March 1, 2022

Mr. Brian Jankauskas, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau A
625 Broadway
12th Floor
Albany, NY 12233-7015

Subject: **2021 Operations and Maintenance Report**
Former Ciba-Geigy Facility
Glens Falls, New York
NYSDEC #557011

Dear Mr. Jankauskas:

This *Operations and Maintenance Report* summarizes the operations and maintenance (O&M) activities performed between January 1 and December 31, 2021, at the former Ciba-Geigy Corporation pigments manufacturing facility located at 89 Lower Warren Street in Queensbury, New York, just east of the City of Glens Falls (the Site) (**Figure 1**). O&M are performed in accordance with the New York State Department of Environmental Conservation (NYSDEC) Hazardous Waste Management (HWM) Post Closure Permit for the Site (NYSDEC Site No. 557011). A renewal of Part 373 of the HWM Permit #5-5234-00008/00096 was issued by the NYSDEC on March 6, 2015, with an expiration date of March 5, 2025.

EHS Support LLC ("EHS Support") is submitting this report to the NYSDEC on behalf of Hercules LLC ("Hercules," previously acquired by Ashland LLC) and CIBA Corporation ("CIBA," previously acquired by BASF Corporation). Hercules and CIBA ("the Parties") are the Site permittees and share responsibility for ongoing environmental activities.

GWES Operations Summary

Groundwater extraction system (GWES) operations were performed at the Main Plant Site (MPS) area in accordance with the *Remedy Optimization Plan* (ROP),[1] which was approved by NYSDEC and implemented in November 2016, and the *Revised Remedy Optimization Report* (ROR), which was approved by NYSDEC in May 2019.[2]

Groundwater was extracted in 2021 from two sumps (Sumps A and B) in the overburden French Drain System (**Figure 2**). Additionally, as described in the letter submitted to the NYSDEC in November 2018,

[1] EHS Support. 2016. Remedy Optimization Plan. Former Ciba-Geigy Facility, Glens Falls, NY. August 2016. Revised November 2016.
[2] EHS Support. 2019. Revised Remedy Optimization Report. Former Ciba-Geigy Facility, Glens Falls, NY. March.

approved by the NYSDEC in December 2018,[3] and documented in the NYSDEC-approved ROR, groundwater extraction was reinitiated at well EW-B5 in December 2018. Extraction well EW-B5 was active throughout 2021. In accordance with the ROP and the ROR, groundwater is no longer extracted from the other 19 bedrock groundwater extraction wells or from Sump C.

Extracted groundwater is pumped via force mains to a lift station near the on-site railroad crossing, then pumped to a 500,000-gallon equalization tank located in the effluent pumping station (EPS) building near the northeastern corner of the Site. The extracted water is then discharged directly from the EPS to the City of Glens Falls publicly owned treatment works (POTW) in accordance with the City of Glens Falls Industrial User Permit No. 002F, issued in April 2012 (renewed April 2017). In February 2018, the POTW provided an updated page 11 for the permit, which specifies a pH range of 6.0 to 9.0 standard units (SU) that is consistent with the Site-specific limits indicated on page 3 of the permit. This updated permit page is included in **Enclosure 1,** along with the current permit dated April 2017. A renewal application has been submitted to the City of Glens Falls for continuation of the existing discharge permit beyond its current expiration date of April 2022.

POTW Discharge Monitoring Results

Per the POTW permit, discharge sampling was performed quarterly in 2021, and Discharge Monitoring Reports (DMRs) were submitted to the POTW.

As specified in the permit, the GWES discharge was monitored for several parameters. The DMRs, including the laboratory analytical reports, are included in **Enclosure 2**. System discharges must comply with the limits outlined in the POTW permit.

Flow, Chromium, and Cyanide

Permit limits for flow, chromium, and cyanide include the following:

- Total Flow: 175,000 gallons per day (gpd) (quarterly average)
- Total Flow: 350,000 gpd (instantaneous maximum)
- Total Chromium: 3.1 pounds per day (lb/day) (maximum, based on quarterly sample result and quarterly average flow)
- Total Cyanide: 3.0 milligrams per liter (mg/L) (maximum, based on quarterly sample result)

The GWES flow is recorded daily at the permittees' dedicated flow meter, located at the southern end of the Preliminary Treatment Building at the Glens Falls POTW. The GWES discharge is sampled quarterly using a composite sampler at the southern end of the Preliminary Treatment Building at the POTW, with samples analyzed for total chromium (United States Environmental Protection Agency [USEPA] Method 200.8) and total cyanide (USEPA Method 335.4).

The 2021 POTW discharge results for flow, cyanide, and chromium measurements are summarized in **Table 1.** All results were within the applicable permit limits.

[3] Letter submitted to the NYSDEC by EHS Support on November 27, 2018, RE: EW-B5 Operations and Main Plant Site Groundwater and Surface Water Sampling Program. NYSDEC provided approval via e-mail on December 6, 2018.

Table 1 Comparison of Measured Values to Permit Values (Flow, Cyanide, Chromium)

	Flow (gpd, Maximum Daily)	Flow (gpd, Average)	Sample Date	Total Cyanide (mg/L)	Total Chromium (mg/L)	Chromium (lb/day)
Permit Limits	**350,000**	**175,000**	**--**	**3.0**	**--**	**3.1**
January – March 2021	73,000	24,233	2/22/2021	0.55	0.19	0.04
April – June 2021	90,000	48,725	4/29/2021	0.65	0.37	0.15
July – September 2021	88,000	56,848	7/29/2021	0.1U	0.49	0.23
October – December 2021	119,000	65,913	12/15/2021	0.57	0.48	0.26
Average	**--**	**48,930**	**--**	**0.47**	**0.38**	**0.17**

Notes:
Dashes represent information that is not applicable.
gpd = gallons per day
lb/day = pounds per day
mg/L = milligrams per liter
U = indicates the analyte was not detected above reporting limit.

The chromium permit limit is a daily mass limit, so the concentration measured in the composite discharge sample is converted to an average daily mass, using the average flow for the period.

The conversion calculation is as follows:

$$Total\ chromium\ \left(\frac{lb}{day}\right) = \left(x\ \frac{mg}{L}\right)\left(\frac{g}{10^3\ mg}\right)\left(\frac{lb}{453.59\ g}\right)\left(\frac{1\ L}{0.2642\ gal}\right)\left(y\ \frac{gal}{day}\right)$$

where:
x = chromium concentration (quarterly sample result)
y = average quarterly flow
g = grams
gal = gallons
L = liters
lb = pounds
mg = milligrams

Other Parameters

The POTW permit includes limits for several additional parameters. The POTW permit requires continuous sampling for pH; quarterly sampling for lead, mercury, and total phenols; and annual sampling for 22 additional analytes, biological oxygen demand, total suspended solids, and oil and

grease (frequency and limits provided in **Enclosure 1**). GWES operations complied with all additional requirements of the POTW permit (as provided on the DMRs [**Enclosure 2**]).

Annual discharge sampling for the full suite of analytes listed in the permit was performed on December 15, 2021. The sample results for constituents beyond cyanide and chromium (which were discussed earlier) are provided in **Enclosure 3,** along with the permit limits. All sample results were within permit limits, with concentrations orders of magnitude below the respective permit limits.

On-Site GWES Discharge Measurements

Flow totalizers were in place in Sump A, Sump B, and extraction well EW-B5 throughout 2021. Totalizer readings were manually recorded in both sumps and EW-B5 on an approximately weekly basis, except for short periods of time when the pumps at Sumps A and B were not running (later replaced) and when field personnel were unable to open well EW-B5 to record the measurement. For Sumps A and B, totalizer readings were also recorded daily through the Site telemetry system. Starting in December 2021, automatic telemetry readings were also available for well EW-B5.

Consistent with historical data reviewed for the development of the ROP, Sump B had a considerably higher average discharge rate than Sump A. When considering the combined discharge from these two sumps, an average of 70 percent of the flow from the French Drain was contributed by Sump B. **Figure 3** illustrates the daily flow totals from Sumps A and B, as recorded by the telemetry system.

When telemetry upgrades were completed for Sumps A and B in late 2016, operational data, including pump status and flow rate, became available for each location, with data recorded in 15-minute intervals. At Sump B, consistent with pumping in 2017 through 2020, pumping typically occurred three times a day at approximately 2-hour intervals. When the pump is active, Sump B pumping rates average approximately 100 gallons per minute (gpm). The typical pumping rate for the Sump A pump was 25 gpm, with the pump cycling approximately every hour for 15 to 30 minutes.

Extraction rates at well EW-B5 averaged approximately 300 gpd. When active, the EW-B5 pump extracts water at a rate of 10 gpm. Weekly totalizer readings for EW-B5 are summarized in **Enclosure 4**.

Pumping Set Points

The pumping level set points in Sumps A and B have been refined to achieve maximum drawdown within the sumps (i.e., optimize water extraction), while ensuring pump intakes remain submerged to avoid overheating and/or damage to the pumps. The pump operations are optimized to maintain water levels in the French Drain at or below the base of the overburden horizon to the extent practicable.

In Sump A, the transducer controlling the pump was calibrated to initiate pumping at a water level elevation of 211.2 feet mean sea level (ft msl) and continue pumping until the water level reaches 210.2 ft msl. The overburden base elevation in the vicinity of Sump A is 215 ft msl or higher, and the invert of the French Drain inlet pipe at Sump A is 210.2 ft msl. In Sump B, the transducer controlling the pump was calibrated to initiate pumping at a water level elevation of 214.0 ft msl and continue pumping until

the water level reaches 211.5 ft msl. The overburden base elevation in the vicinity of Sump B is 217 ft msl or higher, and the invert of the French Drain inlet pipe at Sump B is 209.2 ft msl.

Since December 2018, the level-float controls for the EW-B5 well pump have been set to initiate pumping at a water level elevation of 194.0 ft msl and continue pumping until the water level reaches 187.7 ft msl. The pumping elevation range is similar to the range used before discontinuing groundwater extraction at well EW-B5 in 2016.

GWES and Site Operations and Maintenance

Site inspections were conducted on a weekly, monthly, and quarterly basis to evaluate the condition of multiple Site features, including the Resource Conservation and Recovery Act (RCRA) cap, permeable cover, roads, fencing, surface drainage system, and vegetative cover. Inspection reports are provided in **Enclosure 5.**

Fencing and Signage

During Site inspections, the condition of the fences were inspected to check for any signs of damage or unauthorized entry. During an inspection performed in December 2021, some damage to the fencing in the northeast portion of the North Lot was observed, along with some neighbor's equipment stored in the area. The Parties are currently reviewing the status of this issue.

Fence signage was maintained along all fence lines of the MPS, as well as along fence lines of the pretreatment plant and other off-site parcels.

Roads and Covers

Access road conditions were assessed during weekly inspections for damage and were plowed during the winter on an as-needed basis. The condition of the cover systems was also assessed. No erosion or disturbance (e.g., by small animals) was discovered. The Site was mowed during the summer months.

GWES, Lift Station, and Discharge Force Main

Preventative maintenance was conducted on the active pumps throughout 2021. The pumps in Sump A and Sump B were pulled, cleaned, and checked for functionality, and probes were cleaned, inspected for continuity, and replaced as necessary. Bio-foul build-up, scaling, and iron build-up were removed from the probes, pumps, and piping to ensure continued operation at peak efficiency. Weekly inspections were conducted to ensure that the pumps and related components were functioning properly, and plumbing lines were inspected for leaks.

As has been typical for operations at this Site, intermittent power, system alarm, and telemetry communication outages occurred during the year; however, these were promptly resolved either remotely via telemetry or by a technician on-site.

A summary of the electrical and mechanical upgrades performed in 2021 is provided in **Table 2.**

Table 2 Summary of Mechanical and Electrical Upgrades

Date	Description
2/11/2021	Pump replaced at Sump B.
4/22/2021	Pump replaced at Sump A.
6/1/2021	Pump at EW-B5 repaired.

As communicated to the NYSDEC via e-mail on December 18, 2020, the pump in Sump B became inoperable in mid-December 2020. Through troubleshooting it was determined that the pump required replacement. A new pump was ordered and, following weather-related delays, was replaced and restarted in February 2021.

NYSDEC and City of Glens Falls Site Inspections

Kevin Wood, Regional Materials Management Engineer with NYSDEC, completed a hazardous waste inspection on December 15, 2020, which consisted of viewing the RCRA cap, some of the GWES components, and the EPS. No issues were identified during the inspection other than two unlocked padlocks on stickup well caps, and a depression in the ground surface noted in the RCRA cap area that could potentially gather surface water.

During inspections conducted throughout 2021, no standing water was observed in the depression, and the soil was relatively dry. There was also no erosion or exposed soils noted in this area, nor evidence of surface desiccation (cracks) or sloughing. Since there was no immediate risk from the depression in the RCRA cap, the cap continued to be monitored and no corrective actions were initiated. In a letter dated November 1, 2021, NYSDEC requested that repairs to the RCRA cap be made by January 31, 2022. In a letter dated November 24, 2021, the Parties requested a six-month extension until July 31, 2022, to further evaluate the RCRA cap conditions and conduct any needed repairs.

As a follow-up to the 2020 RCRA cap inspection, a Site visit took place on December 21, 2021 and included Kevin Wood and Brian Jankauskas (both from NYSDEC), Bob O'Neill (Brown & Caldwell), Katie Angel (Antea), and Cameron Dixon (EHS Support). In a letter dated December 27, 2021, NYSDEC agreed to the Parties' proposed extension. Due to COVID-19 travel and access restrictions, a representative from the City of Glens Falls POTW did not complete a Site inspection in 2021.

Closing

Certification by a NYS-registered professional engineer is provided on the following page.

If you have questions or comments regarding this report or the attached documents, please contact Cassie Johnson at 608-558-6795 for discussion.

Sincerely,

Elena Dadukova
Project Engineer

Cassie Johnson
Project Manager

List of Attached Figures:
Figure 1 – Site Location
Figure 2 – Site Features and Groundwater Extraction System Components
Figure 3 – Daily Extraction Rates – Sumps A and B

List of Enclosures:
Enclosure 1 City of Glens Falls Industrial User Permit No. 002F (April 2017)
Enclosure 2 2021 Discharge Monitoring Reports
Enclosure 3 POTW Effluent Extended Parameters
Enclosure 4 EW-B5 Weekly Totalizer Summary
Enclosure 5 Site Inspection Reports

cc: Eamonn O'Neil, New York State Department of Health
James Vondracek, Ashland LLC
Stephen Havlik, BASF Corporation
Laura McMahon, BASF Corporation
Katie Angel, Antea Group
Kristin VanLandingham, EHS Support
Jim Breza, EHS Support
Cameron Dixon, EHS Support
Bob O'Neill, Brown & Caldwell
Jeff Caputi, Brown & Caldwell

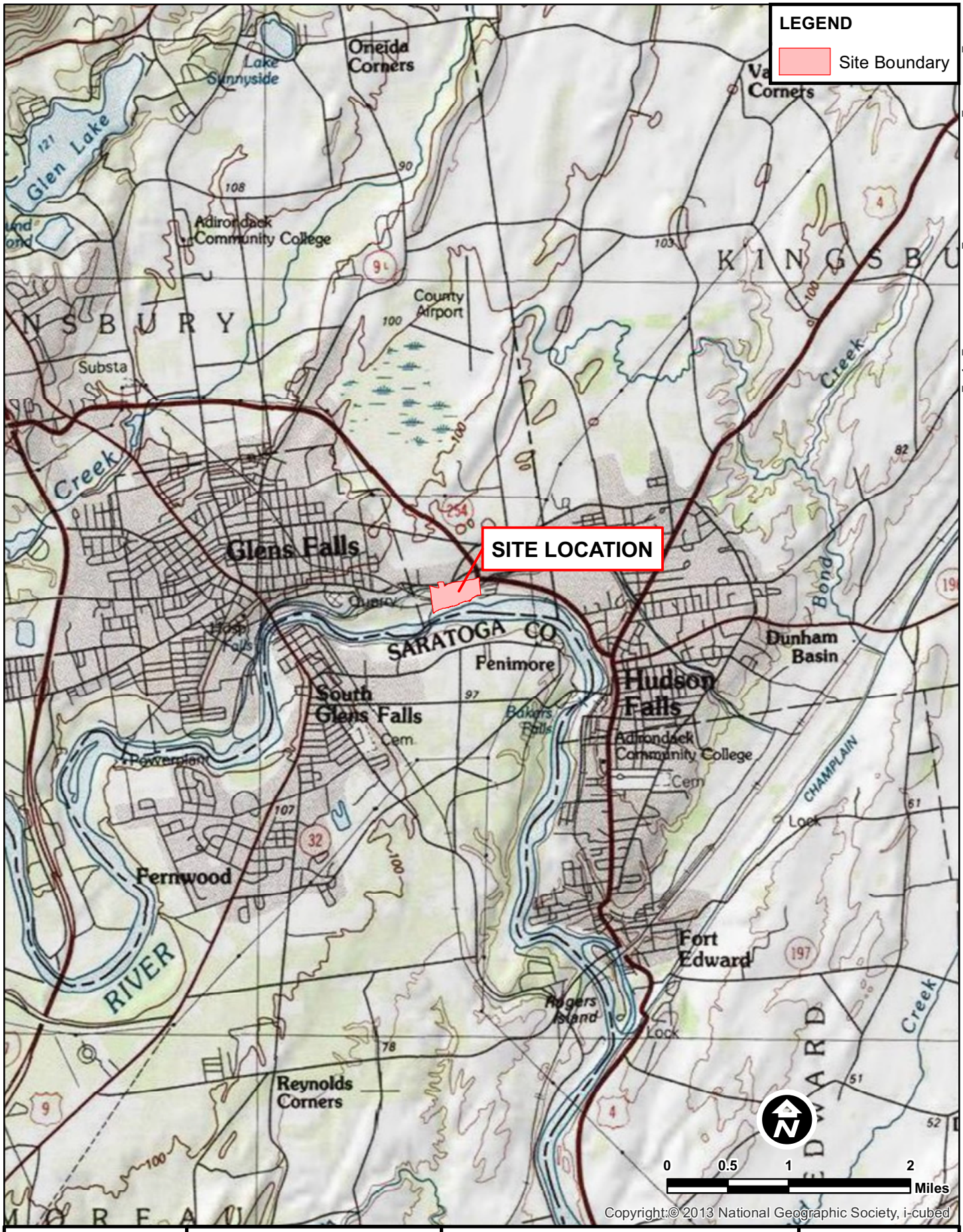
Certification Page

I, Kristin A. VanLandingham, P.E., certify that I am currently a NYS-registered professional engineer and that this *Operations and Maintenance Report* dated March 2022 for the Former Ciba-Geigy Facility located in Queensbury Township, Glens Falls, New York was prepared in accordance with all applicable statutes and regulations, and with DER *Technical Guidance for Site Investigation and Remediation* (DER-10).

