. The rain gauge(s) shall be capable of recording 15-minute rainfalls to the nearest 0.01 inches. Respondent will validate and report the data to Complainant weekly.

27. Respondent failed to establish a network of automatic rain gauge(s) on Site for seven days from September 15 – 21, 2014, in violation of Paragraph No. 24 of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.
28. Complainant Information Request, dated August 29, 2014, Paragraph No. 25, required that, no later than 10 days following receipt of this request, Respondent shall prepare and submit to EPA for approval a Quality Assurance Project Plan (QAPP) for the collection of precipitation and effluent flow monitoring data in accordance with Complainant Information Request Paragraph Nos. 26 – 28.
29. Respondent failed to prepare and submit to EPA for approval a QAPP for the collection of precipitation and effluent flow monitoring data, in violation of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.
30. Complainant Information Request, dated August 29, 2014, Paragraph No. 29, required that no later than 14 days following receipt of this request, Respondent prepare and submit to Complainant for approval a QAPP to conduct representative sampling and analysis of Outfall effluent for the parameters provided in the request.
31. Respondent failed to prepare and submit to Complainant for approval a QAPP to conduct representative sampling and analysis of Outfall effluent for the parameters provided in the request, in violation of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.
32. Complainant Information Request, dated August 29, 2014, Paragraph No. 30, required that no later than 2 days following receipt of EPA approval of BASF's QAPP, BASF will begin effluent sampling at Outfall 007, and not later than 5 days following receipt of EPA approval of BASF's QAPP, BASF will begin effluent sampling at Outfalls 001- 006.
33. Respondent failed to complete any effluent sampling at Outfalls 001- 007, in violation of Paragraph No. 30 of the Information Request and sections 308 and 309(g)(1) of the Act, 33 U.S.C. §§ 1318 and 1319.
34. On October 8, 2014, Complainant issued to Respondent a combination sections 308 Information Request and 309 Administrative Order for Compliance, 33 U.S.C. §§ 1318 and 1319, which required Respondent to 1) Immediately Cease and Desist Any and All Site Point Source Discharges in Navigable Water, including the Cuyahoga River; 2) Immediately Provide to Complainant for Approval a Written Proposed Cease and Desist Plan; and 3) Document to Complainant its Completion of each Cease and Desist Plan Milestone.

35. On October 16, 2014, Respondent dismantled and plugged Outfall 007 and ceased adding nickel, lead, cadmium, copper, selenium, uranium, and other radionuclides from Outfall No. 007 into the Cuyahoga River, Cleveland, Ohio.
36. The Complaint's \$262,006.00 proposed civil penalty is appropriate pursuant to Section 309(g)(2) of the Act, 33 U.S.C. § 1319(g)(2).

COMPLAINANT'S LIST OF EXHIBITS

1. OEPA CWA NPDES Permits (1976 – 1998) for The Harshaw Chemical Corporation, 1000 Harvard Avenue, Cleveland, Ohio, 44113, dated 1976 – 1993. (CX 1, Page Nos. 1-93).
2. U.S. Army Corps of Engineers, Buffalo District, Fact Sheet, for the Former Harshaw Chemical Company, Cleveland, Ohio, dated April 2007. (CX 2, Page Nos. 94-95).
3. U.S. Army Corps of Engineers, Buffalo District, Harshaw Spotlight, dated April 2008. (CX 3, Page Nos. 96-97).
4. U.S. Army Corps of Engineers, Buffalo District, Groundwater Monitoring Data Release, 2008 and 2009 Sampling Events, Harshaw FUSRAP Site, dated November 2010. (CX 4, Page Nos. 98-104).
5. U.S. EPA, Region 5, RCRA 3008(h) Administrative Order to BASF Catalysts, f.k.a. Engelhard, Cleveland, Ohio, dated March 30, 2010. (CX 5, Page Nos. 105-184).
6. BASF Description of Current Conditions Report, dated July 2, 2010. (CX 6, Page Nos. 185-266).
7. U.S. Army Corps of Engineers, Buffalo District, Groundwater Monitoring Data Release, 2010 Sampling Event, Harshaw FUSRAP Site, dated February 2011. (CX 7, Page Nos. 267-275).
8. AECOM (Albert, Culp) Memorandum to BASF (Burrows, Martin) regarding Outfall 007 Surface Water Source Area Investigation, dated October 20, 2011. (CX 8, Page Nos. 276-293).
9. U.S. Army Corps of Engineers, Buffalo District, Groundwater Monitoring Data Release, 2011 Sampling Event, Harshaw FUSRAP Site, dated April 2012. (CX 9, Page Nos. 294-303).
10. U.S. EPA (McConaghy) E-Mail to BASF (Burrows), dated June 21, 2012. (CX 10, Page No. 304).