Kristin A. VanLandingham, P.E.
NYS License No. 089610

03/01/2022
Date

Figures



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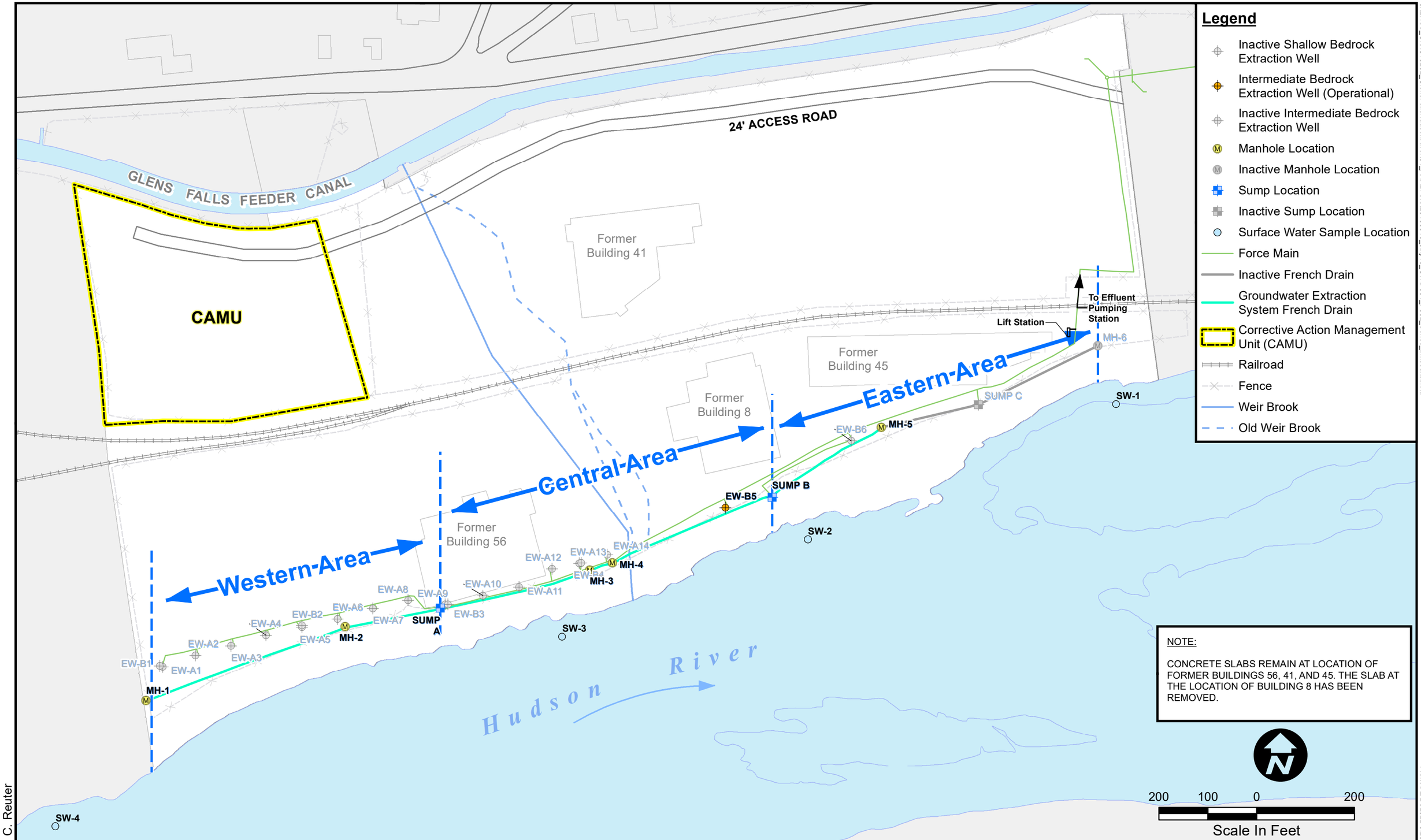
EHS Support	ASHLAND FORMER CIBA-GEIGY / HERCULES SITE GLENS FALLS, NY	SITE LOCATION	FIGURE 1



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Reviewed By: C. Reuter

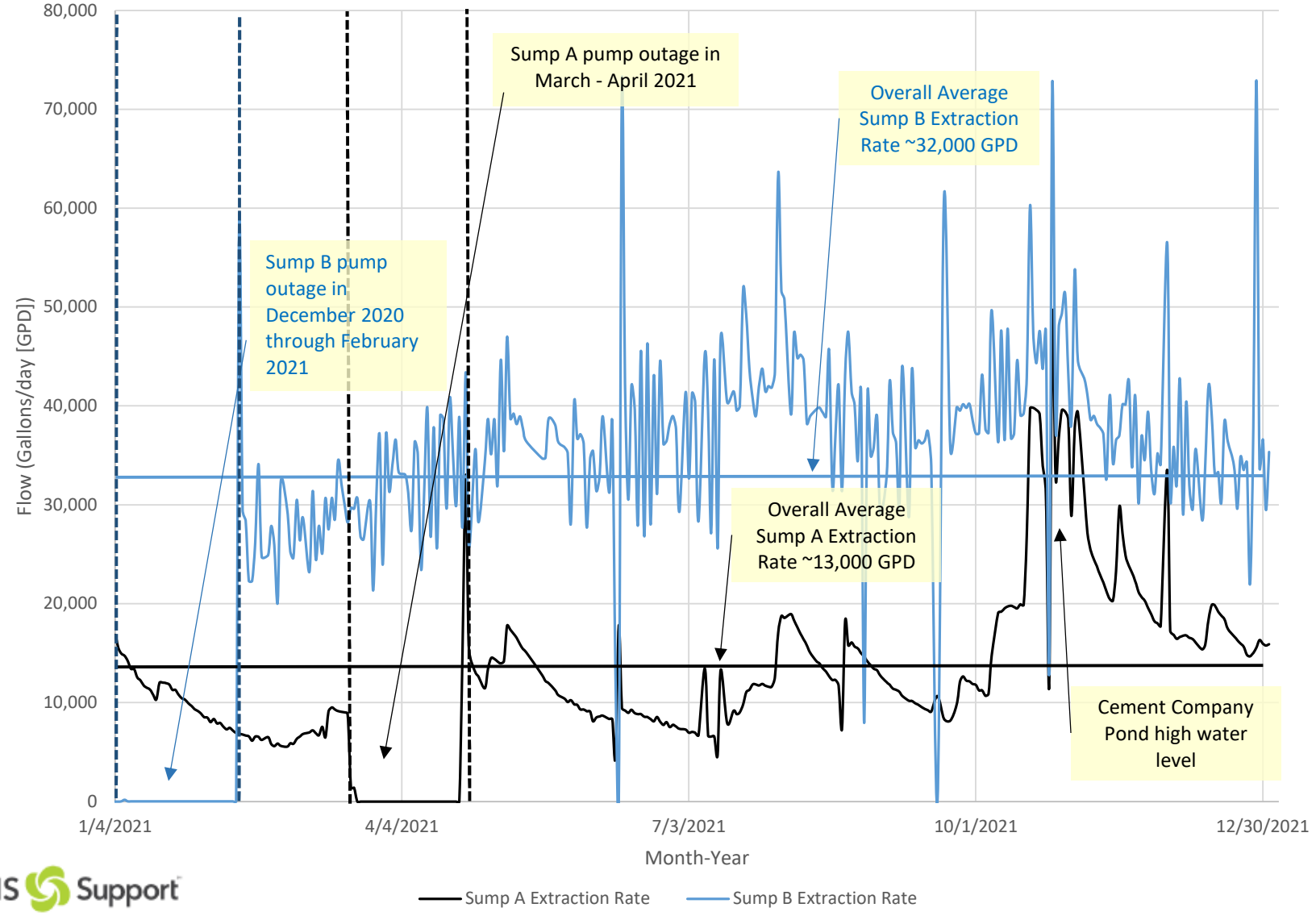
EHS Support

FORMER CIBA-GEIGY / HERCULES SITE
GLENS FALLS, NY

SITE FEATURES AND GROUNDWATER EXTRACTION SYSTEM COMPONENTS

FIGURE 2

Figure 3
Daily Extraction Rates – Sumps A and B



EHS Support

Enclosure 1 City of Glens Falls Industrial User Permit No. 002F (April 2017)

City of Glens Falls

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Water & Sewer Department Telephone: [518] 761-3850 • Fax: [518] 761-3862
24 Hr. Water & Sewer Emergencies: [518] 761-3857 • www.cityofglensfalls.com

Hercules LLC
Ashland Inc.
5200 Blazer Parkway
Dublin, Ohio 43017

Subject: Updated Permit No. 002F

The City of Glens Falls Wastewater Treatment Plant has requested and been granted a change in our Local Limits for pH by the USEPA. We requested the Local Limit for pH be changed from 6.5-8.5 Standard Units to a new limit of 6.0 to 9.0 Standard Units.

We have updated the pages of your permit for your facility at Lower Warren St., Queensbury, New York to reflect this new pH range and are enclosing a copy of the pages of your permit that outline the pH ranges. These pages should be inserted in your permit in sequence to reflect this change.

This modification will take effect on February 1st, 2018.

Please feel free to contact me with any questions.

Sincerely,

Christopher S. Miller
Assistant Chief Operator Glens Falls WWTP
Telephone: (518) 761-3850 ext 119
Telefax: (518) 761-3862
Email: cmiller@cityofglensfalls.com

B. During the period commencing April 24, 2017 through midnight April 23, 2022, the discharge from the process wastewater shall not exceed the following effluent limitations. Effluent at this location consists of the discharge from the permittees' effluent pumping station treating groundwater from the Lower Warren Street site that was formerly used by Hercules, Inc. and Ciba-Geigy Inc. for the manufacture of dyes and related chemicals.

EFFLUENT LIMITATIONS

Parameter	Instantaneous Maximum (mg/1)	Quarterly Average (mg/l unless otherwise noted)
Antimony	10	--
Ammonia	40	--
Arsenic	0.25	--
Benzene	0.1	--
Boron	5.0	--
Cadmium	0.25	--
Calcium	500	--
Chloroform	1.0	--
Chromium, total	see note below *	3.1 lb/day
Copper	1.0	--
Cyanide, total	3.0	--
Ethylbenzene	0.1	--
Iron	50	--
Lead	0.8**	--
Manganese	5.0	--
Mercury	0.025***	0.005
Methylene Chloride	1.0	--
Napthalene	1.0	--
Nickel	2.3	--
Oil & Grease	50	--
pH	6.0-9.0	--
Phenols	5.0	--
Silver	0.2	--
Toluene	0.1	--
1,1,1 - Trichloroethane	1.0	--
Xylene	0.1	--
Zinc	1.5	--
Flow (gallons per day)	350,000	175,000

*The discharge for total chromium is 3.1 lb/day and will be based on the average of chromium sampling data and the quarterly average flow. This limit is based on mass balance calculations as well as the 1999 Wastewater Headworks Analysis Report.

**0.8 mg/l Lead recommended as a local limit in the 1999 Wastewater Headworks Analysis Report.

***Variance for Mercury granted by the Water and Sewer Board at the public hearing held June 24, 1991.

C. All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in Chapter 177 of the Code of the City of Glens Falls and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this permit.

a) Containing any liquid, solid, or gas which, by reason of its nature or quantity, is sufficient, either alone or by interaction with other substances, to cause fire or explosion or be injurious in any way to the POTW or to the operation of the POTW. At no time shall two successive readings on an explosion-hazard meter at the point of discharge in the system or at any point in the system, be more than 5% nor any single reading over 10% of the lower explosive limits (LEL) of the meter. Materials prohibited under this subsection include but are not limited to substance(s) which the Board, the DEC or the EPA has notified a user poses a fire or explosion hazard to the POTW;

b) Containing solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities, such as but not limited to grease, oil or fat in concentrations exceeding 100 parts per million by weight, garbage with particles greater than ½ inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, wastepaper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud or glass grindings or polishing wastes;

c) Having a pH less than six point zero (6.0) or higher than nine point zero (9.0) or having any other corrosive property capable of causing damage or hazard to structures, equipment or personnel of the POTW;

d) Containing any toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, so as to potentially inhibit or interfere with the operation or performance of the POTW, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the POTW or exceed a limitation set forth in a National Categorical Pretreatment Standard. A "toxic pollutant" shall include but not be limited to any pollutant identified pursuant to Section 307 (a) of the Federal Act.

e) Containing any wastes which either singly or by interaction with other wastes, are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewer for its maintenance and repair.

f) Containing any substance which may cause the POTW's effluent or any other product of the POTW, such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act or the Toxic Substances Control Act; or state criteria applicable to the sludge management method being used.

g) Containing any substance which may cause the POTW to violate its State Pollution Discharge Pollution Discharge Elimination System Permit or receiving water quality standard.

h) Containing any objectionable color not removed in the treatment process, such as but not limited to dye wastes and vegetable tanning solutions.

i) Having a temperature which may inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds forty degrees centigrade (40 degrees C.) [one hundred four degrees Fahrenheit (104 degrees F.)]

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24 Hr. Water & Sewer Emergencies: [518] 761-3857 • www.cityofglensfalls.com

April 22, 2017

Hercules LLC, a wholly owned subsidiary of
Ashland Inc.
5200 Blazer Parkway
Dublin, Ohio 43017

Dear James E. Vondracek,

Please find your renewed Industrial User Permit. Check for any typographical or factual errors. Contact me with any questions or concerns regarding the permit language or sampling/reporting requirements so they can be resolved as soon as possible.

Sincerely,

Lawrence Glasheen

Lawrence Glasheen, Chief Operator
Glens Falls WWTP
2 Shermantown Road
Glens Falls 12801
Telephone: (518) 761-3850 ext 112
Telefax: (518) 761-3862
Email: lglasheen@cityofglensfalls.com

City of Glens Falls Water and Sewer Board of Commissioners

2 Shermantown Road
Glens Falls, NY 12801
Telephone: (518) 761-3850
Fax: (518) 761-3862

Permit No. 002F

INDUSTRIAL USER PERMIT

In accordance with the provisions of Chapter 177 of the Code of the City of Glens Falls

Hercules LLC , a wholly owned subsidiary of Ashland Inc.
5200 Blazer Parkway
Dublin, Ohio 43017

and

BASF Corporation
227 Oak Ridge Parkway
Toms River, NJ 08754-0071

Are hereby authorized to discharge industrial wastewater from the above identified facility and through the outfall identified herein into the City of Glens Falls sewer system in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all applicable pretreatment regulations, standards or requirements under local, State, and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of Chapter 177 of the Code of the City of Glens Falls.

This permit shall become effective on April 24, 2017 and shall expire at midnight on April 23, 2022.
If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a renewal permit in accordance with the requirements of Chapter 177 of the Code of the City of Glens Falls, a minimum of 180 days prior to the expiration date.

CITY OF GLENS FALLS

By: Steve Gurzler

Steven Gurzler, Water & Sewer Superintendent

Issued this 21st day of April, 2017

PART 1 - EFFLUENT LIMITATIONS

A. During the period of April 24, 2017 through midnight April 23, 2022, the permittees is authorized to discharge process wastewater to the City of Glens Falls sewer system from the outfalls listed below.

Description of outfalls:

Outfall	Descriptions
001	The flow from manhole number 5 located at the Glens Falls WWTP to a dedicated conveyance channel where metering and sampling takes place prior to combining with GFWWTP primary effluent. Said discharge is conveyed by a dedicated pipeline from the permittee's effluent pumping station located on Lower Warren Street.

B. During the period commencing April 24, 2017 through midnight April 23, 2022, the discharge from the process wastewater shall not exceed the following effluent limitations. Effluent at this location consists of the discharge from the permittees' effluent pumping station treating groundwater from the Lower Warren Street site that was formerly used by Hercules, Inc. and Ciba-Geigy Inc. for the manufacture of dyes and related chemicals.

EFFLUENT LIMITATIONS

Parameter	Instantaneous Maximum (mg/l)	Quarterly Average (mg/l unless otherwise noted)
Antimony	10	--
Ammonia	40	--
Arsenic	0.25	--
Benzene	0.1	--
Boron	5.0	--
Cadmium	0.25	--
Calcium	500	--
Chloroform	1.0	--
Chromium, total	see note below *	3.1 lb/day
Copper	1.0	--
Cyanide, total	3.0	--
Ethylbenzene	0.1	--
Iron	50	--
Lead	0.8**	--
Manganese	5.0	--
Mercury	0.025***	0.005
Methylene Chloride	1.0	--
Napthalene	1.0	--
Nickel	2.3	--
Oil & Grease	50	--
pH	6.5-8.5	--
Phenols	5.0	--
Silver	0.2	--
Toluene	0.1	--
1,1,1 - Trichloroethane	1.0	--
Xylene	0.1	--
Zinc	1.5	--
Flow (gallons per day)	350,000	175,000

*The discharge for total chromium is 3.1 lb/day and will be based on the average of chromium sampling data and the quarterly average flow. This limit is based on mass balance calculations as well as the 1999 Wastewater Headworks Analysis Report.

**0.8 mg/l Lead recommended as a local limit in the 1999 Wastewater Headworks Analysis Report.

***Variance for Mercury granted by the Water and Sewer Board at the public hearing held June 24, 1991.

C. All discharges shall comply with all other applicable laws, regulations, standards, and requirements contained in Chapter 177 of the Code of the City of Glens Falls and any applicable State and Federal pretreatment laws, regulations, standards, and requirements including any such laws, regulations, standards, or requirements that may become effective during the term of this permit.

PART 2 - MONITORING REQUIREMENTS

A. From the period beginning on the effective date of the permit until the expiration date, the permittee shall monitor outfall 001 for the following parameters, at the indicated frequency:

Sample Parameter (units)	Sample Location	Frequency	Sample Type
Flow (gpd)	See note 2	Continuous	Meter
BOD (mg/l)	See note 1,3	1/Year	Grab
TSS (mg/1)	See note 1,3	1/Year	Grab
Ammonia (mg/1)	See note 1,3	1/Year	Grab
Antimony (mg/l)	See note 1,3	1/Year	Grab
Arsenic (mg/1)	See note 1,3	1/Year	Grab
Benzene (mg/l)	See note 1,4	1/Year	Grab
Boron (mg/l)	See note 1,3	1/Year	Grab
Cadmium (mg/1)	See note 1,3	1/Year	Grab
Calcium (mg/l)	See note 1,3	1/Year	Grab
Chloroform (mg/l)	See note 1,4	1/Year	Grab
Chromium (mg/1)	See note 1,3	Quarterly	Grab
Copper (mg/1)	See note 1,3	1/Year	Grab
Cyanide (mg/1)	See note 1,3	Quarterly	Grab
Ethylbenzene (mg/l)	See note 1,4	1/Year	Grab
Iron (mg/l)	See note 1,3	1/Year	Grab
Lead (mg/1)	See note 1,3	Quarterly	Grab
Manganese (mg/l)	See note 1,3	1/Year	Grab
Mercury (mg/1)	See note 1,3	Quarterly	Grab
Methylene Chloride (mg/l)	See note 1,4	1/Year	Grab
Napthalene	See note 1,3	1/Year	Grab
Nickel (mg/1)	See note 1,3	1/Year	Grab

Sample Parameter (units)	Sample Location	Frequency	Sample Type
Zinc (mg/1)	See note 1,3	1/Year	Grab
Trichlorophenol (mg/1)	See note 1,4	1/Year	Grab
Pentachlorophenol (mg/l)	See note 1,4	1/Year	Grab
Oil and Grease (mg/l)	See note 1,4	1/Year	Grab
Phenols, Total (mg/l)	See note 1,3	Quarterly	Grab
pH	See note 5	Continuous	Meter
Silver (mg/l)	See note 1,3	1/Year	Grab
Toluene (mg/l)	See note 1,4	1/Year	Grab
1,1,1-Trichloroethane	See note 1,4	1/Year	Grab
Xylene (mg/l)	See note 1,4	1/Year	Grab

Notes

1. Composite sampler is located at the Southern end of the Preliminary Treatment Building at the WWTP.

2. Daily flows are to be recorded from the permittee's flow meter at the Southern end of the Preliminary Treatment Building at the WWTP
3. Composite samples shall be taken at the frequency specified above and tested by a State certified laboratory. Permittee's samples shall be 24 hour time composites except as noted above.;
4. Grab samples shall be taken from the effluent wet well at the Southern end of the Preliminary Treatment Building at the WWTP at the frequency specified above and tested by a State certified laboratory.

5. pH shall be monitored at the Southern end of the Preliminary Treatment Building at the WWTP.

B. All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto unless specified otherwise in the monitoring conditions of this permit.

PART 3 - REPORTING REQUIREMENTS

A. Monitoring Reports

Monitoring results obtained shall be summarized and reported on an Industrial User Monitoring Report Form once per quarter. The reports are due on the 28th day of the following month. The report shall indicate the nature and concentration of all pollutants in the effluent for which sampling and analyses were performed including measured maximum and average daily flows.

B. If the permittee monitors any pollutant more frequently than required by this permit, using test procedures prescribed in 40 CFR Part 136 or amendments thereto, or otherwise approved by EPA or as specified in this permit, the results of such monitoring shall be included in any calculations of actual daily maximum or monthly average pollutant discharge and results shall be reported in the monthly report submitted to the City of Glens Falls. Such increased monitoring frequency shall also be indicated in the monthly report.

C. Automatic Resampling

If the results of the permittee's wastewater analysis indicate that a violation of this permit has occurred, the permittee must:

1. Inform the City of Glens Falls of the violation within 24 hours; and

2. Repeat the sampling and pollutant analysis and submit, in writing, the results of this second analysis within 30 days of the first violation.

D. Accidental Discharge Report

1. The permittee shall notify the City of Glens Falls immediately upon the occurrence of an accidental discharge of substances prohibited by Chapter 177 of the Code of the City of Glens Falls or any slug loads or spills that may enter the public sewer. The City of Glens Falls should be notified by telephone at (518) 761-3850. The notification shall include location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective actions taken. The permittee's notification of accidental releases in accordance with this section does not relieve it of other reporting requirements that arise under local, State, or Federal laws.

   Within five days following an accidental discharge, the permittee shall submit to the City of Glens Falls a detailed written report. The report shall specify:

   a. Description and cause of the upset, slug load or accidental discharge, the cause thereof, and the impact on the permittee's compliance status. The description should also include location of discharge, type, concentration and volume of waste.

   b. Duration of noncompliance, including exact dates and times of noncompliance and, if the noncompliance is continuing, the time by which compliance is reasonably expected to occur.

   c. All steps taken or to be taken to reduce, eliminate, and/or prevent recurrence of such an upset, slug load, accidental discharge, or other conditions of noncompliance.

E. All reports required by this permit shall be submitted to the City of Glens Falls at the following address:

City of Glens Falls
Attn.: Pretreatment Coordinator
2 Shermantown Rd.
Glens Falls, NY 12801

PART 4 - SPECIAL CONDITIONS

SECTION 1 - ADDITIONAL/SPECIAL MONITORING REQUIREMENTS.

A. No Special Monitoring Requirements are applicable at this time.

SECTION 2 - REOPENER CLAUSE

A. This permit may be reopened and modified to incorporate any new or revised requirements contained in a National Categorical Pretreatment Standard.

B. This permit may be reopened and modified to incorporate any new or revised requirements resulting from the City of Glens Falls' reevaluation of its local limits.

C. This permit may be reopened and modified to incorporate any new or revised requirements developed by the City of Glens Falls as are necessary to ensure POTW compliance with any and all regulatory standards.

PART 5 - STANDARD CONDITIONS

SECTION A. GENERAL CONDITIONS AND DEFINITIONS

1. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

2. Duty to comply

The permittee must comply with all conditions of this permit. Failure to comply with the requirements of this permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief, and summary abatements.

3. Duty to mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact to the public treatment plant or the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Permit Modification

This permit may be modified for good causes including, but not limited to, the following:

a. To incorporate any new or revised Federal, State, or local pretreatment standards or requirements.

b. Material or substantial alterations or additions to the discharger's operation processes, or discharge volume or character which were not considered in drafting the effective permit.

c. A change in any condition in either the industrial user or the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge.

d. Information indicating that the permitted discharge poses a threat to the Control Authority's collection and treatment systems, POTW personnel or the receiving waters.

e. Violation of any terms or conditions of the permit.

f. Misrepresentation or failure to disclose fully all relevant facts in the permit application or in any required reporting.

g. Revision of or a grant of variance from such categorical standards pursuant to 40 CFR 403.13.

h. To correct typographical or other errors in the permit.

i. To reflect transfer of the facility ownership and/or operation to a new/operator.

j. Upon request of the permittee, provided such request does not create a violation of any applicable requirements, standards, laws, or rules and regulations.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

5. Permit Termination

This permit may be terminated for the following reasons:

a. Falsifying self-monitoring reports

b. Tampering with monitoring equipment

c. Refusing to allow timely access to the facility premises and records

d. Failure to meet effluent limitations

e. Failure to pay fines

f. Failure to pay sewer charges

g. Failure to meet compliance schedules

6. Permit Appeals

The permittee may petition to appeal the terms of this permit within thirty (30) days of the notice.

The petition must be in writing; failure to submit a petition for review shall be deemed to be a waiver of the appeal. In its petition, the permittee must indicate the permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to be placed in the permit.

7. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any violation of Federal, State, or local laws or regulations.

8. Limitation on Permit Transfer

Permits may be reassigned or transferred to a new owner and/or operator with prior approval of the City of Glens Falls:

a. The permittee must give at least thirty (30) days advance notice to the City of Glens Falls

b. The notice must include a written certification by the new owner which:

(i) States that the new owner has no immediate intent to change the facility's operations and processes

(ii) Identifies the specific date on which the transfer is to occur

(iii) Acknowledges full responsibility for complying with the existing permit.

9. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit an application for a new permit at least 180 days before the expiration date of this permit.

10. Continuation of Expired Permits

An expired permit will continue to be effective and enforceable until the permit is reissued if:

a) The permittee has submitted a complete permit application at least 180 days prior to the expiration date of the user's existing permit.

b) The failure to reissue the permit, prior to expiration of the previous permit, is not due to any act or failure to act on the part of the permittee.

11. Dilution

The permittee shall not increase the use of potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

12. Definitions

a) Daily Maximum – The maximum allowable discharge of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

b) Composite Sample – A sample that is collected over time, formed either by continuous sampling or by mixing discrete samples. The sample may be composited either as a time composite sample: composed of discrete sample aliquots collected in one container at constant time intervals providing representative samples irrespective of stream flow; or as a flow proportional composite sample: collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots.

c) Grab Sample – An individual sample collected in less than 15 minutes, without regard for flow or time.

d) Instantaneous Maximum Concentration – The maximum concentration allowed in any single grab sample.

e) Cooling Water –

(1) Uncontaminated: Water used for cooling purposes only which has no direct contact with any raw material, intermediate, or final product and which does not contain a level of contaminants detectably higher than that of the intake water.

(2) Contaminated: Water used for cooling purposes only which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides, or by direct contact with process materials and/or wastewater.

f) Monthly Average – The arithmetic mean of the values for effluent samples collected during a calendar month .

g) Weekly Average – The arithmetic mean of the values for effluent samples collected over a period of seven consecutive days.

h) Bi-Weekly – Once every other week.

i) Bi- Monthly – Once every other month

j) Quarterly – The arithmetic mean of the values for effluent samples collected during a calendar quarter.

k) Upset – Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee, excluding such factors as operational error, improperly designed or inadequate treatment facilities, or improper operation and maintenance or lack thereof.

l) Bypass – Means the intentional diversion of wastes from any portion of a treatment facility.

13. General Prohibitive Standards

The permittee shall comply with all the general prohibitive discharge standards in Chapter 177 of the Code of the City of Glens Falls. No user shall contribute or cause to be contributed, directly or indirectly, any pollutant, wastewater, or other material which will inhibit or interfere with the operation or performance of the POTW or the use or disposal of the sludge generated by the POTW or pass through the POTW without adequate treatment in violation of any applicable federal, state, or local environmental regulation into the receiving waters of the Hudson River or into the sludge by-product of the POTW. These general prohibitions apply to all such users of a POTW, whether or not the user is subject to National Categorical Pretreatment Standards or any other national, state, or local pretreatment standards or requirements. Namely, the industrial user shall not discharge wastewater to the sewer system:

a) Containing any liquid, solid, or gas which, by reason of its nature or quantity, is sufficient, either alone or by interaction with other substances, to cause fire or explosion or be injurious in any way to the POTW or to the operation of the POTW. At no time shall two successive readings on an explosion-hazard meter at the point of discharge in the system or at any point in the system, be more than 5% nor any single reading over 10% of the lower explosive limits (LEL) of the meter. Materials prohibited under this subsection include but are not limited to substance(s) which the Board, the DEC or the EPA has notified a user poses a fire or explosion hazard to the POTW;

b) Containing solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities, such as but not limited to grease, oil or fat in concentrations exceeding 100 parts per million by weight, garbage with particles greater than ½ inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, wastepaper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud or glass grindings or polishing wastes;

c) Having a pH less than six point five (6.5) or higher than eight point five (8.5) or having any other corrosive property capable of causing damage or hazard to structures, equipment or personnel of the POTW;

d) Containing any toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, so as to potentially inhibit or interfere with the operation or performance of the POTW, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the POTW or exceed a limitation set forth in a National Categorical Pretreatment Standard. A "toxic pollutant" shall include but not be limited to any pollutant identified pursuant to Section 307 (a) of the Federal Act.

e) Containing any wastes which either singly or by interaction with other wastes, are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewer for its maintenance and repair.

f) Containing any substance which may cause the POTW's effluent or any other product of the POTW, such as residues, sludges or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a substance discharged to the POTW cause the POTW to be in noncompliance with the sludge use or disposal criteria, guidelines or regulations developed under Section 405 of the Act; any criteria, guidelines or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act or the Toxic Substances Control Act; or state criteria applicable to the sludge management method being used.

g) Containing any substance which may cause the POTW to violate its State Pollution Discharge Pollution Discharge Elimination System Permit or receiving water quality standard.

h) Containing any objectionable color not removed in the treatment process, such as but not limited to dye wastes and vegetable tanning solutions.

i) Having a temperature which may inhibit biological activity in the POTW treatment plant resulting in interference, but in no case wastewater with a temperature at the introduction into the POTW which exceeds forty degrees centigrade (40 degrees C.) [one hundred four degrees Fahrenheit (104 degrees F.)]

j) Containing any pollutants, including oxygen-demanding pollutants (BOD, etc.), released at a flow rate and/or pollutant concentration which will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentrations or qualities of pollutants that exceed, for any time period longer than fifteen (15) minutes, more than five (5) times the average twenty-four hour concentration quantities or flow during normal operation.

k) Containing any radioactive waste or isotopes of such half-life or concentration as may exceed limits established by the Board in compliance with applicable state or federal regulatons or limits set forth in any applicable federal, state, or local pollutant discharge regulation.

l) Containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant.

m) Containing any substance which exceeds a national categorical pretreatment standsrd promulgated by the EPA or any other applicable federal, state or local pollutant discharge regulation.

n) Containing any medical or infectious wastes;

o) Containing any gasoline, benzene, naptha, fuel oil or other flammable or explosive liquids, solids or gases; and in no case pollutants with a closed cup flashpoint of less than one hundred forty (140) degrees Fahrenheit (60 degrees C), or pollutants which cause an exceedance of 10 percent of the Lower Explosive Limit (LEL) at any point within the POTW.

14. Compliance with Applicable Pretreatment Standards and Requirements

Compliance with this permit does not relieve the permittee from its obligations regarding compliance with any and all applicable local, State and Federal pretreatment standards and requirements including any such standards or requirements that may become effective during the term of this permit.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The 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 includes but is not limited to: effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction of efficiency of operation, or loss or failure of all or part of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control its production or discharges (or both) until operation of the treatment facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a) Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury, or severe property damage or no feasible alternatives exist.

b) The permittee may allow bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

c) Notification of bypass:

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten days before the date of the bypass, to the City of Glens Falls

(2) Unanticipated bypass. The permittee shall immediately notify the City of Glens Falls and submit a written notice to the POTW within 5 days. This report shall specify:

(i) A description of the bypass, and its cause, including its duration;

(ii) Whether the bypass has been corrected; and

(iii) The steps being taken or to be taken to reduce, eliminate and prevent a reoccurrence of the bypass.

4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in accordance with section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act or in accordance with the latest appropriate State and/or Federal requirements.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. All equipment used for sampling and analysis must be routinely calibrated, inspected and maintained to ensure their accuracy. Monitoring points shall not be changed without notification to and the approval of the City of Glens Falls.

2. Flow Measurements

If flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes.

3. Analytical Methods to Demonstrate Continued Compliance

All sampling and analysis required by this permit shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, otherwise approved by EPA, or as specified in this permit.

4. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures identified in Section C.3, the results of this monitoring shall be included in the permittee's self-monitoring reports.

5. Inspection and Entry

The permittee shall allow the City of Glens Falls, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;

d) Sample or monitor, for the purposes of assuring permit compliance, any substances or parameters at any location; and

e) Inspect any production, manufacturing, fabricating, or storage are where pollutants, regulated under the permit, could originate, be stored, or be discharged to the sewer system.

6. Retention of Records

a) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip 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 this permit, for a period of at least three years from the date of the sample, measurements, report or application.

This period may be extended by request of the City of Glens Falls at any time.

b) All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the City of Glens Falls shall be retained and preserved by the permittee until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

7. Record Contents

Records of sampling and analyses shall include:

a) The date, exact place, time, and methods of sampling or measurements, and sample preservation techniques or procedures;

b) Who performed the sampling or measurements;

c) The date(s) analyses were performed;

d) Who performed the analyses;

e) The analytical techniques or methods used; and

f) The results of such analyses.

8. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate, is a crime and may result in the imposition of criminal sanctions and/or civil penalties.

SECTION D. ADDITIONAL REPORTING REQUIRMENTS

1. Planned Changes

The permittee shall give notice to the City of Glens Falls 90 days prior to any facility expansion, production increase, or process modifications which results in new or substantially increased discharges or a change in the nature of the discharge.

2. Anticipated Noncompliance

The permittee shall give advance notice to the City of Glens Falls of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Automatic Resampling

If the results of the permittee's wastewater analysis indicates a violation has occurred, the permittee must notify the City of Glens Falls within 24 hours of becoming aware of the violation and repeat the sampling and pollutant analysis and submit, in writing, the results of this repeat analysis within 30 days after becoming aware of the violation.

4. Duty to Provide Information

The permittee shall furnish to the City of Glens Falls within 10 days any information which the City of Glens Falls may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also, upon request, furnish to the City of Glens Falls within 10 days copies of any records required to be kept by this permit.

5. Signatory Requirements

All applications, reports, or information submitted to the City of Glens Falls must contain the following certification statement and be signed as required in Sections (a), (b), (c) or (d) below:

"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."

a) By a responsible corporate officer, if the Industrial User submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or;

(ii) the manager of one or more manufacturing, production, or operation facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

b) By a general partner or proprietor if the Industrial User submitting the reports is a partnership or sole proprietorship respectively.

c) The principal executive officer or director having responsibility for the overall operation of the discharging facility if the Industrial User submitting the reports is a Federal, State, or local governmental entity, or their agents.

d) By a duly authorized representative of the individual designated in paragraph (a), (b), or (c);

(i) the authorization is made in writing by the individual described in paragraph (a), (b), or (c);

(ii) the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the Industrial Discharge originates, such as the position of plant manager, operator of a well, or a well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; and

(iii) the written authorization is submitted to the City.

e) If an authorization under paragraph (d) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph (d) of this section must be submitted to the City of Glens Falls prior to or together with any reports to be signed by an authorized representative.

6. Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provision of either this permit or with any section of Chapter 177 of the Code of the City of Glens Falls, shall inform the City of Glens Falls within 24 hours of becoming aware of the upset at (518) 761-3850.

A written follow-up report of the upset shall be filed by the permittee with the City of Glens Falls within five days. The report shall specify:

a) Description of the upset, the cause(s) thereof and the upset's impact on the permittee's compliance status;

b) Duration of noncompliance, including exact dates and times of noncompliance, and if not corrected, the anticipated time the noncompliance is expected to continue; and

c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset.

The report must also demonstrate that the treatment facility was being operating in an appropriate manner.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought

against the permittee for violations attributable to the upset event.

7. Annual Publication

A list of all industrial users which were subject to enforcement proceedings during the twelve (12) previous months shall be annually published by the City of Glens Falls in the largest daily newspaper within its service area. Accordingly, the permittee is apprised that noncompliance with this permit may lead to an enforcement action and may result in publication of its name in an appropriate newspaper in accordance with this section.

8. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance under Chapter 177 of the Code of the City of Glens Falls or State or Federal laws or regulations.

9. Penalties for Violations of Permit Conditions

The City of Glens Falls provides that any person who violates a permit condition is subject to administrative penalties of up to $5000 per violation per day and civil penalties of up to $5000 per violation per day. Any person who willfully or negligently violates permit conditions is subject to criminal penalties of $5000 per violation per day, or imprisonment for six months, or both. The permittee may also be subject to sanctions under State and/or Federal law.

10. Recovery of Costs Incurred

In addition to civil and criminal liability, the permittee violating any of the provisions of this permit or Chapter 177 of the Code of the City of Glens Falls or causing damage to or otherwise inhibiting the City of Glens Falls wastewater disposal system shall be liable to the City of Glens Falls for any expense, loss, or damage caused by such violation or discharge. The City of Glens Falls shall bill the permittee for the costs incurred by the City of Glens Falls for any cleaning, repair, or replacement work caused by the violation or discharge. Refusal to pay the assessed costs shall constitute a separate violation of Chapter 177 of the Code of the City of Glens Falls.

Enclosure 2 2021 Discharge Monitoring Reports

Hercules Incorporated
5475 Rings Rd., Suite 500
Atrium North Tower
Dublin, Ohio 43017

April 28, 2021

Mr. Chris Miller
Glens Falls Wastewater Treatment Plant
Water and Sewer Department
2 Shermantown Road
Glens Falls, New York 12801

RE: Discharge Monitoring Report for 1st Quarter 2021
Industrial Wastewater - Discharge Permit No. 002F

Dear Mr. Miller:

Attached is the 1st Quarter 2021 Discharge Monitoring Report for the Hercules/Ciba site. The wastewater sample was collected on February 22, 2021. All parameters meet the limits of the wastewater discharge permit effective April 23, 2007 which was subsequently renewed in April 2012 and April 2017.

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 violation.