11. U.S. Army Corps of Engineers, Buffalo District, Groundwater Monitoring Data, 2013 Sampling Event, Harshaw Chemical Company FUSRAP Site, dated February 2013. (CX 11, Page Nos. 305-362).
12. U.S. Army Corps of Engineers, Buffalo District, Harshaw Chemical Company Site, FUSRAP, Storm Sewer Sampling Data, dated May 29, 2013. (CX 12, Page Nos. 363-369).
13. U.S. Army Corps of Engineers, Former Harshaw Chemical Company, FUSRAP, Site Hydrogeologic Conditions Briefing, dated July 30, 2013. (CX 13, Page Nos. 370-403).
14. Department of Defense, Department of the Army, Buffalo District, Corps of Engineers, Harshaw Chemical Company FUSRAP Site, Groundwater Sampling Results, dated August 9, 2013. (CX 14, Page Nos. 404-420).
15. U.S. EPA, Office of Radiation and Indoor Air (Cynthia White), Radiochemical Results for BASF Cleveland Samples, to U.S. EPA, Region 5 (Vargas), dated January 21, 2014. (CX 15, Page Nos. 421-458).
16. U.S. Army Corps of Engineers, Buffalo District, Groundwater Monitoring Data, 2013 Sampling Event, Harshaw Chemical Company FUSRAP Site, dated February 2014. (CX 16, Page Nos. 459-498).
17. U.S. EPA (Moloney, Conti), Clean Water Act Inspection Sampling Report, BASF Corporation, dated March 3, 2014. (CX 17, Page Nos. 499-654).
18. U.S. EPA Letter to BASF Corporation regarding Proposed Clean Water Act Section 309(a) Administrative Order for Compliance by Consent, dated July 15, 2014. (CX 18, Page Nos. 655-662).
19. U.S. EPA Letter to BASF Corporation regarding Clean Water Act Section 308 Information Request, dated August 29, 2014. (CX 19, Page Nos. 663-712).
20. U.S. EPA (Conti) E-Mails to U.S. EPA (Trevino) regarding BASF Outfall 007 Effluent, dated August 28, September 3, 4, 8, 9, 15, 16, 25, October 1, 2014. (CX 20, Page Nos. 713-734).
21. BASF (Culp) E-Mail to BASF (Burrows), dated October 2, 2014. (CX 21, Page No. 735).

22. U.S. EPA Memorandum, BASF Corporation Ownership of the Facility at 1000 Harvard Avenue, Cleveland, Ohio, dated October 3, 2014. (CX 22, Page Nos. 736-1047).
23. U.S. EPA (Jablonowski) Review of Compliance Sampling Inspection Data, BASF Corporation, Cleveland, Ohio, to U.S. EPA (Vargas), dated October 6, 2014. (CX 23, Page Nos. 1048-1055).
24. U.S. EPA Letter to BASF Corporation and Clean Water Act Sections 308 and 309 Orders, dated October 8, 2014. (CX 24, Page Nos. 1056-1081).
25. BASF (Martin) E-Mail to U.S. EPA (Trevino), dated October 14, 2014, (CX 25, Page Nos. 1082-1083).
26. BASF (Martin) E-Mail to U.S. EPA (Trevino), dated October 20, 2014, (CX 26, Page No. 1084).
27. U.S. EPA (Conti) E-Mail BASF (Martin), dated October 20, 2014, (CX 27, Page No. 1085).
28. U.S. EPA (Maraldo) Letter to BASF (Martin), dated December 4, 2014. (CX 28, Page No. 1086).
29. BASF (Martin) E-Mail to U.S. EPA (Trevino), dated December 9, 2014, (CX 29, Page Nos. 1087-1088).
30. BASF (Martin) E-Mail to U.S. EPA (Trevino), dated December 15, 2014, (CX 30, Page Nos. 1089-1100).
31. Pace Analytical, Analytical Results for Project 14003931 Cuyahoga River Sediment, dated December 19, 2014. (CX 31, Page Nos. 1101-1124).
32. BASF Supplemental Response to Clean Water Act Section 308 Information Request, dated August 29, 2014, dated May 5, 2015. (CX 32, Page Nos. 1125-1229).
33. U.S. EPA and BASF Tolling Agreement, dated September 7, 2017. (CX 33, Page Nos. 1230-1231).
34. U.S. EPA Complaint against BASF Corporation, dated July 24, 2018. (CX 34, Page Nos. 1232-1249).

REQUIRED TIME TO PRESENT COMPLAINANT'S CASE

Complainant will require one (1) to two (2) days to present its case-in-chief.

PROOF OF SERVICE OF THE COMPLAINT

On July 26, 2018, U.S. EPA (Conti) personally served CT Corporation System, the Registered Agent for Service of Process for BASF Corporation, the Complaint. (CX 34, p.1042).

EXPLANATION OF FACTUAL AND/OR LEGAL BASES FOR ALLEGATIONS DENIED IN RESPONDENT'S ANSWER

The Respondent denied the factual allegations of the following Complaint paragraphs, but those factual allegations will be demonstrated by the testimony of Complainant's witnesses as discussed above, and the following Complainant exhibits (attached).

Complaint, Paragraph 6: The factual allegations are demonstrated by Complainant Exhibits 5, 6, 18, 19, 22, 24.

Complaint, Paragraph 7: The factual allegations are demonstrated by Complainant Exhibits 15, 17, 19, 20, 30, 32.

Complaint, Paragraph 9: The factual allegations are demonstrated by Complainant Exhibits 15, 17, 19, 20, 30, 32.

Complaint, Paragraph 11: The factual allegations are demonstrated by Complainant Exhibits 15, 17, 19, 20, 30, 32.

Complaint, Paragraph 13: The factual allegations are demonstrated by Complainant Exhibits 15, 17, 19, 20, 30, 32.