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

James E. Vondracek, P.E.
Principal Remediation Engineer

Attachments
cc: Stephen K. Havlik**,** BASF Corporation, Toms River, NJ

ATTACHMENT 1

DISCHARGE DATA

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

4/28/2021

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min.	0.19	0.00	0.0000	0.55	0.00	6.7	4,000
Quarterly ave.	0.19	0.00	0.0000	0.55	0.00	6.8	24,233
Quarterly max.	0.19	0.00	0.0000	0.55	0.00	7.3	73,000
Data points	1	1	1	1	1	90	90
Date:							
01/01/21						6.8	16,000
01/02/21						7.1	11,000
01/03/21						7.0	13,000
01/04/21						7.0	14,000
01/05/21						7.0	13,000
01/06/21						7.1	12,000
01/07/21						7.0	14,000
01/08/21						7.1	12,000
01/09/21						7.0	12,000
01/10/21						6.8	9,000
01/11/21						6.8	12,000
01/12/21						7.1	9,000
01/13/21						6.8	10,000
01/14/21						6.9	11,000
01/15/21						6.8	13,000
01/16/21						6.7	10,000
01/17/21						6.8	10,000
01/18/21						6.8	14,000
01/19/21						6.9	10,000
01/20/21						6.7	9,000
01/21/21						6.9	14,000
01/22/21						6.9	9,000
01/23/21						6.9	10,000
01/24/21						6.7	13,000
01/25/21						6.8	9,000
01/26/21						6.8	9,000
01/27/21						6.9	9,000
01/28/21						6.8	9,000
01/29/21						6.8	9,000
01/30/21						6.7	9,000
01/31/21						6.7	9,000

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

4/28/2021

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min.	0.19	0.00	0.0000	0.55	0.00	6.7	4,000
Quarterly ave.	0.19	0.00	0.0000	0.55	0.00	6.8	24,233
Quarterly max.	0.19	0.00	0.0000	0.55	0.00	7.3	73,000
Data points	1	1	1	1	1	90	90
Date:							
02/01/21						6.7	6,000
02/02/21						6.9	10,000
02/03/21						6.8	9,000
02/04/21						6.7	5,000
02/05/21						7.0	8,000
02/06/21						6.8	10,000
02/07/21						6.7	4,000
02/08/21						6.9	8,000
02/09/21						7.0	5,000
02/10/21						6.9	10,000
02/11/21						7.0	5,000
02/12/21						7.0	73,000
02/13/21						6.9	40,000
02/14/21						6.8	33,000
02/15/21						6.7	34,000
02/16/21						6.9	29,000
02/17/21						6.9	35,000
02/18/21						6.9	39,000
02/19/21						6.9	33,000
02/20/21						6.7	40,000
02/21/21						6.7	32,000
02/22/21	0.190	0.0015 J	ND	0.55	0.031 J	6.7	35,000
02/23/21						6.8	31,000
02/24/21						6.7	29,000
02/25/21						7.0	34,000
02/26/21						6.9	42,000
02/27/21						6.7	32,000
02/28/21						6.7	38,000

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

4/28/2021

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min.	0.19	0.00	0.0000	0.55	0.00	6.7	4,000
Quarterly ave.	0.19	0.00	0.0000	0.55	0.00	6.8	24,233
Quarterly max.	0.19	0.00	0.0000	0.55	0.00	7.3	73,000
Data points	1	1	1	1	1	90	90
Date:							
03/01/21						6.7	32000.00
03/02/21						7.0	37,000
03/03/21						6.7	46,000
03/04/21						6.7	30,000
03/05/21						6.9	29,000
03/06/21						6.7	38,000
03/07/21						6.8	41,000
03/08/21						6.9	33,000
03/09/21						6.9	36,000
03/10/21						6.7	34,000
03/11/21						6.7	40,000
03/12/21						6.8	38,000
03/13/21						6.9	43,000
03/14/21						6.8	41,000
03/15/21						6.7	49,000
03/16/21						6.8	37,000
03/17/21						6.9	47,000
03/18/21						6.7	43,000
03/19/21						6.9	34,000
03/20/21						6.8	34,000
03/21/21						6.7	27,000
03/22/21						6.7	37,000
03/23/21						6.8	29,000
03/24/21						6.7	36,000
03/25/21						6.7	30,000
03/26/21						6.7	29,000
03/27/21						7.2	34,000
03/28/21						7.1	41,000
03/29/21						7.3	27,000
03/30/21						7.2	41,000
03/31/21						7.1	36,000

Quarterly Average for Chromium	
Concentration	0.19 mg/L
Ave. Flow	24,233 gpd
Ave. Load	0.04 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the laboratory Reporting Limit.
NS: No Standard. No instantaneous maximum for Total Chromium.
The laboratory Reporting Limit for Lead is 0.0025 mg/L.
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.
The laboratory Reporting Limit for Phenols is 0.050 mg/L.

ATTACHMENT 2

ANALYTICAL DATA

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

Laboratory Job ID: 680-195467-1
Client Project/Site: Hercules Glens Falls O&M Quarterly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
3/5/2021 7:02:05 AM

Eddie Barnett, Project Manager I
(912)250-0280
Eddie.Barnett@Eurofinset.com

Definitions/Glossary

Client: Ashland LLC
Job ID: 680-195467-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: Ashland LLC
Job ID: 680-195467-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
680-195467-1	POTW_20210222	Water	02/22/21 13:00	02/26/21 12:50	

Job ID: 680-195467-1

Laboratory: Eurofins TestAmerica, Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Quarterly POTW

Report Number: 680-195467-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The sample was received on 02/26/2021; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.4º C.

TOTAL METALS (ICPMS)
Sample POTW_20210222 (680-195467-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared on 02/27/2021 and analyzed on 03/02/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY
Sample POTW_20210222 (680-195467-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared on 03/03/2021 and analyzed on 03/04/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE
Sample POTW_20210222 (680-195467-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 02/28/2021.

Sample POTW_20210222 (680-195467-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PHENOLS
Sample POTW_20210222 (680-195467-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 03/01/2021.

Phenolics, Total Recoverable recovered high for the MSD of sample POTW_20210222MSD (680-195467-1) in batch 680-657577. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Ashland LLC
Job ID: 680-195467-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Client Sample ID: POTW_20210222
Lab Sample ID: 680-195467-1
Date Collected: 02/22/21 13:00
Matrix: Water
Date Received: 02/26/21 12:50

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	190		5.0	1.6	ug/L		02/27/21 15:27	03/02/21 00:07	1
Lead	1.5	J	2.5	0.98	ug/L		02/27/21 15:27	03/02/21 00:07	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		03/03/21 15:31	03/04/21 13:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.55		0.050	0.013	mg/L		02/28/21 13:45	02/28/21 16:44	5
Phenolics, Total Recoverable	0.031	J F1	0.050	0.025	mg/L		03/01/21 10:20	03/01/21 15:47	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-657377/1-A
Matrix: Water
Analysis Batch: 657582

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657377

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		02/27/21 15:27	03/01/21 23:39	1
Lead	2.5	U	2.5	0.98	ug/L		02/27/21 15:27	03/01/21 23:39	1

Lab Sample ID: LCS 680-657377/2-A
Matrix: Water
Analysis Batch: 657582

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657377

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	111		ug/L		111	85 - 115
Lead	454	499		ug/L		110	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-657879/1-A
Matrix: Water
Analysis Batch: 658066

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657879

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		03/03/21 15:31	03/04/21 13:22	1

Lab Sample ID: LCS 680-657879/3-A
Matrix: Water
Analysis Batch: 658066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657879

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.73		ug/L		109	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-657413/12-A
Matrix: Water
Analysis Batch: 657415

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657413

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		02/28/21 13:45	02/28/21 15:24	1

Lab Sample ID: LCS 680-657413/13-A
Matrix: Water
Analysis Batch: 657415

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657413

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0485		mg/L		97	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-657454/1-A
Matrix: Water
Analysis Batch: 657577

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657454

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		03/01/21 10:20	03/01/21 17:00	1

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: LCS 680-657454/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 657577
Prep Batch: 657454

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Phenolics, Total Recoverable			0.100	0.115		mg/L		115	75 - 125		

Lab Sample ID: 680-195467-1 MS
Client Sample ID: POTW_20210222
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 657577
Prep Batch: 657454

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Phenolics, Total Recoverable	0.031	J F1	0.100	0.157		mg/L		125	75 - 125		

Lab Sample ID: 680-195467-1 MSD
Client Sample ID: POTW_20210222
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 657577
Prep Batch: 657454

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenolics, Total Recoverable	0.031	J F1	0.100	0.166	F1	mg/L		135	75 - 125	6	30

QC Association Summary

Client: Ashland LLC
Job ID: 680-195467-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Metals

Prep Batch: 657377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-195467-1	POTW_20210222	Total/NA	Water	200.8	
MB 680-657377/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-657377/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 657582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-195467-1	POTW_20210222	Total/NA	Water	200.8	657377
MB 680-657377/1-A	Method Blank	Total/NA	Water	200.8	657377
LCS 680-657377/2-A	Lab Control Sample	Total/NA	Water	200.8	657377

Prep Batch: 657879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-195467-1	POTW_20210222	Total/NA	Water	245.1	
MB 680-657879/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-657879/3-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 658066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-195467-1	POTW_20210222	Total/NA	Water	245.1	657879
MB 680-657879/1-A	Method Blank	Total/NA	Water	245.1	657879
LCS 680-657879/3-A	Lab Control Sample	Total/NA	Water	245.1	657879

General Chemistry

Prep Batch: 657413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-195467-1	POTW_20210222	Total/NA	Water	Distill/CN	
MB 680-657413/12-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-657413/13-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 657415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-195467-1	POTW_20210222	Total/NA	Water	335.4	657413
MB 680-657413/12-A	Method Blank	Total/NA	Water	335.4	657413
LCS 680-657413/13-A	Lab Control Sample	Total/NA	Water	335.4	657413

Prep Batch: 657454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-195467-1	POTW_20210222	Total/NA	Water	Distill/Phenol	
MB 680-657454/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-657454/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
680-195467-1 MS	POTW_20210222	Total/NA	Water	Distill/Phenol	
680-195467-1 MSD	POTW_20210222	Total/NA	Water	Distill/Phenol	

Analysis Batch: 657577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-195467-1	POTW_20210222	Total/NA	Water	420.1	657454
MB 680-657454/1-A	Method Blank	Total/NA	Water	420.1	657454
LCS 680-657454/2-A	Lab Control Sample	Total/NA	Water	420.1	657454
680-195467-1 MS	POTW_20210222	Total/NA	Water	420.1	657454
680-195467-1 MSD	POTW_20210222	Total/NA	Water	420.1	657454

Lab Chronicle

Client: Ashland LLC
Job ID: 680-195467-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Client Sample ID: POTW_20210222
Lab Sample ID: 680-195467-1
Date Collected: 02/22/21 13:00
Matrix: Water
Date Received: 02/26/21 12:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			657377	02/27/21 15:27	BCB	TAL SAV
Total/NA	Analysis	200.8		1	657582	03/02/21 00:07	BWR	TAL SAV
Total/NA	Prep	245.1			657879	03/03/21 15:31	JKL	TAL SAV
Total/NA	Analysis	245.1		1	658066	03/04/21 13:37	JKL	TAL SAV
Total/NA	Prep	Distill/CN			657413	02/28/21 13:45	CMR	TAL SAV
Total/NA	Analysis	335.4		5	657415	02/28/21 16:44	CMR	TAL SAV
Total/NA	Prep	Distill/Phenol			657454	03/01/21 10:20	SM	TAL SAV
Total/NA	Analysis	420.1		1	657577	03/01/21 15:47	SM	TAL SAV

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Ashland LLC
Job ID: 680-195467-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Laboratory: Eurofins TestAmerica, Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10842	04-01-21

Method Summary

Client: Ashland LLC
Job ID: 680-195467-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV
200.8	Preparation, Total Metals	EPA	TAL SAV
245.1	Preparation, Mercury	EPA	TAL SAV
Distill/CN	Distillation, Cyanide	None	TAL SAV
Distill/Phenol	Distillation, Phenolics	None	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Albany

Chain of Custody Record 486464

eurofins | Environment Testing TestAmerica

Address: #224

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Katie Angell	Site Contact:	Date:	COC No:
Company Name: Antea Group	Tel/Email: 518 859 4626	Lab Contact:	Carrier:	____ of ____ COCs
Address: 71 Raymond Rd.	Analysis Turnaround Time			Sampler:
City/State/Zip: West Hartford	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 1518 859 4626	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: Ashland Glens Falls Quarterly POTW	10-Day			Job / SDG No.:
Site: Glens Falls				
P O #				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	300.0 Cl/NO3/SO4 total	Chem. Hg and Lead	4500 Phenolics, total Recoverable	335.4 Total Cyanide	7471 Mercury	Sample Specific Notes:
POTW-20210222	2/22/21	1300	G	water	3	N	N	X		X	X	X	

680-195467 Chain of Custody

2-22-2021

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

email Katie.angell@anteagroup.us 2.3 2.4

Custody Seals Intact: ☐ Yes ☑ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____		
Relinquished by:	Company: Antea Group	Date/Time: 2/22/21 1500	Received by: Tim Keller	Company: EETA	Date/Time: 2-22-2021 1500
Relinquished by: Tim Keller	Company: EETA	Date/Time: 2-23-21 1500	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA	Date/Time: 2.26.21 1250

3/5/2021

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-195467-1

Login Number: 195467

List Source: Eurofins TestAmerica, Savannah

List Number: 1

Creator: Sims, Robert D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Hercules Incorporated
5475 Rings Rd., Suite 500
Atrium North Tower
Dublin, Ohio 43017

HERCULES

July 28, 2021

Mr. Chris Miller
Glens Falls Wastewater Treatment Plant
Water and Sewer Department
2 Shermantown Road
Glens Falls, New York 12801

RE: Discharge Monitoring Report for 2nd Quarter 2021
Industrial Wastewater - Discharge Permit No. 002F

Dear Mr. Miller:

Attached is the 2nd Quarter 2021 Discharge Monitoring Report for the Hercules/Ciba site. The wastewater sample was collected on April 29, 2021. All parameters meet the limits of the wastewater discharge permit effective April 23, 2007 which was subsequently renewed in April 2012 and April 2017.

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 violation.

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

James E. Vondracek, P.E.
Principal Remediation Engineer

Attachments
cc: Stephen K. Havlik**,** BASF Corporation, Toms River, NJ

ATTACHMENT 1

DISCHARGE DATA

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

7/16/2021

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min	0.37	0.00	0.00	0.65	0.00	7.2	15,000
Quarterly ave	0.37	0.00	0.00	0.65	0.00	7.4	48,725
Quarterly max	0.37	0.00	0.00	0.65	0.00	7.6	90,000
Data points	1	1	1	1	1	57	91
Date:							
04/01/21						NF	38,000
04/02/21						7.5	32,000
04/03/21						NF	45,000
04/04/21						NF	39,000
04/05/21						NF	36,000
04/06/21						7.5	29,000
04/07/21						7.4	40,000
04/08/21						NF	41,000
04/09/21						7.4	31,000
04/10/21						7.4	36,000
04/11/21						NF	35,000
04/12/21						7.3	42,000
04/13/21						7.5	34,000
04/14/21						NF	42,000
04/15/21						NF	29,000
04/16/21						7.4	44,000
04/17/21						NF	34,000
04/18/21						NF	49,000
04/19/21						NF	50,000
04/20/21						7.4	32,000
04/21/21						NF	47,000
04/22/21						7.6	46,000
04/23/21						7.5	42,000
04/24/21						7.6	71,000
04/25/21						7.6	57,000
04/26/21						NF	62,000
04/27/21						7.5	47,000
04/28/21						NF	44,000
04/29/21	0.370	ND	ND	0.650	ND	NF	56,000
04/30/21						7.5	39,000

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

7/16/2021

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min	0.37	0.00	0.00	0.65	0.00	7.2	15,000
Quarterly ave	0.37	0.00	0.00	0.65	0.00	7.4	48,725
Quarterly max	0.37	0.00	0.00	0.65	0.00	7.6	90,000
Data points	1	1	1	1	1	57	91
Date:							
05/01/21						NF	63,000
05/02/21						7.5	61,000
05/03/21						7.5	59,000
05/04/21						7.4	59,000
05/05/21						7.5	57,000
05/06/21						7.4	59,000
05/07/21						NF	42,000
05/08/21						7.4	64,000
05/09/21						7.5	65,000
05/10/21						NF	62,000
05/11/21						NF	60,000
05/12/21						NF	61,000
05/13/21						7.5	58,000
05/14/21						7.5	54,000
05/15/21						NF	59,000
05/16/21						7.4	53,000
05/17/21						NF	65,000
05/18/21						NF	51,000
05/19/21						7.4	52,000
05/20/21						NF	55,000
05/21/21						7.4	49,000
05/22/21						7.5	56,000
05/23/21						7.3	51,000
05/24/21						7.4	48,000
05/25/21						7.4	53,000
05/26/21						7.5	48,000
05/27/21						7.5	50,000
05/28/21						NF	56,000
05/29/21						7.4	50,000
05/30/21						7.4	45,000
05/31/21						7.4	43,000

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

7/16/2021

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min	0.37	0.00	0.00	0.65	0.00	7.2	15,000
Quarterly ave	0.37	0.00	0.00	0.65	0.00	7.4	48,725
Quarterly max	0.37	0.00	0.00	0.65	0.00	7.6	90,000
Data points	1	1	1	1	1	57	91
Date:							
06/01/21						7.4	48,000
06/02/21						7.5	46,000
06/03/21						NF	54,000
06/04/21						7.4	37,000
06/05/21						7.4	73,000
06/06/21						NF	31,000
06/07/21						7.4	40,000
06/08/21						7.4	47,000
06/09/21						NF	52,000
06/10/21						NF	19,000
06/11/21						7.4	15,000
06/12/21						7.5	90,000
06/13/21						7.4	58,000
06/14/21						7.4	47,000
06/15/21						NF	58,000
06/16/21						7.4	50,000
06/17/21						NF	45,000
06/18/21						7.5	63,000
06/19/21						NF	39,000
06/20/21						7.2	60,000
06/21/21						NF	41,000
06/22/21						7.3	53,000
06/23/21						7.3	48,000
06/24/21						7.3	61,000
06/25/21						7.5	48,000
06/26/21						7.4	45,000
06/27/21						NF	52,000
06/28/21						7.6	50,000
06/29/21						7.2	46,000
06/30/21						7.2	41,000

Quarterly Average for Chromium	
Concentration	0.37 mg/L
Ave. Flow	48,725 gpd
Ave. Load	0.15 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the laboratory Reporting Limit.
NS = No Standard. No instantaneous maximum for Total Chromium.
NF = No Flow. pH not recorded due to system not discharging at the time of data collection.
J: Lab estimated value
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.
The laboratory Reporting Limit for Phenols is 0.050 mg/L.

ATTACHMENT 2

ANALYTICAL DATA

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

Laboratory Job ID: 680-198287-1
Client Project/Site: Hercules Glens Falls O&M Quarterly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
5/5/2021 7:10:12 AM

Eddie Barnett, Project Manager I
(912)250-0280
Eddie.Barnett@Eurofinset.com

Definitions/Glossary

Client: Ashland LLC
Job ID: 680-198287-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: Ashland LLC
Job ID: 680-198287-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
680-198287-1	POTW_20210429	Water	04/29/21 13:15	04/30/21 10:30	

Job ID: 680-198287-1

Laboratory: Eurofins TestAmerica, Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Quarterly POTW

Report Number: 680-198287-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The sample was received on 04/30/2021; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.8º C.

TOTAL METALS (ICPMS)
Sample POTW_20210429 (680-198287-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared and analyzed on 05/03/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY
Sample POTW_20210429 (680-198287-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared on 05/03/2021 and analyzed on 05/04/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE
Sample POTW_20210429 (680-198287-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared on 05/03/2021 and analyzed on 05/04/2021.

Sample POTW_20210429 (680-198287-1)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PHENOLS
Sample POTW_20210429 (680-198287-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 05/04/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Ashland LLC
Job ID: 680-198287-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Client Sample ID: POTW_20210429
Lab Sample ID: 680-198287-1
Date Collected: 04/29/21 13:15
Matrix: Water
Date Received: 04/30/21 10:30

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**370**		5.0	1.6	ug/L		05/03/21 10:15	05/03/21 20:12	1
Lead	2.5	U	2.5	0.98	ug/L		05/03/21 10:15	05/03/21 20:12	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		05/03/21 14:53	05/04/21 14:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.65**		0.10	0.025	mg/L		05/03/21 15:17	05/04/21 10:47	10
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		05/04/21 12:11	05/04/21 15:24	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-666872/1-A
Matrix: Water
Analysis Batch: 667096

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 666872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		04/30/21 15:09	05/03/21 19:54	1
Lead	2.5	U	2.5	0.98	ug/L		04/30/21 15:09	05/03/21 19:54	1

Lab Sample ID: LCS 680-666872/2-A
Matrix: Water
Analysis Batch: 667096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	100		ug/L		100	85 - 115
Lead	505	517		ug/L		103	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-666977/1-A
Matrix: Water
Analysis Batch: 667163

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 666977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		05/03/21 14:53	05/04/21 13:39	1

Lab Sample ID: LCS 680-666977/3-A
Matrix: Water
Analysis Batch: 667163

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.17		ug/L		87	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-666969/12-A
Matrix: Water
Analysis Batch: 667117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 666969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		05/03/21 14:41	05/03/21 18:27	1

Lab Sample ID: LCS 680-666969/13-A
Matrix: Water
Analysis Batch: 667117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 666969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0473		mg/L		95	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-667133/1-A
Matrix: Water
Analysis Batch: 667178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 667133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		05/04/21 12:11	05/04/21 15:24	1

QC Sample Results

Client: Ashland LLC
Job ID: 680-198287-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: LCS 680-667133/2-A
Matrix: Water
Analysis Batch: 667178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 667133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.112		mg/L		112	75 - 125

QC Association Summary

Client: Ashland LLC
Job ID: 680-198287-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Metals

Prep Batch: 666872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-198287-1	POTW_20210429	Total/NA	Water	200.8	
MB 680-666872/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-666872/2-A	Lab Control Sample	Total/NA	Water	200.8	

Prep Batch: 666977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-198287-1	POTW_20210429	Total/NA	Water	245.1	
MB 680-666977/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-666977/3-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 667096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-198287-1	POTW_20210429	Total/NA	Water	200.8	666872
MB 680-666872/1-A	Method Blank	Total/NA	Water	200.8	666872
LCS 680-666872/2-A	Lab Control Sample	Total/NA	Water	200.8	666872

Analysis Batch: 667163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-198287-1	POTW_20210429	Total/NA	Water	245.1	666977
MB 680-666977/1-A	Method Blank	Total/NA	Water	245.1	666977
LCS 680-666977/3-A	Lab Control Sample	Total/NA	Water	245.1	666977

General Chemistry

Prep Batch: 666969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-198287-1	POTW_20210429	Total/NA	Water	Distill/CN	
MB 680-666969/12-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-666969/13-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Analysis Batch: 667117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-198287-1	POTW_20210429	Total/NA	Water	335.4	666969
MB 680-666969/12-A	Method Blank	Total/NA	Water	335.4	666969
LCS 680-666969/13-A	Lab Control Sample	Total/NA	Water	335.4	666969

Prep Batch: 667133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-198287-1	POTW_20210429	Total/NA	Water	Distill/Phenol	
MB 680-667133/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-667133/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 667178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-198287-1	POTW_20210429	Total/NA	Water	420.1	667133
MB 680-667133/1-A	Method Blank	Total/NA	Water	420.1	667133
LCS 680-667133/2-A	Lab Control Sample	Total/NA	Water	420.1	667133

Lab Chronicle

Client: Ashland LLC
Job ID: 680-198287-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Client Sample ID: POTW_20210429
Lab Sample ID: 680-198287-1
Date Collected: 04/29/21 13:15
Matrix: Water
Date Received: 04/30/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			666872	05/03/21 10:15	BJB	TAL SAV
Total/NA	Analysis	200.8		1	667096	05/03/21 20:12	BWR	TAL SAV
Total/NA	Prep	245.1			666977	05/03/21 14:53	BCB	TAL SAV
Total/NA	Analysis	245.1		1	667163	05/04/21 14:22	BWR	TAL SAV
Total/NA	Prep	Distill/CN			666969	05/03/21 15:17	MS	TAL SAV
Total/NA	Analysis	335.4		10	667117	05/04/21 10:47	ALG	TAL SAV
Total/NA	Prep	Distill/Phenol			667133	05/04/21 12:11	SM	TAL SAV
Total/NA	Analysis	420.1		1	667178	05/04/21 15:24	SM	TAL SAV

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Ashland LLC
Job ID: 680-198287-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Laboratory: Eurofins TestAmerica, Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10842	04-01-22

Method Summary

Client: Ashland LLC
Job ID: 680-198287-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV
200.8	Preparation, Total Metals	EPA	TAL SAV
245.1	Preparation, Mercury	EPA	TAL SAV
Distill/CN	Distillation, Cyanide	None	TAL SAV
Distill/Phenol	Distillation, Phenolics	None	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Albany #224

Chain of Custody Record

531362

eurofins | Environment Testing TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Contact: Group Ltd Hartford	Project Manager: Katie Angel	Site Contact:	Date:
Phone: 518 859 4626	Tel/Email: 518-859-4626	Lab Contact:	Carrier:
Fax:	Analysis Turnaround Time: ☐ CALENDAR DAYS ☐ WORKING DAYS		COC No: 1 of 1 COCs
Project Name: Ashland Glens Falls Quarterly POTW	TAT if different from Below: ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — 10DAY		Sampler:
Site: Glens Falls			For Lab Use Only: Walk-in Client: Lab Sampling:
P O #			Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	200.8 CWA total	Chromium/Lead	420.1 Phenolics total Recoverable	335.4 Total Cyanide	245.1 Mercury	Sample Specific Notes:
POTW_20210429	4/29/21	1315	G	GW	V			X		X	X	X	

680-198287 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

email Katie.angel@anteagroup.us

0.6 0.8

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

	Company	Date/Time		Company	Date/Time
Relinquished by:	Antea Group	4/29/21 1523	Received by: Tim Knoll	EETA	4-29-2021 1523
Relinquished by: Tim Knoll	EETA	4.29.21 1700	Received by:		
Relinquished by:			Received in Laboratory by:	TA	4-30-21 1030

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-198287-1

Login Number: 198287

List Source: Eurofins TestAmerica, Savannah

List Number: 1

Creator: Sims, Robert D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Hercules Incorporated
5475 Rings Rd., Suite 500
Atrium North Tower
Dublin, Ohio 43017

HERCULES

October 28, 2021

Mr. Chris Miller
Glens Falls Wastewater Treatment Plant
Water and Sewer Department
2 Shermantown Road
Glens Falls, New York 12801

RE: Discharge Monitoring Report for 3rd Quarter 2021
Industrial Wastewater - Discharge Permit No. 002F

Dear Mr. Miller:

Attached is the 3rd Quarter 2021 Discharge Monitoring Report for the Hercules/Ciba site. The wastewater sample was collected on July 29, 2021. All parameters meet the limits of the wastewater discharge permit effective April 23, 2007 which was subsequently renewed in April 2012 and April 2017.

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 violation.

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

James E. Vondracek, P.E.
Principal Remediation Engineer

Attachments
cc: Stephen K. Havlik, BASF Corporation, Toms River, NJ

ATTACHMENT 1

DISCHARGE DATA

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

10/22/2021

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min.	0.49	0.00	0.0001	0.00	0.00	7.1	0
Quarterly ave.	0.49	0.00	0.0001	0.00	0.00	6.0	56,848
Quarterly max.	0.49	0.00	0.0001	0.00	0.00	7.5	88,000
Data points	1	1	1	1	1	92	92
Date:							
07/01/21						7.3	48,000
07/02/21						7.3	49,000
07/03/21						7.2	52,000
07/04/21						NF	54,000
07/05/21						7.2	53,000
07/06/21						NF	36,000
07/07/21						7.4	46,000
07/08/21						NF	60,000
07/09/21						7.2	46,000
07/10/21						7.2	42,000
07/11/21						NF	59,000
07/12/21						7.2	34,000
07/13/21						7.2	60,000
07/14/21						7.3	63,000
07/15/21						7.2	55,000
07/16/21						7.3	56,000
07/17/21						7.2	57,000
07/18/21						7.1	56,000
07/19/21						7.2	55,000
07/20/21						7.2	64,000
07/21/21						7.1	70,000
07/22/21						7.2	69,000
07/23/21						7.3	60,000
07/24/21						7.2	57,000
07/25/21						7.2	61,000
07/26/21						NF	63,000
07/27/21						NF	61,000
07/28/21						7.1	60,000
07/29/21	0.490	ND	0.0001	ND	ND	7.2	61,000
07/30/21						7.3	61,000
07/31/21						7.2	88,000

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

10/22/2021

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min.	0.49	0.00	0.0001	0.00	0.00	7.1	0
Quarterly ave.	0.49	0.00	0.0001	0.00	0.00	6.0	56,848
Quarterly max.	0.49	0.00	0.0001	0.00	0.00	7.5	88,000
Data points	1	1	1	1	1	92	92
Date:							
08/01/21						NF	83,000
08/02/21						7.3	83,000
08/03/21						7.3	83,000
08/04/21						7.2	65,000
08/05/21						7.2	70,000
08/06/21						7.3	75,000
08/07/21						7.3	63,000
08/08/21						7.3	76,000
08/09/21						7.2	60,000
08/10/21						7.2	57,000
08/11/21						7.4	69,000
08/12/21						7.3	60,000
08/13/21						7.3	60,000
08/14/21						7.2	58,000
08/15/21						NF	58,000
08/16/21						7.3	61,000
08/17/21						7.2	50,000
08/18/21						7.2	56,000
08/19/21						NF	61,000
08/20/21						7.2	33,000
08/21/21						7.3	78,000
08/22/21						7.4	75,000
08/23/21						NF	65,000
08/24/21						7.2	54,000
08/25/21						7.2	58,000
08/26/21						7.2	64,000
08/27/21						7.3	55,000
08/28/21						7.4	69,000
08/29/21						7.2	54,000
08/30/21						NF	55,000
08/31/21						7.2	56,000

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

10/22/2021

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min.	0.49	0.00	0.0001	0.00	0.00	7.1	0
Quarterly ave.	0.49	0.00	0.0001	0.00	0.00	6.0	56,848
Quarterly max.	0.49	0.00	0.0001	0.00	0.00	7.5	88,000
Data points	1	1	1	1	1	92	92
Date:							
09/01/21						NF	43,000
09/02/21						7.2	55,000
09/03/21						7.3	55,000
09/04/21						7.3	61,000
09/05/21						7.3	55,000
09/06/21						7.2	46,000
09/07/21						7.4	48,000
09/08/21						NF	63,000
09/09/21						7.2	46,000
09/10/21						7.3	47,000
09/11/21						7.3	62,000
09/12/21						7.1	50,000
09/13/21						7.4	51,000
09/14/21						NF	51,000
09/15/21						7.1	50,000
09/16/21						7.3	47,000
09/17/21						7.4	52,000
09/18/21						NF	47,000
09/19/21						7.2	0
09/20/21						7.3	15,000
09/21/21						7.3	74,000
09/22/21						7.2	50,000
09/23/21						7.3	49,000
09/24/21						NF	48,000
09/25/21						7.2	56,000
09/26/21						7.5	58,000
09/27/21						7.3	58,000
09/28/21						7.3	59,000
09/29/21						7.3	58,000
09/30/21						7.3	56,000

Monthly Average for Chromium	
Concentration	0.49 mg/L
Ave. Flow	56,848 gpd
Ave. Load	0.23 #/day
PERMIT	3.10 #/day

Notes:

ND = Non-Detect. Value reported to be below the Laboratory Reporting Limit.
NS: No Standard. No instantaneous maximum for Total Chromium.
The laboratory Reporting Limit for Lead is 0.0025 mg/L.
The laboratory Reporting Limit for Total Cyanide is 0.010 mg/L.
The laboratory Reporting Limit for Total Phenols is 0.050 mg/L.

ATTACHMENT 2

ANALYTICAL DATA

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

Laboratory Job ID: 680-202266-1
Client Project/Site: Hercules Glens Falls O&M Quarterly POTW

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
8/5/2021 10:58:26 AM

Eddie Barnett, Project Manager I
(912)250-0280
Eddie.Barnett@Eurofinset.com

Definitions/Glossary

Client: Ashland LLC
Job ID: 680-202266-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: Ashland LLC
Job ID: 680-202266-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-202266-1	POTW_20210729	Water	07/29/21 13:55	07/30/21 10:20

Job ID: 680-202266-1

Laboratory: Eurofins TestAmerica, Savannah

Narrative

CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Glens Falls O&M Quarterly POTW

Report Number: 680-202266-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The sample was received on 07/30/2021; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.5º C.

TOTAL METALS (ICPMS)
Sample POTW_20210729 (680-202266-1) was analyzed for total metals (ICPMS) in accordance with EPA Method 200.8. The sample was prepared on 08/03/2021 and analyzed on 08/04/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY
Sample POTW_20210729 (680-202266-1) was analyzed for total mercury in accordance with EPA Method 245.1. The sample was prepared and analyzed on 08/04/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL CYANIDE
Sample POTW_20210729 (680-202266-1) was analyzed for total cyanide in accordance with EPA Method 335.4. The sample was prepared and analyzed on 08/04/2021.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PHENOLS
Sample POTW_20210729 (680-202266-1) was analyzed for phenols in accordance with EPA Method 420.1. The sample was prepared and analyzed on 08/03/2021.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Ashland LLC
Job ID: 680-202266-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Client Sample ID: POTW_20210729
Lab Sample ID: 680-202266-1
Date Collected: 07/29/21 13:55
Matrix: Water
Date Received: 07/30/21 10:20

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**490**		5.0	1.6	ug/L		08/03/21 08:56	08/04/21 00:24	1
Lead	2.5	U	2.5	0.98	ug/L		08/03/21 08:56	08/04/21 00:24	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.10**	**J**	0.20	0.080	ug/L		08/04/21 10:35	08/04/21 16:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		08/04/21 10:34	08/04/21 19:57	1
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		08/03/21 08:24	08/03/21 12:55	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-679090/1-A
Matrix: Water
Analysis Batch: 679296

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 679090

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	1.6	ug/L		08/03/21 08:56	08/04/21 00:00	1
Lead	2.5	U	2.5	0.98	ug/L		08/03/21 08:56	08/04/21 00:00	1

Lab Sample ID: LCS 680-679090/2-A
Matrix: Water
Analysis Batch: 679296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679090

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	100	98.0		ug/L		98	85 - 115
Lead	505	526		ug/L		104	85 - 115

Lab Sample ID: 680-202266-1 MS
Matrix: Water
Analysis Batch: 679296

Client Sample ID: POTW_20210729
Prep Type: Total/NA
Prep Batch: 679090

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	490		100	570	4	ug/L		76	70 - 130
Lead	2.5	U	505	495		ug/L		98	70 - 130

Lab Sample ID: 680-202266-1 MSD
Matrix: Water
Analysis Batch: 679296

Client Sample ID: POTW_20210729
Prep Type: Total/NA
Prep Batch: 679090

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	490		100	608	4	ug/L		114	70 - 130	6	20
Lead	2.5	U	505	517		ug/L		103	70 - 130	5	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-679358/1-A
Matrix: Water
Analysis Batch: 679515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 679358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		08/04/21 10:35	08/04/21 16:26	1

Lab Sample ID: LCS 680-679358/3-A
Matrix: Water
Analysis Batch: 679515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679358

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.48		ug/L		99	85 - 115

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-679357/12-A
Matrix: Water
Analysis Batch: 679448

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 679357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		08/04/21 10:30	08/04/21 19:49	1

Lab Sample ID: LCS 680-679357/13-A
Matrix: Water
Analysis Batch: 679448

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0489		mg/L		98	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-679084/1-A
Matrix: Water
Analysis Batch: 679248

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 679084

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		08/03/21 08:24	08/03/21 12:55	1

Lab Sample ID: LCS 680-679084/2-A
Matrix: Water
Analysis Batch: 679248

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679084

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.0871		mg/L		87	75 - 125

Lab Sample ID: 680-202266-1 MS
Matrix: Water
Analysis Batch: 679248

Client Sample ID: POTW_20210729
Prep Type: Total/NA
Prep Batch: 679084

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.050	U	0.100	0.0811		mg/L		81	75 - 125

Lab Sample ID: 680-202266-1 MSD
Matrix: Water
Analysis Batch: 679248

Client Sample ID: POTW_20210729
Prep Type: Total/NA
Prep Batch: 679084

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenolics, Total Recoverable	0.050	U	0.100	0.0821		mg/L		82	75 - 125	1	30

QC Association Summary

Client: Ashland LLC
Job ID: 680-202266-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Metals

Prep Batch: 679090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-202266-1	POTW_20210729	Total/NA	Water	200.8	
MB 680-679090/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-679090/2-A	Lab Control Sample	Total/NA	Water	200.8	
680-202266-1 MS	POTW_20210729	Total/NA	Water	200.8	
680-202266-1 MSD	POTW_20210729	Total/NA	Water	200.8	

Analysis Batch: 679296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-202266-1	POTW_20210729	Total/NA	Water	200.8	679090
MB 680-679090/1-A	Method Blank	Total/NA	Water	200.8	679090
LCS 680-679090/2-A	Lab Control Sample	Total/NA	Water	200.8	679090
680-202266-1 MS	POTW_20210729	Total/NA	Water	200.8	679090
680-202266-1 MSD	POTW_20210729	Total/NA	Water	200.8	679090

Prep Batch: 679358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-202266-1	POTW_20210729	Total/NA	Water	245.1	
MB 680-679358/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-679358/3-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 679515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-202266-1	POTW_20210729	Total/NA	Water	245.1	679358
MB 680-679358/1-A	Method Blank	Total/NA	Water	245.1	679358
LCS 680-679358/3-A	Lab Control Sample	Total/NA	Water	245.1	679358

General Chemistry

Prep Batch: 679084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-202266-1	POTW_20210729	Total/NA	Water	Distill/Phenol	
MB 680-679084/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-679084/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
680-202266-1 MS	POTW_20210729	Total/NA	Water	Distill/Phenol	
680-202266-1 MSD	POTW_20210729	Total/NA	Water	Distill/Phenol	

Analysis Batch: 679248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-202266-1	POTW_20210729	Total/NA	Water	420.1	679084
MB 680-679084/1-A	Method Blank	Total/NA	Water	420.1	679084
LCS 680-679084/2-A	Lab Control Sample	Total/NA	Water	420.1	679084
680-202266-1 MS	POTW_20210729	Total/NA	Water	420.1	679084
680-202266-1 MSD	POTW_20210729	Total/NA	Water	420.1	679084

Prep Batch: 679357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-202266-1	POTW_20210729	Total/NA	Water	Distill/CN	
MB 680-679357/12-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-679357/13-A	Lab Control Sample	Total/NA	Water	Distill/CN	

QC Association Summary

Client: Ashland LLC
Job ID: 680-202266-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

General Chemistry

Analysis Batch: 679448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-202266-1	POTW_20210729	Total/NA	Water	335.4	679357
MB 680-679357/12-A	Method Blank	Total/NA	Water	335.4	679357
LCS 680-679357/13-A	Lab Control Sample	Total/NA	Water	335.4	679357