Complaint, Paragraphs 27 and 28: The factual allegations are demonstrated by Complainant Exhibits 15, 17, 19, 20, 30, 32.

Complaint, Paragraphs 30 and 31: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

Complaint, Paragraph 33 and 34: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

Complaint, Paragraphs 36 and 37: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

Complaint, Paragraphs 39 and 40: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

Complaint, Paragraphs 42 and 43: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

Complaint, Paragraphs 45 and 46: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

Complaint, Paragraphs 48 and 49: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

Complaint, Paragraphs 51 and 52: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

Complaint, Paragraphs 54 and 55: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

Complaint, Paragraphs 57 and 58: The factual allegations are demonstrated by Complainant Exhibits 19, 25, 26, 27, 28, 29, 30.

EXPLANATION OF FACTORS CONSIDERED AND METHODOLOGY UTILIZED TO CALCULATE THE PROPOSED CIVIL PENALTY

1. BACKGROUND

The BASF facility is a 40-acre site formerly known as Harshaw Chemical Company (Harshaw). It is located approximately 3.5 miles southwest of downtown Cleveland, Ohio, situated along the western bank of the Cuyahoga River, just north of its confluence with Big Creek. In 1901, Harshaw became the original owner and operator of this facility, where chemical manufacturing and processing took place. During the 1930's and 1940's the U.S. government contracted with Harshaw to complete uranium research and enrichment at Building G-1 of the BASF site, in support of the Manhattan Project. Building G-1 and its underlying soil and groundwater became heavily contaminated with uranium and other radioactive contaminants. Historically, Harshaw was the Permittee of several Clean Water Act National Pollutant Discharge Elimination System (NPDES) permits for the site, including permits for process wastewater, storm water, groundwater, and approximately eight outfalls. On April 1, 1998, the remaining NPDES permits for the site expired.

In 1977, Gulf Oil Corporation (Gulf) purchased Harshaw and became parent company to subsidiary Harshaw. In 1983, Gulf and Kaiser Aluminum and Chemical Corporation (Kaiser) entered into a partnership and Gulf/Kaiser became the operator of the BASF site. Shortly thereafter, Chevron purchased Gulf and Chevron assumed Gulf's position in the Gulf/Kaiser Partnership. In 1988, the Engelhard Corporation purchased the entire site, except for Building

G-1, which remained owned and operated by the Chevron/Kaiser Partnership. In 2006, BASF purchased the site, except for Building G-1, which remained owned and operated by the Chevron/Kaiser Partnership. BASF never conducted any operations at the site, except for a pump-and-treat system to remediate nickel contamination on the site, pursuant to an order from the state of Ohio.

Since the early 2000's, the BASF facility has been the subject of response action by the U.S. Army Corps of Engineers (Corps) under the federal government's Formerly Utilized Sites Remedial Action Program (FUSRAP). The Corps conducted groundwater monitoring every year, as follows: May 2011, May 2012, May 2013, June 2015.

On March 30, 2010, EPA Region 5 issued to BASF a RCRA 3008(h) Administrative Corrective Action Order (the Order) to remediate heavy metals in the soil and groundwater at the site.

On or about April 2010, BASF notified EPA that it found radioactive contamination in the pump-and-treat system. In 2011, EPA Region 5 Land and Chemicals Division (LCD) discovered a pipe (Outfall 007) on the site discharging water into the Cuyahoga River. In May of 2011 the Corps sampled the water from the pipe (Outfall 007) and found the discharge to be approximately 25 – 30 gallons per minute, and “polished,” meaning it appeared to have undergone some “treatment” process. It also found uranium at approximately 170 micrograms

per liter ($\mu\text{g/L}$). In July of 2012, the Corps sampled water in the storm sewer from Building G-1 to the Cuyahoga River and found high levels of uranium in the storm sewer water near Building G-1.

To confirm the Corps' evidence, representatives of EPA Region 5 inspected the site and sampled wastewater discharges at the site. The first sampling done by EPA took place on October 25 and 29, 2013. The sampling analysis confirmed that metals and radioactive materials were discharged to the Cuyahoga River from Outfall 007.

On August 29, 2014, EPA issued to BASF a request for information (308 RFI or RFI). This RFI required BASF to monitor the discharge from Outfall 007 and the other outfalls, by sampling and analyzing it for a series of water pollutants. BASF did not comply with the RFI, but instead worked towards eliminating the outfall discharge. In the meantime, EPA monitored the site, and observed a discharge from Outfall 007 on the following dates: August 28, September 3, 4, 8, 9, 15, 16, 25, and October 1, 2014.

On October 8, 2014, EPA issued to BASF an Unilateral Administrative Order (UAO) to cease and desist from discharging pollutants into the Cuyahoga River, among other things. On October 29, 2014, BASF completed work to remove or block conveyances to Outfall 007, eliminating the discharge.

What follows is a description of the violations alleged in the Administrative Complaint, and the statutory factors to be considered in assessing penalties under section 309(g)(3) of the Clean Water Act, which include the nature, circumstances, extent and gravity of the violation, or violations, and, with respect to the violator, ability to pay, any prior history of such violations, the degree of culpability, economic benefit or saving (if any) resulting from the violations, and such other matters as justice may require.

2. NATURE AND CIRCUMSTANCES OF VIOLATIONS

A table of violations (TOV) summarizing the 105 counts alleged in the Administrative Complaint is attached. The Administrative Complaint filed in this matter contains a counting error. Counts 1-27 should have been identified as Counts 1-26. However, to remain consistent with the numbering of the counts in the Complaint, Count 1 was retained on the TOV, and the corresponding columns are left blank.

A. Unpermitted Discharges, CWA Section 301, 33 U.S.C. § 1311

Counts 2-27: BASF discharged pollutants into the Cuyahoga River without a NPDES permit on the following 26 dates:

1. July 1, 2012
2. May 31, 2013
3. October 25, 2013
4. October 29, 2013
5. August 28, 2014

6. September 3, 2014
7. September 4, 2014
8. September 8, 2014
9. September 9, 2014
10. September 15, 2014
11. September 16, 2014
12. September 22, 2014
13. September 23, 2014
14. September 24, 2014
15. September 25, 2014
16. September 29, 2014
17. September 30, 2014
18. October 1, 2014
19. October 2, 2014
20. October 6, 2014
21. October 7, 2014
22. October 8, 2014
23. October 9, 2014
24. October 13, 2014
25. October 14, 2014
26. October 15, 2014

The statute of limitations expired for the unpermitted discharge that occurred on July 1, 2012. Therefore, EPA is seeking penalties for 25 days of unpermitted discharges.

B. Failure to Provide Written Confirmation of Intent to Comply, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Count 28: Paragraph 1 of the RFI required that, no later than three (3) days following receipt of the RFI, BASF must notify EPA, in writing, of its intent to comply with the RFI. On September 9, 2014, BASF received the RFI and notified EPA attorney Jeffery Trevino via email. However, the email message did not indicate BASF's intention to comply with the RFI. For this requirement, EPA assessed a penalty for one (1) day of violation occurring on September 9, 2014.

C. Failure to Visually Monitor Outfalls and Effluent Flow, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Counts 29-61 (Examination of Outfall 007): Paragraph 21 of the RFI required that, no later than 3 days following receipt of this request, BASF visually examine the outfall structure at Outfall 007, and immediately commence construction or modification of any channel or conveyance works at Outfall 007 necessary to ensure accurate volumetric flow monitoring and representative sampling of the effluent. BASF failed to do so. For this requirement, EPA

assessed penalties for 33 days of violation from September 13, 2014, through October 15, 2014 (which was the date BASF reportedly ceased discharge through that outfall).

Counts 62-66 (Visual Monitoring of Outfall 007): Paragraph 22 of the RFI required that, no later than 3 days following receipt of the RFI, BASF visually monitor the effluent discharged from Outfall 007. Such monitoring should have been conducted on each business day, during daylight hours, including observations of the presence or absence of flow, as well as descriptions of color, odor, clarity, floating solids, foams, or oil sheen in the effluent. BASF failed to conduct visual monitoring for the five (5) business days from September 15 through September 19, 2014.

Counts 67-78 (Outfall 007 Weekly Visual Monitoring Reports): Paragraph 22 of the RFI also required that BASF provide EPA with weekly reports of its visual monitoring at Outfall 007. BASF did not submit any of the weekly visual monitoring reports until December 15, 2014, at which point it provided visual monitoring reports for the period of September 22 through November 20, 2014. EPA assessed 12 days of violation, for the 12 weeks of Sunday, September 14 through Saturday, December 6, 2014.

Counts 79-83 (Visual Monitoring of Outfalls 001-006): Paragraph 23 of the RFI required that, no later than 5 days following receipt of the RFI, BASF commence visual monitoring for effluent discharges from Outfalls 001, 002, 003, 004, 005 and 006 (Outfalls 001-006), as well as any other point source discharges to the Cuyahoga River or Big Creek. Such monitoring should have been conducted on each business day, during daylight hours, including observations of the presence or absence of flow, as well as descriptions of color, odor, clarity, floating solids, foams, or oil sheen in the effluent. BASF failed to conduct visual monitoring for the five (5) business days from September 15 through September 19, 2014.

Counts 84-95 (Outfall 001-006 Weekly Visual Monitoring Reports): Paragraph 23 of the RFI also required that BASF provide EPA with weekly reports of its visual monitoring at Outfalls 001 - 006. BASF did not submit any of the visual monitoring reports until December 15, 2014, at which point it provided visual monitoring reports for the period of September 22 through November 20, 2014. EPA assessed 12 days of violation, for the 12 weeks of Sunday, September 14 through Saturday, December 6, 2014.

D. Failure to Monitor Precipitation and Effluent Flow, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Counts 96-102 (Establishment of Rain Gauge Network): Paragraph 24 of the RFI required that, no later than 5 days following receipt of the RFI, BASF establish a network of automatic rain gauge(s) on site, representative of precipitation falling on the site. The rain gauge(s) should have been capable of recording 15-minute rainfalls to the nearest 0.01 inches. In addition, BASF should have validated and reported the data to EPA. The rain gauge network should have been in

place as of September 15, 2014. Records indicate BASF began measuring precipitation at the site on September 22, 2014. Therefore, EPA assessed penalties for seven (7) days of violation from September 15 through 21, 2014.