Lab Chronicle

Client: Ashland LLC
Job ID: 680-202266-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Client Sample ID: POTW_20210729
Lab Sample ID: 680-202266-1
Date Collected: 07/29/21 13:55
Matrix: Water
Date Received: 07/30/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			679090	08/03/21 08:56	BJB	TAL SAV
Total/NA	Analysis	200.8		1	679296	08/04/21 00:24	BWR	TAL SAV
Total/NA	Prep	245.1			679358	08/04/21 10:35	JKL	TAL SAV
Total/NA	Analysis	245.1		1	679515	08/04/21 16:43	JKL	TAL SAV
Total/NA	Prep	Distill/CN			679357	08/04/21 10:34	AE	TAL SAV
Total/NA	Analysis	335.4		1	679448	08/04/21 19:57	ALG	TAL SAV
Total/NA	Prep	Distill/Phenol			679084	08/03/21 08:24	SM	TAL SAV
Total/NA	Analysis	420.1		1	679248	08/03/21 12:55	SM	TAL SAV

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Ashland LLC
Job ID: 680-202266-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Laboratory: Eurofins TestAmerica, Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10842	04-01-22

Method Summary

Client: Ashland LLC
Job ID: 680-202266-1
Project/Site: Hercules Glens Falls O&M Quarterly POTW

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV
200.8	Preparation, Total Metals	EPA	TAL SAV
245.1	Preparation, Mercury	EPA	TAL SAV
Distill/CN	Distillation, Cyanide	None	TAL SAV
Distill/Phenol	Distillation, Phenolics	None	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

Laboratory References:

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Albany
#224

Chain of Custody Record

530078

eurofins | Environment Testing TestAmerica

Address:

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Cody Hume	Site Contact:	Date:	COC No:
Company Name: Antea Group	Tel/Email: 914 4759932	Lab Contact:	Carrier:	1 of 1 COCs
Address: 71 Raymond Rd	Analysis Turnaround Time			Sampler:
City/State/Zip: West Hartford	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 518 959 4626	TAT if different from Below 10 Day			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Ashland Glens Falls Quarterly PGTW	☐ 1 week			
Site: Glens Falls	☐ 2 days			Job / SDG No.:
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	200.8 CUA total	Chromium +Hexd	420.1 Phenolics total	recoverable	335.4 Total Cyanide	245.1 Mercury	Sample Specific Notes:
PGTW_20210729	7/29/21	1355	G	GW	3			X		X		X	X	

680-202266 Chain of Custody

TNK
7-29-2021

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
email cody.hume@anteagroup.us

1.4 1.5

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by: Mary Boselli	Company: Antea Group	Date/Time: 7/29/21 1500	Received by: Tim Knollmyer	Company: EETA	Date/Time: 7-29-2021 1500
Relinquished by: Tim Knollmyer	Company: EETA Albany	Date/Time: 7-29-21 1700	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA	Date/Time: 7-30-21 1020

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-202266-1

Login Number: 202266
List Number: 1
Creator: Sims, Robert D

List Source: Eurofins TestAmerica, Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Hercules Incorporated
5475 Rings Rd., Suite 500
Atrium North Tower
Dublin, Ohio 43017

HERCULES

January 20, 2022

Mr. Chris Miller
Glens Falls Wastewater Treatment Plant
Water and Sewer Department
2 Shermantown Road
Glens Falls, New York 12801

RE: Discharge Monitoring Report for 4th Quarter 2021
Industrial Wastewater - Discharge Permit No. 002F

Dear Mr. Miller:

Attached is the 4th Quarter 2021 Discharge Monitoring Report for the Hercules/Ciba site. The wastewater sample was collected on December 15, 2021. All parameters meet the limits of the wastewater discharge permit effective April 23, 2007 which was subsequently renewed in April 2012 and April 2017.

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 violation.

If you have any questions, please contact me at (614) 790-6146.

Sincerely,

James E. Vondracek, P.E.
Principal Remediation Engineer

Attachments
cc: Stephen K. Havlik, BASF Corporation, Toms River, NJ

ATTACHMENT 1

DISCHARGE DATA

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

1/21/2022

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min.	0.48	0.00	0.0000	0.57	0.00	7.2	26,000
Quarterly ave.	0.48	0.00	0.0000	0.57	0.00	7.4	65,913
Quarterly max.	0.48	0.00	0.0000	0.57	0.00	7.6	119,000
Data points	1	1	1	1	1	72	92
Date:							
10/01/21						7.2	53,000
10/02/21						7.5	50,000
10/03/21						7.3	65,000
10/04/21						7.2	53,000
10/05/21						NF	53,000
10/06/21						NF	71,000
10/07/21						7.3	66,000
10/08/21						7.3	67,000
10/09/21						7.4	73,000
10/10/21						7.2	61,000
10/11/21						7.2	71,000
10/12/21						7.2	66,000
10/13/21						7.3	59,000
10/14/21						7.3	74,000
10/15/21						NF	62,000
10/16/21						7.3	64,000
10/17/21						7.2	74,000
10/18/21						7.4	109,000
10/19/21						7.4	93,000
10/20/21						7.3	92,000
10/21/21						NF	94,000
10/22/21						7.4	81,000
10/23/21						NF	91,000
10/24/21						7.4	26,000
10/25/21						7.4	119,000
10/26/21						NF	73,000
10/27/21						7.4	92,000
10/28/21						7.4	101,000
10/29/21						7.5	92,000
10/30/21						NF	95,000
10/31/21						7.4	71,000

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

1/21/2022

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min.	0.48	0.00	0.0000	0.57	0.00	7.2	26,000
Quarterly ave.	0.48	0.00	0.0000	0.57	0.00	7.4	65,913
Quarterly max.	0.48	0.00	0.0000	0.57	0.00	7.6	119,000
Data points	1	1	1	1	1	72	92
Date:							
11/01/21						7.4	94,000
11/02/21						7.4	94,000
11/03/21						7.4	95,000
11/04/21						7.4	79,000
11/05/21						7.5	75,000
11/06/21						7.5	73,000
11/07/21						7.5	70,000
11/08/21						7.5	69,000
11/09/21						NF	68,000
11/10/21						7.3	65,000
11/11/21						7.3	57,000
11/12/21						7.4	67,000
11/13/21						7.4	62,000
11/14/21						7.5	65,000
11/15/21						7.4	73,000
11/16/21						7.4	73,000
11/17/21						7.4	70,000
11/18/21						7.4	76,000
11/19/21						7.5	61,000
11/20/21						NF	70,000
11/21/21						7.4	57,000
11/22/21						NF	62,000
11/23/21						7.4	59,000
11/24/21						7.4	66,000
11/25/21						7.5	56,000
11/26/21						NF	52,000
11/27/21						7.4	60,000
11/28/21						NF	57,000
11/29/21						7.4	31,000
11/30/21						7.2	84,000

TABLE 1 GLENS FALLS PRETREATED DISCHARGE TO POTW QUALITY DATA

1/21/2022

LOCATION:	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW-CG Sampler	POTW Meter	POTW Meter
ANALYZED BY:	Test America	Test America	Test America	Test America	Test America		
LAB METHOD:	EPA 200.8	EPA 200.8	EPA 245.1	MCAWW 335.4	MCAWW 420.1		
PRESERVED:	Acid Chilled	Acid Chilled	Acid Chilled	NaOH Chilled	Chilled		
	Total Chromium	**Total Lead**	**Total Mercury**	**Total Cyanide**	**Total Phenols**	**Compliance Point**	**Compliance Point**
Units:	mg/l	mg/l	mg/l	mg/l	mg/l	pH	gpd
POTW Permit or min						6.0	
Daily max.	NS	0.8	0.025	3.0	5.0	9.0	350,000
Quarterly ave.			0.005				175,000
In Compliance	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Quarterly min.	0.48	0.00	0.0000	0.57	0.00	7.2	26,000
Quarterly ave.	0.48	0.00	0.0000	0.57	0.00	7.4	65,913
Quarterly max.	0.48	0.00	0.0000	0.57	0.00	7.6	119,000
Data points	1	1	1	1	1	72	92
Date:							
12/01/21						NF	54,000
12/02/21						7.6	54,000
12/03/21						7.4	55,000
12/04/21						NF	66,000
12/05/21						NF	48,000
12/06/21						NF	65,000
12/07/21						7.4	52,000
12/08/21						7.4	48,000
12/09/21						7.3	57,000
12/10/21						NF	54,000
12/11/21						7.5	54,000
12/12/21						7.4	54,000
12/13/21						7.4	66,000
12/14/21						7.3	58,000
12/15/21	0.480	ND	ND	0.570	ND	NF	61,000
12/16/21						7.3	57,000
12/17/21						7.5	51,000
12/18/21						7.4	60,000
12/19/21						7.5	65,000
12/20/21						7.5	49,000
12/21/21						7.4	56,000
12/22/21						7.4	49,000
12/23/21						NF	57,000
12/24/21						7.5	48,000
12/25/21						7.4	53,000
12/26/21						7.5	44,000
12/27/21						7.4	59,000
12/28/21						7.6	55,000
12/29/21						NF	52,000
12/30/21						7.4	63,000
12/31/21						7.4	49,000

Quarterly Average for Chromium	
Concentration	0.48 mg/L
Ave. Flow	65,913 gpd
Ave. Load	0.26 #/day
PERMIT	3.10 #/day

Notes:

ND: Non-Detect. Value reported to be below the Laboratory Reporting Limit.
NF: No Flow
NS: No Standard. No instantaneous maximum for Total Chromium.
The laboratory Reporting Limit for Lead is 0.0025 mg/L
The laboratory Reporting Limit for Mercury is 0.00020 mg/L.
The laboratory Reporting Limit for Phenols is 0.050 mg/L.

Table 2
POTW Effluent Extended Parameters – 4th Quarter 2021
Glens Falls, New York
December 15, 2021

	Effluent Limitations		Effluent Concentrations	
	Instantaneous Maximum	Quarterly Average		
Parameter	mg/L	mg/L	Conc.	Units
Antimony	10	-	0.0041 J	mg/L
Ammonia	40	-	<0.25	mg/L
Arsenic	0.25	-	<0.003	mg/L
Benzene	0.1	-	<0.001	mg/L
Boron	5	-	0.19	mg/L
Cadmium	0.25	-	0.0016	mg/L
Calcium	500	-	68.0	mg/L
Chloroform	1	-	<0.001	mg/L
Chromium, total	*See below**	3.1 lb/day	0.48	mg/L
Copper	1	-	0.0027 J	mg/L
Cyanide, total	3	-	0.57	mg/L
Ethylbenzene	0.1	-	<0.001	mg/L
Iron	50	-	0.27	mg/L
Lead	0.8	-	<0.0025	mg/L
Manganese	5	-	0.0039 J	mg/L
Mercury	0.025	0.005	<0.0002	mg/L
Methylene Chloride	1	-	<0.005	mg/L
Napthalene	1	-	<0.0047	mg/L
Nickel	2.3	-	<0.005	mg/L
Oil & Grease	50	-	<5.1	mg/L
pH (Standard Units)	6.0 - 9.0	-	8.1	SU
Phenols	5	-	<0.05	mg/L
Silver	0.2	-	<0.001	mg/L
Toluene	0.1	-	<0.001	mg/L
1,1,1 - Trichloroethane	1	-	<0.001	mg/L
Xylene	0.1	-	<0.002	mg/L
Zinc	1.5	-	0.013 J	mg/L
Flow (gallons per day)	350,000	175,000	61,000	gpd

**Discharge for total chromium is 3.1 lb/day and will be based on the average of chromium sampling data and the quarterly average flow.*

- : No standard value

J: Lab estimated value (Between the method detection limit and the reporting limit)

<3.0 : The analyte was not detected and the value is below the laboratory reporting limit

Bold: Analyte exceeded the permitted effulent limitations

ATTACHMENT 2

ANALYTICAL DATA

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

Laboratory Job ID: 680-208976-1
Client Project/Site: Hercules Glens Falls O&M Quarterly

For:
Ashland LLC
5200 Blazer Parkway
DS-4
Dublin, Ohio 43017

Attn: Mr. Jim Vondracek

Authorized for release by:
12/30/2021 11:20:45 AM

David Fuller, Project Manager
(770)344-8986
David.Fuller@Eurofinset.com

Definitions/Glossary

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
^6+	Interference Check Standard (ICSA and/or ICSAB) is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sample Summary

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-208976-1	POTW_20211215	Water	12/15/21 12:30	12/16/21 11:00
680-208976-2	Trip Blank	Water	12/15/21 00:00	12/16/21 11:00

Case Narrative

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

Job ID: 680-208976-1

Laboratory: Eurofins TestAmerica, Savannah

Narrative

Receipt
The samples were received on 12/16/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.8º C.

GC/MS VOA
Method 624: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batches 680-700612, 680-700620, and 680-700917.

GC/MS Semi VOA
Method 625.1: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: POTW_20211215 (680-208976-1). These results have been reported and qualified.

Metals
Methods 200.8: The interference check standard solution (ICSA) associated with the following samples showed results for cadmium at a level greater than the reporting limit (RL). It is believed that the solution contains trace impurities of this element / these elements and the results are not due to matrix interference. These results are consistent with those found by the manufacturer of the ICSA solution. (ICSA 680-700205/17)

General Chemistry
Method 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 680-699924.

Method 335.4: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 680-699463 and analytical batch 680-700077 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 335.4: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 680-699463 and analytical batch 680-700077 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 420.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for prep batch 700300 and analytical batch 700364 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 5210B - BOD: The sample for this method was prepped outside the 48 hour holding time due to a scheduling error at the lab.

Client Sample ID: POTW_20211215
Lab Sample ID: 680-208976-1
Date Collected: 12/15/21 12:30
Matrix: Water
Date Received: 12/16/21 11:00

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			12/28/21 22:01	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/28/21 22:01	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/28/21 22:01	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/28/21 22:01	1
Toluene	1.0	U	1.0	0.48	ug/L			12/28/21 22:01	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/28/21 22:01	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/28/21 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*79 - 119*		*12/28/21 22:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*12/28/21 22:01*	*1*
4-Bromofluorobenzene (Surr)	*107*		*71 - 121*		*12/28/21 22:01*	*1*
Dibromofluoromethane (Surr)	*104*		*77 - 129*		*12/28/21 22:01*	*1*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	4.7	U	4.7	1.6	ug/L		12/17/21 15:36	12/22/21 22:51	1
2,4,6-Trichlorophenol	4.7	U	4.7	1.0	ug/L		12/17/21 15:36	12/22/21 22:51	1
Naphthalene	4.7	U	4.7	1.7	ug/L		12/17/21 15:36	12/22/21 22:51	1
Pentachlorophenol	24	U	24	4.7	ug/L		12/17/21 15:36	12/22/21 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*30 - 130*	*12/17/21 15:36*	*12/22/21 22:51*	*1*
2-Fluorobiphenyl	*73*		*25 - 130*	*12/17/21 15:36*	*12/22/21 22:51*	*1*
2-Fluorophenol	*48*		*10 - 130*	*12/17/21 15:36*	*12/22/21 22:51*	*1*
Nitrobenzene-d5	*57*		*15 - 314*	*12/17/21 15:36*	*12/22/21 22:51*	*1*
Phenol-d5	*50*		*8 - 424*	*12/17/21 15:36*	*12/22/21 22:51*	*1*
Terphenyl-d14	*28*	*S1-*	*35 - 131*	*12/17/21 15:36*	*12/22/21 22:51*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**190**		100	36	ug/L		12/17/21 11:59	12/21/21 03:50	1
Calcium	**68000**		500	25	ug/L		12/17/21 11:59	12/21/21 03:50	1

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**4.1**	**J**	5.0	0.50	ug/L		12/17/21 11:59	12/21/21 18:36	1
Arsenic	3.0	U	3.0	1.5	ug/L		12/17/21 11:59	12/21/21 18:36	1
Cadmium	**1.6**	**^6+**	0.50	0.15	ug/L		12/17/21 11:59	12/21/21 18:36	1
Chromium	**480**		5.0	1.6	ug/L		12/17/21 11:59	12/21/21 18:36	1
Copper	**2.7**	**J**	5.0	1.7	ug/L		12/17/21 11:59	12/21/21 18:36	1
Iron	**270**		100	25	ug/L		12/17/21 11:59	12/21/21 18:36	1
Lead	2.5	U	2.5	0.98	ug/L		12/17/21 11:59	12/21/21 18:36	1
Manganese	**3.9**	**J**	5.0	1.8	ug/L		12/17/21 11:59	12/21/21 18:36	1
Nickel	5.0	U	5.0	1.9	ug/L		12/17/21 11:59	12/21/21 18:36	1
Silver	1.0	U	1.0	0.10	ug/L		12/17/21 11:59	12/21/21 18:36	1
Zinc	**13**	**J**	20	9.6	ug/L		12/17/21 11:59	12/21/21 18:36	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		12/17/21 10:25	12/17/21 16:42	1

Client Sample Results

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: POTW_20211215
Lab Sample ID: 680-208976-1
Date Collected: 12/15/21 12:30
Matrix: Water
Date Received: 12/16/21 11:00

General Chemistry

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.1**	**HF**			SU			12/22/21 13:52	1
Temperature	**19.5**	**HF**			Degrees C			12/22/21 13:52	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	5.1	U	5.1	1.4	mg/L		12/21/21 06:30	12/21/21 10:23	1
Cyanide, Total	**0.57**		0.10	0.025	mg/L		12/20/21 12:00	12/20/21 23:32	10
Ammonia	0.25	U	0.25	0.10	mg/L			12/21/21 16:43	1
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		12/22/21 11:33	12/22/21 14:39	1
Biochemical Oxygen Demand	6.0	U H	6.0	6.0	mg/L			12/17/21 19:45	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	**13**		2.5	2.5	mg/L			12/16/21 17:53	1

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: Trip Blank
Lab Sample ID: 680-208976-2

Date Collected: 12/15/21 00:00
Matrix: Water
Date Received: 12/16/21 11:00

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			12/24/21 16:52	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/24/21 16:52	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/24/21 16:52	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/24/21 16:52	1
Toluene	1.0	U	1.0	0.48	ug/L			12/24/21 16:52	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/24/21 16:52	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/24/21 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*79 - 119*		*12/24/21 16:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*12/24/21 16:52*	*1*
4-Bromofluorobenzene (Surr)	*100*		*71 - 121*		*12/24/21 16:52*	*1*
Dibromofluoromethane (Surr)	*103*		*77 - 129*		*12/24/21 16:52*	*1*

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-700612/9
Matrix: Water
Analysis Batch: 700612

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			12/24/21 14:21	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/24/21 14:21	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/24/21 14:21	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/24/21 14:21	1
Toluene	1.0	U	1.0	0.48	ug/L			12/24/21 14:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/24/21 14:21	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/24/21 14:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*79 - 119*		*12/24/21 14:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*12/24/21 14:21*	*1*
4-Bromofluorobenzene (Surr)	*103*		*71 - 121*		*12/24/21 14:21*	*1*
Dibromofluoromethane (Surr)	*101*		*77 - 129*		*12/24/21 14:21*	*1*

Lab Sample ID: LCS 680-700612/4
Matrix: Water
Analysis Batch: 700612

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	50.0		ug/L		100	37 - 151		
Chloroform			50.0	50.0		ug/L		100	51 - 138		
Ethylbenzene			50.0	53.0		ug/L		106	37 - 162		
Methylene Chloride			50.0	50.6		ug/L		101	1 - 221		
Toluene			50.0	54.0		ug/L		108	47 - 150		
1,1,1-Trichloroethane			50.0	52.7		ug/L		105	52 - 162		
Xylenes, Total			100	108		ug/L		108	78 - 119		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*103*		*79 - 119*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*71 - 121*
Dibromofluoromethane (Surr)	*107*		*77 - 129*