Count 103 (Submittal of QAPP for Collection of Precipitation and Effluent Flow Data):

Paragraph 25 of the RFI required that, no later than 10 days following receipt of the RFI, BASF prepare and submit to EPA a Quality Assurance Project Plan (QAPP), for the collection of precipitation and effluent flow monitoring data to EPA for approval. BASF failed to do so. For this requirement, EPA assessed a penalty for one (1) day of violation, on the date the QAPP was due (i.e., September 19, 2014).

E. Failure to Complete Representative Effluent Sampling and Analysis, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Count 104 (Submittal of QAPP for Effluent Sampling and Analysis): Paragraph 29 of the RFI required that, no later than 14 days following receipt of the RFI, BASF prepare and submit to EPA for approval a QAPP to conduct representative sampling and analysis of Outfall effluent for the parameters provided in the RFI. BASF failed to do so. For this requirement, EPA assessed a penalty for one (1) day of violation, on the date the QAPP was due (i.e., September 23, 2014).

Count 105 (Sampling and Analysis of Outfall Effluent): Paragraph 30 of the RFI required that no later than two (2) days following receipt of EPA approval of BASF's QAPP, BASF begin effluent sampling at Outfall 007, and not later than five (5) days following receipt of EPA approval of BASF's QAPP, BASF begin effluent sampling at Outfalls 001-006. BASF did not conduct the required monitoring. EPA did not assess a separate penalty for this Count, since the QAPP was not submitted.

3. GRAVITY OF VIOLATIONS

A. Unpermitted Discharges, CWA Section 301, 33 U.S.C. § 1311.

Counts 2-27: The discharge was first noted by EPA in 2011. EPA was informed by the Corps that they had sampled the discharge as far back as 2008. BASF continued to discharge from Outfall 007 until October 15, 2014. When sampling the Outfall in May 2011, the Corps estimated the flow at 25 to 30 gallons per minute. EPA personnel estimated the flow ranged between 0.5 and 8 gallons per minute, during site visits from August 28 through October 1, 2014.

Outfall 007 discharges to the Cuyahoga River, just north of its confluence with Big Creek. The Ohio 2018 Integrated Water Quality Monitoring and Assessment Report (Integrated Report) lists the Cuyahoga River, from Brandy Wine Creek (River Mile: 24.16) to the river mouth at Lake Erie (River Mile: 0), as impaired for the Beneficial Uses of Aquatic Life (warm water habitat), Recreation (primary contact), and Human Health (fish tissue assessment). One of the monitoring

locations used to assess water quality in the Cuyahoga River is in proximity to BASF's facility (Monitoring Station 502130, Cuyahoga R. at Cleveland @ Lower Harvard Avenue). According to the Integrated Report, the results of water quality monitoring at that location contribute to the Aquatic Life and Recreational Use impairment status.

The mouth of the Cuyahoga River empties into the Central Basin of Lake Erie at Cleveland's West Harbor. The Central Basin spans from the Black River/Lorain Ridge to Ohio's border with Pennsylvania. For purposes of assessing water quality in Lake Erie, Ohio divides the Central Basin into two Lake Erie Assessment Units (LEAUs), shoreline and open water. The shoreline area is defined as the portion that extends out to and including a depth of three (3) meters from the shore. Open water is the area beyond three (3) meters. The 2018 Integrated Report identifies the Central Basin Shoreline LEAU as impaired for the Exceptional Warm Water Habitat (EWWH) Beneficial Use, though samples collected at the location where the Cuyahoga River enters Lake Erie indicate that particular location fully supports the EWWH designated use. The Central Basin Shoreline LEAU is also identified as impaired for Recreational Use (due to bacteria) and Fish Consumption (due to PCBs in fish tissue). The 2018 Integrated Report identifies the Central Basin Open Water LEAU as impaired for the beneficial use of Public Water Supply.

EPA collected samples of BASF's discharge from Outfall 007 on October 25 and 29, 2013, for a variety of chemical analyses. Sample analyses revealed the discharge samples contained measurable concentrations of aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium, selenium, silver, sodium, thallium, vanadium, uranium, and zinc. Radioactive isotopes of radium, thorium and uranium were also detected. The following is a brief discussion on the toxic/harmful effects of some these pollutants.

Arsenic: According to the ATSDR, inorganic arsenic has been recognized as a human poison since ancient times. Ingestion of arsenic can have adverse effects on the stomach and intestines. Other adverse health effects from arsenic exposure include fatigue, abnormal heart rhythm, blood vessel damage, impaired nerve function, and cancer. The Department of Health and Human Services (DHHS) has determined that inorganic arsenic is known to be a human carcinogen.

Cadmium: According to the ATSDR, aquatic organisms accumulate cadmium, and therefore have the potential to enter the food chain. Humans ingesting lower levels of cadmium over a long period of time can lead to a buildup of cadmium in the kidneys. Lower level exposures over prolonged periods of time can cause bones to become fragile. Cadmium exposure studies conducted on animals have identified adverse effects including anemia, liver disease, and nerve or brain damage.

Chromium: According to the ATSDR, chromium can have adverse health effects to the respiratory tract, stomach, small intestine, and male reproductive system, and can cause anemia. The International Agency for Research on Cancer (IARC) identifies hexavalent chromium compounds as carcinogenic to humans.

Copper: According to the ATSDR, if you drink water that contains higher than normal levels of copper, you may experience nausea, vomiting, stomach cramps, or diarrhea. Intentionally high intakes of copper can cause liver and kidney damage.

Nickel: According to the ATSDR, the most common human health effect from nickel includes skin rashes from contacting substances containing nickel. Drinking water containing high amounts of nickel can have adverse effects to the blood and kidneys. Studies have shown adverse effects to the stomach, blood, liver, kidney, immune system, and reproduction in animals eating or drinking large amounts of nickel.

Lead: According to the ATSDR, lead has adverse effects on the nervous system, and at high levels of exposure, can lead to severe damage to the brain and kidneys, and can cause miscarriage. The Department of Health and Human Services (DHHS) determined that lead and lead compounds are reasonably anticipated to be carcinogenic to humans.

Selenium: According to the ATSDR, there is some evidence that selenium can be taken up by the tissues of aquatic organisms and possibly increase in concentration as it is passed up the food chain. Consumption of selenium compounds at levels higher than daily dietary levels can lead to a medical condition known as selenosis. Skin contact with industrial selenium compounds have been reported to cause rashes, swelling and pain.

Uranium: Uranium is a radioactive element that emits alpha particles and gamma rays as it undergoes radioactive decay. If alpha particles enter the body (e.g., ingestion or entering the body through a cut) they can cause severe damage to cells and DNA. Gamma rays can easily penetrate the skin and clothing causing damage to skin and tissue. Ingestion of high concentrations of uranium can cause cancer of the bone or liver. According to the ATDR, kidney damage has been found in humans and animals after ingesting uranium compounds.

Thorium: Thorium is a radioactive element that emits alpha particles and weak gamma rays as it undergoes radioactive decay. If alpha particles enter the body (e.g., ingestion or entering the body through a cut) they can cause severe damage to cells and DNA. Gamma rays can easily penetrate the skin and clothing causing damage to skin and tissue. If ingested, most thorium will leave the body within days. However, small amounts can deposit in bone and remain for years.

Radium: Radium is a radioactive element that emits alpha particles, beta particles and gamma rays. If alpha particles enter the body (e.g., ingestion or entering the body through a cut) they can cause severe damage to cells and DNA. Beta particles are more penetrating than alpha particles but produce less damage to living tissue and DNA. Some beta particles can penetrate skin causing skin burns. Gamma rays can easily penetrate the skin and clothing causing damage to skin and tissue. According to the ATSDR, exposure to higher levels of radium over a long period of time may result in anemia, cataracts, fractured teeth, cancer and death. These effects are mostly due to gamma radiation produced during radioactive decay. Both radium and thorium are produced from the radioactive decay of uranium.

B. Failure to Provide Written Confirmation of Intent to Comply, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Count 28: BASF failed to inform EPA of its intent to comply with the RFI. The purpose of the RFI was to obtain further knowledge on the nature and volume of BASF's discharge. The information was important in understanding the potential impact of BASF's discharges on the Cuyahoga River, and potential threat to the public.

C. Failure to Visually Monitor Outfalls and Effluent Flow, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Counts 29-61 (Examination of Outfall 007): Continuous flow monitoring at Outfall 007 was needed to determine the daily volume of BASF's unpermitted discharge of pollutants to the Cuyahoga River. To ensure continuous flow monitoring could be achieved, EPA requested that BASF examine the outfall structure and make any necessary repairs/modification to the outfall and its conveyance structures. Compliance with this requirement was important to ensure accurate volumetric flow monitoring and representative sampling of the effluent, which BASF was required to do under paragraphs 24 through 34 of the RFI. EPA believes that given the impairment status of the Cuyahoga River, and pollutants present in BASF's discharge (e.g., radioactive elements), obtaining accurate flow information was important to determine the daily volume of BASF's unpermitted discharge of pollutants to and relative impact on the Cuyahoga River.

Counts 62-66 (Visual Monitoring of Outfall 007): Daily visual monitoring of Outfall 007 was needed to obtain basic knowledge on the frequency and appearance of BASF's discharge. The information was important in understanding the potential impact of BASF's discharges on the Cuyahoga River, and the potential threat to the public. BASF's discharge through this outfall was unpermitted, and therefore, BASF did not have discharge monitoring and reporting requirements other than those required by EPA under the RFI.

Counts 67-78 (Outfall 007 Weekly Visual Monitoring Reports): BASF began visual monitoring at Outfall 007 on September 22, 2014 (one week after it was required to). BASF withheld this information until December 15, 2014. BASF's failure to submit the required weekly reports prevented EPA from having information regarding the potential impact of BASF's discharges on the Cuyahoga River, and the potential threat to the public.

Counts 79-83 (Visual Monitoring of Outfalls 001-006): The gravity of this violation is the same as that described above for Counts 62-66.

Counts 84-95 (Outfall 001-006 Weekly Visual Monitoring Reports): The gravity of this violation is the same as that described above for Counts 67-78.

D. Failure to Monitor Precipitation and Effluent Flow, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Counts 96-102 (Establishment of Rain Gauge Network): EPA requested BASF establish a network of rain gauges to understand the relationship between precipitation and discharges from BASF's outfalls.