Lab Sample ID: LCSD 680-700612/5
Matrix: Water
Analysis Batch: 700612

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			50.0	49.9		ug/L		100	37 - 151	0	30
Chloroform			50.0	49.9		ug/L		100	51 - 138	0	30
Ethylbenzene			50.0	52.7		ug/L		105	37 - 162	0	30
Methylene Chloride			50.0	47.3		ug/L		95	1 - 221	7	30
Toluene			50.0	53.5		ug/L		107	47 - 150	1	30
1,1,1-Trichloroethane			50.0	54.3		ug/L		109	52 - 162	3	30
Xylenes, Total			100	108		ug/L		108	78 - 119	0	30

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-700612/5
Matrix: Water
Analysis Batch: 700612

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*79 - 119*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*71 - 121*
Dibromofluoromethane (Surr)	*104*		*77 - 129*

Lab Sample ID: MB 680-700917/9
Matrix: Water
Analysis Batch: 700917

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.43	ug/L			12/28/21 13:14	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/28/21 13:14	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/28/21 13:14	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/28/21 13:14	1
Toluene	1.0	U	1.0	0.48	ug/L			12/28/21 13:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/28/21 13:14	1
Xylenes, Total	2.0	U	2.0	0.57	ug/L			12/28/21 13:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*79 - 119*		*12/28/21 13:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*12/28/21 13:14*	*1*
4-Bromofluorobenzene (Surr)	*106*		*71 - 121*		*12/28/21 13:14*	*1*
Dibromofluoromethane (Surr)	*96*		*77 - 129*		*12/28/21 13:14*	*1*

Lab Sample ID: LCS 680-700917/4
Matrix: Water
Analysis Batch: 700917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	48.9		ug/L		98	37 - 151
Chloroform	50.0	49.1		ug/L		98	51 - 138
Ethylbenzene	50.0	56.1		ug/L		112	37 - 162
Methylene Chloride	50.0	49.2		ug/L		98	1 - 221
Toluene	50.0	52.7		ug/L		105	47 - 150
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	52 - 162
Xylenes, Total	100	112		ug/L		112	78 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*108*		*79 - 119*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*71 - 121*
Dibromofluoromethane (Surr)	*99*		*77 - 129*

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-700917/5
Matrix: Water
Analysis Batch: 700917

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			50.0	48.5		ug/L		97	37 - 151	1	30
Chloroform			50.0	49.5		ug/L		99	51 - 138	1	30
Ethylbenzene			50.0	54.4		ug/L		109	37 - 162	3	30
Methylene Chloride			50.0	47.9		ug/L		96	1 - 221	3	30
Toluene			50.0	52.0		ug/L		104	47 - 150	1	30
1,1,1-Trichloroethane			50.0	49.4		ug/L		99	52 - 162	4	30
Xylenes, Total			100	110		ug/L		110	78 - 119	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*105*		*79 - 119*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*71 - 121*
Dibromofluoromethane (Surr)	*100*		*77 - 129*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-699476/12-A
Matrix: Water
Analysis Batch: 700270

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699476

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	5.0	U	5.0	1.7	ug/L		12/17/21 15:36	12/22/21 16:56	1
2,4,6-Trichlorophenol	5.0	U	5.0	1.1	ug/L		12/17/21 15:36	12/22/21 16:56	1
Naphthalene	5.0	U	5.0	1.8	ug/L		12/17/21 15:36	12/22/21 16:56	1
Pentachlorophenol	25	U	25	5.0	ug/L		12/17/21 15:36	12/22/21 16:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*93*		*30 - 130*	*12/17/21 15:36*	*12/22/21 16:56*	*1*
2-Fluorobiphenyl	*81*		*25 - 130*	*12/17/21 15:36*	*12/22/21 16:56*	*1*
2-Fluorophenol	*61*		*10 - 130*	*12/17/21 15:36*	*12/22/21 16:56*	*1*
Nitrobenzene-d5	*66*		*15 - 314*	*12/17/21 15:36*	*12/22/21 16:56*	*1*
Phenol-d5	*60*		*8 - 424*	*12/17/21 15:36*	*12/22/21 16:56*	*1*
Terphenyl-d14	*91*		*35 - 131*	*12/17/21 15:36*	*12/22/21 16:56*	*1*

Lab Sample ID: LCS 680-699476/13-A
Matrix: Water
Analysis Batch: 700270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699476

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol			100	74.6		ug/L		75	26 - 130
2,4,6-Trichlorophenol			100	76.3		ug/L		76	37 - 144
Naphthalene			100	52.4		ug/L		52	21 - 133
Pentachlorophenol			200	178		ug/L		89	14 - 176

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*87*		*30 - 130*
2-Fluorobiphenyl	*63*		*25 - 130*
2-Fluorophenol	*48*		*10 - 130*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-699476/13-A
Matrix: Water
Analysis Batch: 700270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699476

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	56		15 - 314
Phenol-d5	48		8 - 424
Terphenyl-d14	76		35 - 131

Lab Sample ID: LCSD 680-699476/14-A
Matrix: Water
Analysis Batch: 700270

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 699476

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	100	81.7		ug/L		82	26 - 130	9	43
2,4,6-Trichlorophenol	100	84.9		ug/L		85	37 - 144	11	58
Naphthalene	100	56.2		ug/L		56	21 - 133	7	65
Pentachlorophenol	200	189		ug/L		94	14 - 176	6	86

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	90		30 - 130
2-Fluorobiphenyl	69		25 - 130
2-Fluorophenol	53		10 - 130
Nitrobenzene-d5	62		15 - 314
Phenol-d5	56		8 - 424
Terphenyl-d14	70		35 - 131

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 680-699444/1-A
Matrix: Water
Analysis Batch: 700030

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100	U	100	36	ug/L		12/17/21 11:59	12/21/21 02:35	1
Calcium	500	U	500	25	ug/L		12/17/21 11:59	12/21/21 02:35	1

Lab Sample ID: LCS 680-699444/2-A
Matrix: Water
Analysis Batch: 700030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	200	198		ug/L		99	85 - 115
Calcium	5000	4790		ug/L		96	85 - 115

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 680-699445/1-A
Matrix: Water
Analysis Batch: 700205

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	5.0	U	5.0	0.50	ug/L		12/17/21 11:59	12/21/21 17:57	1
Arsenic	3.0	U	3.0	1.5	ug/L		12/17/21 11:59	12/21/21 17:57	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 680-699445/1-A
Matrix: Water
Analysis Batch: 700205

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.50	U ^6+	0.50	0.15	ug/L		12/17/21 11:59	12/21/21 17:57	1
Chromium	5.0	U	5.0	1.6	ug/L		12/17/21 11:59	12/21/21 17:57	1
Copper	5.0	U	5.0	1.7	ug/L		12/17/21 11:59	12/21/21 17:57	1
Iron	100	U	100	25	ug/L		12/17/21 11:59	12/21/21 17:57	1
Lead	2.5	U	2.5	0.98	ug/L		12/17/21 11:59	12/21/21 17:57	1
Manganese	5.0	U	5.0	1.8	ug/L		12/17/21 11:59	12/21/21 17:57	1
Nickel	5.0	U	5.0	1.9	ug/L		12/17/21 11:59	12/21/21 17:57	1
Silver	1.0	U	1.0	0.10	ug/L		12/17/21 11:59	12/21/21 17:57	1
Zinc	20	U	20	9.6	ug/L		12/17/21 11:59	12/21/21 17:57	1

Lab Sample ID: LCS 680-699445/2-A
Matrix: Water
Analysis Batch: 700205

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	49.6		ug/L		99	85 - 115
Arsenic	100	95.1		ug/L		95	85 - 115
Cadmium	50.0	47.9	^6+	ug/L		96	85 - 115
Chromium	100	97.2		ug/L		97	85 - 115
Copper	99.1	98.5		ug/L		99	85 - 115
Iron	5000	5030		ug/L		101	85 - 115
Lead	505	517		ug/L		103	85 - 115
Manganese	400	397		ug/L		99	85 - 115
Nickel	99.0	93.0		ug/L		94	85 - 115
Silver	50.0	50.0		ug/L		100	85 - 115
Zinc	100	94.8		ug/L		95	85 - 115

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 680-699420/1-A
Matrix: Water
Analysis Batch: 700099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.080	ug/L		12/17/21 10:25	12/17/21 16:06	1

Lab Sample ID: LCS 680-699420/3-A
Matrix: Water
Analysis Batch: 700099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.44		ug/L		98	85 - 115

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 680-699924/1-A
Matrix: Water
Analysis Batch: 700048

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	5.0	U	5.0	1.4	mg/L		12/21/21 06:30	12/21/21 10:23	1

Lab Sample ID: LCS 680-699924/2-A
Matrix: Water
Analysis Batch: 700048

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	40.0	37.40		mg/L		93	78 - 114

Lab Sample ID: LCSD 680-699924/3-A
Matrix: Water
Analysis Batch: 700048

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 699924

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	33.20		mg/L		83	78 - 114	12	18

Method: 335.4 - Cyanide, Total

Lab Sample ID: MB 680-699463/12-A
Matrix: Water
Analysis Batch: 700077

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0025	mg/L		12/20/21 12:00	12/20/21 20:34	1

Lab Sample ID: LCS 680-699463/13-A
Matrix: Water
Analysis Batch: 700077

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0497		mg/L		99	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-700206/52
Matrix: Water
Analysis Batch: 700206

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25	0.10	mg/L			12/21/21 15:56	1

Lab Sample ID: LCS 680-700206/53
Matrix: Water
Analysis Batch: 700206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	0.991		mg/L		99	90 - 110

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 680-700300/1-A
Matrix: Water
Analysis Batch: 700364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 700300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	0.050	U	0.050	0.025	mg/L		12/22/21 11:33	12/22/21 14:38	1

Lab Sample ID: LCS 680-700300/2-A
Matrix: Water
Analysis Batch: 700364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 700300

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenolics, Total Recoverable	0.100	0.109		mg/L		109	75 - 125

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 680-699323/1
Matrix: Water
Analysis Batch: 699323

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2.5	U	2.5	2.5	mg/L			12/16/21 17:53	1

Lab Sample ID: LCS 680-699323/2
Matrix: Water
Analysis Batch: 699323

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	951	836		mg/L		88	80 - 120

Lab Sample ID: LCSD 680-699323/3
Matrix: Water
Analysis Batch: 699323

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	951	826		mg/L		87	80 - 120	1	25

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 680-700410/1
Matrix: Water
Analysis Batch: 700410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.01	7.1		SU		101	63 - 158

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-609373/1
Matrix: Water
Analysis Batch: 609373

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			12/17/21 19:45	1

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

Method: SM 5210B - BOD, 5-Day (Continued)

Lab Sample ID: LCS 480-609373/2
Matrix: Water
Analysis Batch: 609373

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand	198	175		mg/L		88	85 - 115

GC/MS VOA

Analysis Batch: 700612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-2	Trip Blank	Total/NA	Water	624	
MB 680-700612/9	Method Blank	Total/NA	Water	624	
LCS 680-700612/4	Lab Control Sample	Total/NA	Water	624	
LCSD 680-700612/5	Lab Control Sample Dup	Total/NA	Water	624	

Analysis Batch: 700917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	624	
MB 680-700917/9	Method Blank	Total/NA	Water	624	
LCS 680-700917/4	Lab Control Sample	Total/NA	Water	624	
LCSD 680-700917/5	Lab Control Sample Dup	Total/NA	Water	624	

GC/MS Semi VOA

Prep Batch: 699476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	CWA_Prep	
MB 680-699476/12-A	Method Blank	Total/NA	Water	CWA_Prep	
LCS 680-699476/13-A	Lab Control Sample	Total/NA	Water	CWA_Prep	
LCSD 680-699476/14-A	Lab Control Sample Dup	Total/NA	Water	CWA_Prep	

Analysis Batch: 700270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	625.1	699476
MB 680-699476/12-A	Method Blank	Total/NA	Water	625.1	699476
LCS 680-699476/13-A	Lab Control Sample	Total/NA	Water	625.1	699476
LCSD 680-699476/14-A	Lab Control Sample Dup	Total/NA	Water	625.1	699476

Metals

Prep Batch: 699420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	245.1	
MB 680-699420/1-A	Method Blank	Total/NA	Water	245.1	
LCS 680-699420/3-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 699444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	200.7	
MB 680-699444/1-A	Method Blank	Total/NA	Water	200.7	
LCS 680-699444/2-A	Lab Control Sample	Total/NA	Water	200.7	

Prep Batch: 699445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	200.8	
MB 680-699445/1-A	Method Blank	Total/NA	Water	200.8	
LCS 680-699445/2-A	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 700030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	200.7 Rev 4.4	699444
MB 680-699444/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	699444

Metals (Continued)

Analysis Batch: 700030 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-699444/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	699444

Analysis Batch: 700099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	245.1	699420
MB 680-699420/1-A	Method Blank	Total/NA	Water	245.1	699420
LCS 680-699420/3-A	Lab Control Sample	Total/NA	Water	245.1	699420

Analysis Batch: 700205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	200.8	699445
MB 680-699445/1-A	Method Blank	Total/NA	Water	200.8	699445
LCS 680-699445/2-A	Lab Control Sample	Total/NA	Water	200.8	699445

General Chemistry

Analysis Batch: 609373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	SM 5210B	
USB 480-609373/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 480-609373/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 699323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	SM 2540D	
MB 680-699323/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 680-699323/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 680-699323/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	

Prep Batch: 699463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	Distill/CN	
MB 680-699463/12-A	Method Blank	Total/NA	Water	Distill/CN	
LCS 680-699463/13-A	Lab Control Sample	Total/NA	Water	Distill/CN	

Prep Batch: 699924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	1664A	
MB 680-699924/1-A	Method Blank	Total/NA	Water	1664A	
LCS 680-699924/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 680-699924/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 700048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	1664A	699924
MB 680-699924/1-A	Method Blank	Total/NA	Water	1664A	699924
LCS 680-699924/2-A	Lab Control Sample	Total/NA	Water	1664A	699924
LCSD 680-699924/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	699924

QC Association Summary

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

General Chemistry

Analysis Batch: 700077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	335.4	699463
MB 680-699463/12-A	Method Blank	Total/NA	Water	335.4	699463
LCS 680-699463/13-A	Lab Control Sample	Total/NA	Water	335.4	699463

Analysis Batch: 700206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	350.1	
MB 680-700206/52	Method Blank	Total/NA	Water	350.1	
LCS 680-700206/53	Lab Control Sample	Total/NA	Water	350.1	

Prep Batch: 700300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	Distill/Phenol	
MB 680-700300/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 680-700300/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	

Analysis Batch: 700364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	420.1	700300
MB 680-700300/1-A	Method Blank	Total/NA	Water	420.1	700300
LCS 680-700300/2-A	Lab Control Sample	Total/NA	Water	420.1	700300

Analysis Batch: 700410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-208976-1	POTW_20211215	Total/NA	Water	SM 4500 H+ B	
LCS 680-700410/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

Client Sample ID: POTW_20211215
Lab Sample ID: 680-208976-1
Date Collected: 12/15/21 12:30
Matrix: Water
Date Received: 12/16/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	700917	12/28/21 22:01	P1C	TAL SAV
Total/NA	Prep	CWA_Prep			699476	12/17/21 15:36	IR	TAL SAV
Total/NA	Analysis	625.1		1	700270	12/22/21 22:51	OK	TAL SAV
Total/NA	Prep	200.7			699444	12/17/21 11:59	JE	TAL SAV
Total/NA	Analysis	200.7 Rev 4.4		1	700030	12/21/21 03:50	BCB	TAL SAV
Total/NA	Prep	200.8			699445	12/17/21 11:59	JE	TAL SAV
Total/NA	Analysis	200.8		1	700205	12/21/21 18:36	BWR	TAL SAV
Total/NA	Prep	245.1			699420	12/17/21 10:25	JKL	TAL SAV
Total/NA	Analysis	245.1		1	700099	12/17/21 16:42	BCB	TAL SAV
Total/NA	Prep	1664A			699924	12/21/21 06:30	PB	TAL SAV
Total/NA	Analysis	1664A		1	700048	12/21/21 10:23	PB	TAL SAV
Total/NA	Prep	Distill/CN			699463	12/20/21 12:00	AE	TAL SAV
Total/NA	Analysis	335.4		10	700077	12/20/21 23:32	AE	TAL SAV
Total/NA	Analysis	350.1		1	700206	12/21/21 16:43	DR	TAL SAV
Total/NA	Prep	Distill/Phenol			700300	12/22/21 11:33	SM	TAL SAV
Total/NA	Analysis	420.1		1	700364	12/22/21 14:39	SM	TAL SAV
Total/NA	Analysis	SM 2540D		1	699323	12/16/21 17:53	PG	TAL SAV
Total/NA	Analysis	SM 4500 H+ B		1	700410	12/22/21 13:52	DR	TAL SAV
Total/NA	Analysis	SM 5210B		1	609373	12/17/21 19:45	SRW	TAL BUF

Client Sample ID: Trip Blank
Lab Sample ID: 680-208976-2
Date Collected: 12/15/21 00:00
Matrix: Water
Date Received: 12/16/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	700612	12/24/21 16:52	P1C	TAL SAV

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

Laboratory: Eurofins TestAmerica, Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10842	04-01-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.8	200.8	Water	Iron
624		Water	1,1,1-Trichloroethane
624		Water	Benzene
624		Water	Chloroform
624		Water	Ethylbenzene
624		Water	Methylene Chloride
624		Water	Toluene
624		Water	Xylenes, Total
625.1	CWA_Prep	Water	2,4,5-Trichlorophenol
SM 4500 H+ B		Water	pH
SM 4500 H+ B		Water	Temperature

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-01-22

Method Summary

Client: Ashland LLC
Job ID: 680-208976-1
Project/Site: Hercules Glens Falls O&M Quarterly

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL SAV
625.1	Semivolatile Organic Compounds (GC/MS)	40CFR136A	TAL SAV
200.7 Rev 4.4	Metals (ICP)	40CFR136A	TAL SAV
200.8	Metals (ICP/MS)	EPA	TAL SAV
245.1	Mercury (CVAA)	EPA	TAL SAV
1664A	HEM and SGT-HEM	1664A	TAL SAV
335.4	Cyanide, Total	MCAWW	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
420.1	Phenolics, Total Recoverable	MCAWW	TAL SAV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL SAV
SM 4500 H+ B	pH	SM	TAL SAV
SM 5210B	BOD, 5-Day	SM	TAL BUF
1664A	HEM and SGT-HEM (Aqueous)	1664A	TAL SAV
200.7	Preparation, Total Metals	EPA	TAL SAV
200.8	Preparation, Total Metals	EPA	TAL SAV
245.1	Preparation, Mercury	EPA	TAL SAV
CWA_Prep	Liquid-Liquid Extraction (Separatory Funnel)	40CFR136A	TAL SAV
Distill/CN	Distillation, Cyanide	None	TAL SAV
Distill/Phenol	Distillation, Phenolics	None	TAL SAV

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Eurofins TestAmerica, Savannah Albany #224
5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912-354-7858 Fax: 912-352-0165

Chain of Custody Record

eurofins

Client Information	Sampler: John Stangel	Lab PM: Fuller, David	Carrier Tracking No(s):	COC No: 680-131209-48498.1
Client Contact: Katie Angel	Phone: 612-772-1142	E-Mail: David.Fuller@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Antea USA Inc.	PWSID:			Job #:
Address: 5788 Wide Water Parkway 2nd Floor - ANTEA	Due Date Requested:			
City: Syracuse	TAT Requested (days): STD			
State, Zip: NY, 13214	Compliance Project: Δ Yes Δ No			
Phone: 614-790-6146(Tel)	PO #: PO847286			
Email: katie.angel@anteagroup.us	WO #: Task 200, 300, 400			
Project Name: Ashland Glens Falls Annual POTW	Project #: 68000956			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	350.1 - Ammonia	200.7_CWA, 200.8_CWA, 245.1	1664A_NP - HEM (Oil & Grease)	624_5ml - 624-VOC	625 - (MOD) Acid/Base Priority Pollutants	5210B - Biochemical Oxygen Demand	2540D - Total Suspended Solids	335.4 - Cyanide, Total	420.1 - Phenolics, Total Recoverable	SM4500_H+ - pH	Total Number of containers
			Preservation Code:		X	X	S	D	S	A	N	N	N	B	S	N	X
POTW_20211215	12/15/21	1230	G	Water	N	N	X	X	X	X	X	X	X	X	X	X	15
Trip Blank	—	—	—	Water						X							2