Count 103 (Submittal of QAPP for Collection of Precipitation and Effluent Flow Data): Paragraphs 26-28 of the RFI required BASF to conduct precipitation and continuous effluent flow monitoring at the site after EPA approval of BASF's Quality Assurance Project Plan (QAPP). The QAPP was necessary to ensure the data collected was representative of actual precipitation and outfall flow conditions, and of sufficient quality to be used for its intended purpose. Though BASF eventually provided precipitation and flow estimates in the weekly reports submitted on December 15, 2014, the failure to submit the QAPP prevents EPA from knowing the accuracy of that data.

E. Failure to Complete Representative Effluent Sampling and Analysis, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Count 104 (Submittal of QAPP for Effluent Sampling and Analysis): Paragraphs 30 through 34 of the RFI required BASF to begin sampling and analyses of its discharges from Outfalls 001 through 007, for specific pollutants listed in the RFI, after submission and approval of a QAPP. Any discharge through these outfalls was unpermitted, and therefore, BASF did not have discharge monitoring and reporting requirements other than those contained in the RFI. The information was important in understanding the potential impact of BASF's discharges on the Cuyahoga River, and the potential threat to the public. The QAPP was necessary to ensure the data collected was representative and of sufficient quality to be used for its intended purpose. BASF never conducted the required sampling and analyses of its discharges. BASF's failure to submit the QAPP also prevented EPA from informing BASF when effluent sampling and analysis was to begin.

Count 105 (Sampling and Analysis of Outfall Effluent): Sampling and analysis of BASF's unpermitted discharges was important in understanding the potential impact of BASF's discharges on the Cuyahoga River, and the potential threat to the public. BASF's discharge through this outfall was unpermitted, and therefore, BASF did not have discharge monitoring and reporting requirements other than those required under the RFI. EPA did not assess a separate penalty for this Count, since the QAPP was not submitted, the gravity of which, is discussed above.

4. EXTENT OF VIOLATIONS

A. Unpermitted Discharges, CWA Section 301, 33 U.S.C. § 1311.

Counts 2-27: BASF did not at all comply with the statutory requirement to obtain a NPDES permit for its discharges through Outfall 007. Discharge at the outfall was noted as early as 2011.

B. Failure to Provide Written Confirmation of Intent to Comply, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Count 28: While BASF did contact EPA to state it received the RFI, it did not state its intent to comply with the RFI. Rather, it stated that it would “prefer to discuss” its response and would call back on Monday. BASF stated it had a plan to permanently remove the entire Outfall 007 drainage system. However, no accompanying statement of intent to comply with the RFI was included, and none was received thereafter.

C. Failure to Visually Monitor Outfalls and Effluent Flow, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Counts 29-61 (Examination of Outfall 007): BASF did not comply with any part of the requirement to visually examine the outfall structure at Outfall 007, and immediately commence construction or modification of any channel or conveyance works at Outfall 007 necessary to ensure accurate volumetric flow monitoring and representative sampling of the effluent.

Counts 62-66 (Visual Monitoring of Outfall 007): BASF was required to begin visually monitoring of Outfall 007 within 3 business days of receiving the RFI. BASF received the RFI on September 9, 2014. BASF appears to have begun visual monitoring on September 22, 2014. BASF did not conduct the visual monitoring for five (5) business days.

Counts 67-78 (Outfall 007 Weekly Visual Monitoring Reports): BASF did not provide weekly reports of its visual monitoring, despite having begun monitoring on September 22, 2014. Rather, BASF waited until December 15, 2014, to submit the reports.

Counts 79-83 (Visual Monitoring of Outfalls 001-006): The extent of violation is the same as that described above for Counts 62-66.

Counts 84-95 (Outfall 001-006 Weekly Visual Monitoring Reports): The extent of violation is the same as that described above for Counts 67-78.

D. Failure to Monitor Precipitation and Effluent Flow, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Counts 96-102 (Establishment of Rain Gauge Network): BASF was required to establish a network of rain gauges at the site within five (5) business days of receiving the RFI. BASF received the RFI on September 9, 2014. Weekly Outfall Observations Reports from BASF

submitted on December 15, 2014, include rainfall measurements beginning on September 22, 2014. BASF did not comply with the requirement for seven (7) days (September 15 – 21, 2014).

Count 103 (Submittal of QAPP for Collection of Precipitation and Effluent Flow Data): At no point did BASF prepare and submit to EPA for approval a Quality Assurance Project Plan (QAPP) for the collection of precipitation and effluent flow monitoring data.

E. Failure to Complete Representative Effluent Sampling and Analysis, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Count 104 (Submittal of QAPP for Effluent Sampling and Analysis): BASF failed to prepare and submit to EPA for approval a Quality Assurance Project Plan to conduct representative sampling and analysis of outfall effluent for the parameters identified in the RFI.

Count 105 (Sampling and Analysis of Outfall Effluent): BASF failed to conduct sampling and analysis of the discharge from Outfalls 001 – 007, for the parameters identified in the RFI.

5. ABILITY TO PAY THE PROPOSED PENALTY

There is no information available to Complainant to indicate that BASF cannot pay the proposed penalty.

6. PRIOR HISTORY OF VIOLATIONS

EPA does not have information regarding previous violations by BASF at this site.

7. BASF CULPABILITY

A. Unpermitted Discharges, CWA Section 301, 33 U.S.C. § 1311

Counts 2-27: Outfall 007 is on BASF's property. BASF was aware, or should have been aware, of the discharge from Outfall 007 beginning at least some time in 2011. BASF was also aware, or should have been aware, of the fact that contaminants existed at the site, since the site was the subject of remedial action under RCRA and the FUSRAP. Remedial actions under the FUSRAP were being carried out to address radioactive contamination from uranium enrichment that took place during the 1930s and 1940s. BASF had sufficient knowledge of the unpermitted discharge. Furthermore, BASF should have known the discharge could contain pollutants based on the history of the site.

B. Failure to Comply with the Provisions of the Request for Information, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Counts 28-105: BASF was capable of complying with each element of the RFI. BASF had the resources and sophistication to do so. EPA is not aware of anything that would have prevented BASF from monitoring, sampling, and analyzing its discharge from Outfall 007 prior to its ceasing the discharge.

8. ECONOMIC BENEFIT OF NON-COMPLAINE

A. Unpermitted Discharges, CWA Section 301, 33 U.S.C. § 1311

Counts 2-27: In this case, the economic benefit of non-compliance is the delay in expenditures necessary to eliminate discharge through Outfall 007. BASF eventually acquired the services of Geosyntec Consultants, Inc. to generate a Storm Water Outfall Investigation and Closure Report (Closure Report), which was completed on March 3, 2015. According to the Closure Report, actions taken to address Outfall 007 included: backfilling a manhole in the vicinity of Building G1; excavating storm water conveyance pipe leading to Outfall 007 and pouring concrete into and around exposed conveyance pipes to form a block on the downgradient ends of excavations; removal of conveyance piping and backfilling open trenches with stone; and sealing conveyance lines with hydraulic cement or a Fernco pipe cap. These expenditures were delayed from at least when BASF discovered the discharges until closure activities were completed in the fall of 2014. EPA does not know the amount of these expenditures, but it can be reasonably assumed it was on the order of tens to hundreds of thousands of dollars.

B. Failure to Comply with the Provisions of the Request for Information, CWA Sections 308 and 309(g)(1), 33 U.S.C. §§ 1318 and 1319

Counts 28-105: The avoided costs of failing to comply with the RFI are considered negligible.

9. STATUTORY MAXIMUM PENALTY

Attachment A includes a TOV for all counts alleged in the complaint. As noted previously, Count 2 is beyond the statute of limitations, and EPA is not assessing a separate penalty for Count 105, since outfall sampling and analysis was to begin after EPA approved BASF's QAPP, and BASF did not submit the QAPP for approval. Therefore, EPA is seeking penalties for 102 days of violation. The CWA statutory maximum penalty for administrative cases for violations occurring from January 13, 2009 through November 1, 2015 is \$16,000 per day. Therefore, the total statutory maximum penalty in this case is \$1,632,000, as detailed in the table below.

Statutory Maximum Penalty			
Type	# Violations	\$Penalty/Violation	Calculated Penalty
Judicial (from 1/13/09 through 11/2/15)	102	\$37,000	\$3,774,000.00
Judicial (<i>from 11/2/15 through 1/14/17</i>)*		\$51,570	\$0.00
Judicial (<i>from 11/12/15 to present</i>)		\$52,414	\$0.00
		Total Judicial:	\$3,774,000.00
Administrative (<i>from 1/13/09 through 11/1/15</i>)	102	\$16,000	\$1,632,000.00
Administrative (<i>from 11/2/15 through 1/14/17</i>)*		\$20,628	\$0.00
Administrative (<i>from 11/12/15 to present</i>)		\$20,965	\$0.00
		Total Administrative:	\$1,632,000.00
*Assessed on or after 8/1/2016 but before 1/15/2017			

Section 309(g)(2)(B) limits the maximum amount of class II administrative penalties to \$262,006. Therefore, the calculated statutory maximum in this case is **\$ 262,006.00**.

10. ADMINISTRATIVE PENALTY SOUGHT

EPA is seeking the statutory maximum penalty of **\$262,006.00** in this case, based on the nature, circumstances, extent, and gravity of the violations; and BASF's culpability, as previously described. These violations warrant significant penalties, as they involve the unpermitted discharge of pollutants, including radioactive pollutants, into the Cuyahoga River, over the course of several years. BASF knew, or should have known, of this discharge and had the ability to cease the discharge at any time. BASF understood the site was contaminated, as remedial actions under RCRA and FUSRAP were on-going. When required by an RFI to provide information on the nature of those discharges, BASF did not do so. The statutory maximum daily penalty for the 25 days of unpermitted discharges alone exceeds the maximum penalty for Class II violations (i.e., 25 X \$16,000 = \$400,000). Therefore, EPA believes an administrative statutory maximum penalty of \$262,006 is appropriate.

Respectfully Submitted,

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**UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE ADMINISTRATOR**

In the Matter of:)	
)	
BASF Corporation,)	Docket No. CWA-05-2018-0008
)	
Respondent.)	

CERTIFICATE OF SERVICE

I hereby certify that today I filed with the Office of Administrative Law Judge E-Filing System at www.epa.gov/alj, and thus also provided the Presiding Officer Administrative Law Judge Christine Donelian Coughlin a copy of **COMPLAINANT’S INITIAL PREHEARING EXCHANGE.**

I hereby certify that today I also issued to DJ Camerson, Counsel to Respondent, via e-mail at djcamerson@bressler.com, one copy of **COMPLAINANT’S INITIAL PREHEARING EXCHANGE.**

9 November 2018
Date

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