Special Instructions/Note: 244-ATLANTA

680-208976 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	John Stangel / Antea Group	12/15/21 1515	Antea Group	Karl Zoehn	12/15/21 1515	Eurofins
2	Karl Zoehn	12/15/21 1700	Eurofins	Courtney	12/16/21 10:30	TAS
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #1 2.8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-208976-1

Login Number: 208976
List Number: 1
Creator: Sims, Robert D

List Source: Eurofins TestAmerica, Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Enclosure 3 POTW Effluent Extended Parameters

Attachment 3

POTW Effluent Extended Parameters – 4th Quarter 2021

Glens Falls, New York

December 15, 2021

	Effluent Limitations		Effluent Concentrations	
	Instantaneous Maximum	Quarterly Average		
Parameter	mg/L	mg/L	Conc.	Units
Antimony	10	-	0.0041 J	mg/L
Ammonia	40	-	<0.25	mg/L
Arsenic	0.25	-	<0.003	mg/L
Benzene	0.1	-	<0.001	mg/L
Boron	5	-	0.19	mg/L
Cadmium	0.25	-	0.0016	mg/L
Calcium	500	-	68.0	mg/L
Chloroform	1	-	<0.001	mg/L
Chromium, total	*See below**	3.1 lb/day	0.48	mg/L
Copper	1	-	0.0027 J	mg/L
Cyanide, total	3	-	0.57	mg/L
Ethylbenzene	0.1	-	<0.001	mg/L
Iron	50	-	0.27	mg/L
Lead	0.8	-	<0.0025	mg/L
Manganese	5	-	0.0039 J	mg/L
Mercury	0.025	0.005	<0.0002	mg/L
Methylene Chloride	1	-	<0.005	mg/L
Napthalene	1	-	<0.0047	mg/L
Nickel	2.3	-	<0.005	mg/L
Oil & Grease	50	-	<5.1	mg/L
pH (Standard Units)	6.0 - 9.0	-	8.1	SU
Phenols	5	-	<0.05	mg/L
Silver	0.2	-	<0.001	mg/L
Toluene	0.1	-	<0.001	mg/L
1,1,1 - Trichloroethane	1	-	<0.001	mg/L
Xylene	0.1	-	<0.002	mg/L
Zinc	1.5	-	0.013 J	mg/L
Flow (gallons per day)	350,000	175,000	61,000	gpd

**Discharge for total chromium is 3.1 lb/day and will be based on the average of chromium sampling data and the quarterly average flow.*

- : No standard value

J: Lab estimated value (Between the method detection limit and the reporting limit)

<3.0 : The analyte was not detected and the value is below the laboratory reporting limit

Bold: Analyte exceeded the permitted effulent limitations

Enclosure 4 EW-B5 Weekly Totalizer Summary

Attachment 4 – EW-B5 Weekly Totalizer Summary
2021 Operations Maintenance Report
Former Ciba-Geigy Facility, Glens Falls, NY

Date	Days Since Previous Reading	Totalizer Reading (gal)	Since Previous Reading		Average gal/day over Period
			Gallons Pumped	Average gal/day	
1/14/2021	---	66,327	---	---	
1/21/2021	7	69,232	2,906	415	
1/29/2021	8	72,302	3,069	384	
2/3/2021	---	252	---	---	
2/10/2021	7	2,546	2,294	328	
2/15/2021	5	3,229	683	137	266
2/22/2021	7	4,722	1,493	213	
3/2/2021	8	6,035	1,313	164	
3/10/2021	8	6,086	51	6	
3/18/2021	8	8,955	2,869	359	
3/25/2021	7	11,647	2,692	385	
4/1/2021	7	14,503	2,856	408	
4/5/2021	4	16,159	1,656	414	
4/12/2021	7	18,867	2,708	387	
4/20/2021	8	22,006	3,139	392	
4/29/2021	9	25,438	3,432	381	
5/4/2021	5	27,001	1,563	313	
5/13/2021	9	30,215	3,214	357	
5/17/2021	4	31,638	1,423	356	332
5/27/2021	10	35,075	3,437	344	
6/1/2021	---	---	---	---	
6/7/2021	11	36,576	1,501	136	
6/16/2021	20	39,400	2,824	141	
6/21/2021	---	113,564	---	---	
6/30/2021	9	116,715	3,151	350	
7/8/2021	8	119,520	2,805	351	
7/14/2021	6	121,647	2,126	354	
7/22/2021	---	---	---	---	
7/29/2021	---	---	---	---	
8/3/2021	---	---	---	---	
8/9/2021	---	---	---	---	
8/16/2021	---	---	---	---	362
8/26/2021	43	139,181	17,534	408	
8/30/2021	4	140,834	1,653	413	
9/9/2021	10	144,731	3,897	390	
9/13/2021	4	146,195	1,465	366	
9/20/2021	7	148,338	2,143	306	
9/27/2021	7	150,487	2,149	307	
10/8/2021	11	152,397	1,910	174	
10/12/2021	4	154,000	1,603	401	
10/18/2021	6	154,275	275	46	
10/25/2021	7	154,531	256	37	
11/2/2021	8	157,941	3,410	426	
11/12/2021	10	162,307	4,366	437	
11/16/2021	4	164,042	1,735	434	333
11/23/2021	7	167,095	3,053	436	
11/29/2021	---	---	---	---	
12/10/2021	17	173,904	6,809	401	
12/14/2021	4	175,496	1,592	398	
12/20/2021	6	178,006	2,510	418	
12/28/2021	8	181,155	3,149	394	
			Annual Average	323	

Note:

(1) Time period shaded in gray represents period where totalizer readings were inaccurate or not available.

Totalizer readings that were outside of norm, were not included in the estimate of average extraction rates for this period.

gal = gallons

--- = not applicable

Enclosure 5 Site Inspection Reports

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year January 2021
Date of visit: 1/14/21
O&M Tech(s): Liam Vaughn & Garrett Browe

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	~~Record totalizer flow readings in EPS~~		1/14	LV
2	Download telemetry files in EPS		1/14	LV
3	~~Record pH and flow readings at POTW~~		1/14	LV
	Site Security			
1	Gates secured & locked		1/14	LV
2	Access roads		1/14	LV
3	Site utilities operational		1/14	LV
4	Inspect fire extinguishers and sign tag		1/14	LV
5	Inspect all fence lines for holes or breaks	Vines overgrowing most fence areas, brownish rusting just past 1st gate to your left	1/14	LV
6	Inspect all buildings for security		1/14	LV
	Site Monitoring			
1	Inspect landfill cap		1/14	LV
2	Vegitative cover		1/14	LV
3	Cement company pond	Frozen over	1/14	LV
4	Inspect rip-rap		1/14	LV
5	Inspect ditches/swales and catch basins		1/14	LV
6	Inspect Hudson River bank		1/14	LV
7	Download transducer data		1/14	LV

COMMENTS

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year: February 2021
Date of visit: 2/22/21
O&M Tech(s): Liam Nangle

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS	(on weekly sheet)	2/22	LN
2	Download telemetry files in EPS		2/22	LN
3	Record pH and flow readings at POTW	No flow / PH meter : 240 at time visit	2/22	LN
	Site Security			
1	Gates secured & locked		2/22	LN
2	Access roads		2/22	LN
3	Site utilities operational		2/22	LN
4	Inspect fire extinguishers and sign tag		2/22	LN
5	Inspect all fence lines for holes or breaks	Tree branch on upper fence near 1st gate	2/22	LN
6	Inspect all buildings for security		2/22	LN
	Site Monitoring			
1	Inspect landfill cap		2/22	LN
2	Vegitative cover		2/22	LN
3	Cement company pond	Frozen over	2/22	LN
4	Inspect rip-rap		2/22	LN
5	Inspect ditches/swales and catch basins		2/22	LN
6	Inspect Hudson River bank	Frozen near gauge	2/22	LN
7	Download transducer data		2/22	LN

COMMENTS

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year March 2021
Date of visit: 3/2/21
O&M Tech(s): Liam Keough

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS		3/2	LK
2	Download telemetry files in EPS		3/2	LK
3	~~Record pH and flow readings at POTW~~ N/A		3/2	LK
	Site Security			
1	Gates secured & locked		3/2	LK
2	Access roads		3/2	LK
3	Site utilities operational		3/2	LK
4	Inspect fire extinguishers and sign tag		3/2	LK
5	Inspect all fence lines for holes or breaks		3/2	LK
6	Inspect all buildings for security		3/2	LK
	Site Monitoring			
1	Inspect landfill cap		3/2	LK
2	Vegitative cover		3/2	LK
3	Cement company pond		3/2	LK
4	Inspect rip-rap		3/2	LK
5	Inspect ditches/swales and catch basins		3/2	LK
6	Inspect Hudson River bank		3/2	LK
7	Download transducer data		3/2	LK

COMMENTS

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 4/2021
Date of visit: 4/20/21
O&M Tech(s): JS Stargel, L. Nangle

Item No.	Action	Remarks & Observations	Date	Initials
		Discharge Monitoring		
1	Record totalizer flow readings in EPS		4/20/21	JS
2	Download telemetry files in EPS		4/20/21	JS
3	Record pH and flow readings at POTW	Sample collected later on	4/20/21	JS
		Site Security		
1	Gates secured & locked	Good	4/20/21	JS
2	Access roads	Good	4/20/21	JS
3	Site utilities operational	Sump A not operational - Trailer repair	4/20/21	JS
4	Inspect fire extinguishers and sign tag	Good	4/20/21	JS
5	Inspect all fence lines for holes or breaks	Good	4/20/21	JS
6	Inspect all buildings for security	Good	4/20/21	JS
		Site Monitoring		
1	Inspect landfill cap	Good	4/20/21	JS
2	Vegitative cover	Good	4/20/21	JS
3	Cement company pond	Good - High	4/20/21	JS
4	Inspect rip-rap	Good	4/20/21	JS
5	Inspect ditches/swales and catch basins	minor ditches/swales along road	4/20/21	JS
6	Inspect Hudson River bank	Good	4/20/21	JS
7	Download transducer data		4/20/21	JS

COMMENTS

JS Stargel

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 5/21
Date of visit: 5/3/21
O&M Tech(s): Garrett Crowe

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS		5/3/21	GC
2	Download telemetry files in EPS		5/3/21	GC
3	Record pH and flow readings at POTW	N/A → Sample collected last week	5/3/21	GC
	Site Security			
1	Gates secured & locked	Good	5/3/21	GC
2	Access roads	Good	5/3/21	GC
3	Site utilities operational	Good	5/3/21	GC
4	Inspect fire extinguishers and sign tag	Good	5/3/21	GC
5	Inspect all fence lines for holes or breaks	Good	5/3/21	GC
6	Inspect all buildings for security	Good	5/3/21	GC
	Site Monitoring			
1	Inspect landfill cap	Good	5/3/21	GC
2	Vegitative cover	Good	5/3/21	GC
3	Cement company pond	Good → still high	5/3/21	GC
4	Inspect rip-rap	Good	5/3/21	GC
5	Inspect ditches/swales and catch basins	Good	5/3/21	GC
6	Inspect Hudson River bank	Good	5/3/21	GC
7	Download transducer data		5/3/21	GC

COMMENTS

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 6/2021
Date of visit: 6/1/21
O&M Tech(s): J. Stangel

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS		6/1/21	JS
2	Download telemetry files in EPS		6/1/21	JS
3	Record pH and flow readings at POTW		6/1/21	
	Site Security			
1	Gates secured & locked	Good	6/1/21	JS
2	Access roads	Good	6/1/21	JS
3	Site utilities operational	Good	6/1/21	JS
4	Inspect fire extinguishers and sign tag	Good	6/1/21	JS
5	Inspect all fence lines for holes or breaks	Good	6/1/21	JS
6	Inspect all buildings for security	Good	6/1/21	JS
	Site Monitoring			
1	Inspect landfill cap	Good	6/1/21	JS
2	Vegitative cover	very Tall - call for removal	6/1/21	JS
3	Cement company pond	Low - Below Fence base	6/1/21	JS
4	Inspect rip-rap	Good	6/1/21	JS
5	Inspect ditches/swales and catch basins	ok - minor ditches/swales along road	6/1/21	JS
6	Inspect Hudson River bank	Good	6/1/21	JS
7	Download transducer data		6/1/21	JS

COMMENTS

J. Stangel

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year: July 2021
Date of visit: 7/8/21
O&M Tech(s): ~~Ross~~ Tomanelli

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS		7/8/21	RT
2	Download telemetry files in EPS		7/8/21	RT
3	Record pH and flow readings at POTW		7/8/21	RT
	Site Security			
1	Gates secured & locked		7/8/21	RT
2	Access roads		7/8/21	RT
3	Site utilities operational		7/8/21	RT
4	Inspect fire extinguishers and sign tag		7/8/21	RT
5	Inspect all fence lines for holes or breaks		7/8/21	RT
6	Inspect all buildings for security		7/8/21	RT
	Site Monitoring			
1	Inspect landfill cap		7/8/21	RT
2	Vegitative cover		7/8/21	RT
3	Cement company pond	Good condition, water at chainlink fence	7/8/21	RT
4	Inspect rip-rap	Good	7/8/21	RT
5	Inspect ditches/swales and catch basins	Good	7/8/21	RT
6	Inspect Hudson River bank	Beavers, vegetation high, holes	7/8/21	RT
7	Download transducer data		7/8/21	RT

COMMENTS

2. Slightly overgrown on fences + areound fences. (vegetative cover)

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

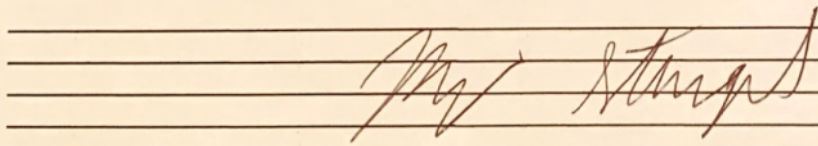
Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 8/2021
Date of visit: 8/3/21
O&M Tech(s): J. Stangel

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS		8/3/21	JS
2	Download telemetry files in EPS		8/3/21	JS
3	Record pH and flow readings at POTW		8/3/21	JS
	Site Security			
1	Gates secured & locked	Good	8/3/21	JS
2	Access roads	Good	8/3/21	JS
3	Site utilities operational	Good	8/3/21	JS
4	Inspect fire extinguishers and sign tag	Good	8/3/21	JS
5	Inspect all fence lines for holes or breaks	Good	8/3/21	JS
6	Inspect all buildings for security	Good	8/3/21	JS
	Site Monitoring			
1	Inspect landfill cap	Good	8/3/21	JS
2	Vegitative cover	Good	8/3/21	JS
3	Cement company pond	Good High	8/3/21	JS
4	Inspect rip-rap	Good	8/3/21	JS
5	Inspect ditches/swales and catch basins	Overgrown - minor swales/ditches along road	8/3/21	JS
6	Inspect Hudson River bank	Good	8/3/21	JS
7	Download transducer data		8/3/21	JS

COMMENTS



Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year September 2021
Date of visit: 9/9/21
O&M Tech(s): RT

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS		9/9/21	RT
2	Download telemetry files in EPS		9/9/21	RT
3	Record pH and flow readings at POTW	Not done	9/9/21	RT
	Site Security			
1	Gates secured & locked		9/9/21	RT
2	Access roads		9/9/21	RT
3	Site utilities operational		9/9/21	RT
4	Inspect fire extinguishers and sign tag		9/9/21	RT
5	Inspect all fence lines for holes or breaks		9/9/21	RT
6	Inspect all buildings for security		9/9/21	RT
	Site Monitoring			
1	Inspect landfill cap		9/9/21	RT
2	Vegitative cover		9/9/21	RT
3	Cement company pond	Very high water, partially flooded	9/9/21	RT
4	Inspect rip-rap		9/9/21	RT
5	Inspect ditches/swales and catch basins		9/9/21	RT
6	Inspect Hudson River bank		9/9/21	RT
7	Download transducer data	Not done	9/9/21	RT

COMMENTS

Very high water, ground largely saturated, long grass on hill

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 10/21
Date of visit: 10/8/21
O&M Tech(s): Gareth Lawrence

anteagroup

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS		10/8	GL
2	Download telemetry files in EPS		10/8	GL
3	Record pH and flow readings at POTW	N/A → Samples collected later in quarter	10/8	GL
	Site Security			
1	Gates secured & locked	Good	10/8	GL
2	Access roads	Good	10/8	GL
3	Site utilities operational	Good	10/8	GL
4	Inspect fire extinguishers and sign tag	Good	10/8	GL
5	Inspect all fence lines for holes or breaks	Good	10/8	GL
6	Inspect all buildings for security	Good	10/8	GL
	Site Monitoring			
1	Inspect landfill cap	Good	10/8	GL
2	Vegitative cover	Good	10/8	GL
3	Cement company pond	Pond High	10/8	GL
4	Inspect rip-rap	Good	10/8	GL
5	Inspect ditches/swales and catch basins	Good	10/8	GL
6	Inspect Hudson River bank	Good	10/8	GL
7	Download transducer data		10/8	GL

COMMENTS

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year: 11/2021
Date of visit: 11/12/21
O&M Tech(s): J. Stingl

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS		11/12/21	JS
2	Download telemetry files in EPS		11/12/21	JS
3	Record pH and flow readings at POTW		11/12/21	JS
	Site Security			
1	Gates secured & locked	Good	11/12/21	JS
2	Access roads	Good	11/12/21	JS
3	Site utilities operational	Good	11/12/21	JS
4	Inspect fire extinguishers and sign tag	Good	11/12/21	JS
5	Inspect all fence lines for holes or breaks	Good	11/12/21	JS
6	Inspect all buildings for security	Good	11/12/21	JS
	Site Monitoring			
1	Inspect landfill cap	very small swale - Good	11/12/21	JS
2	Vegitative cover	Good	11/12/21	JS
3	Cement company pond	Low - Below fence base	11/12/21	JS
4	Inspect rip-rap	Good	11/12/21	JS
5	Inspect ditches/swales and catch basins	Minor ditches at swales along road - Good	11/12/21	JS
6	Inspect Hudson River bank	Good - minor erosion (drainage, groundhogs, eastern very)	11/12/21	JS
7	Download transducer data		11/12/21	JS

COMMENTS

J. Stingl

Initial Issue Date: 11/3/2016
Revision Date: 2/14/2018

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.
Site Location: 89 Lower Warren Street, Queensbury, NY

ROUTINE MONTHLY ACTIVITIES

Month/year 12/2021
Date of visit: 12/14/21
O&M Tech(s): J. Stanzl

Item No.	Action	Remarks & Observations	Date	Initials
	Discharge Monitoring			
1	Record totalizer flow readings in EPS		12/14/21	JS
2	Download telemetry files in EPS		12/14/21	JS
3	Record pH and flow readings at POTW		12/14/21	JS
	Site Security			
1	Gates secured & locked	Good	12/14/21	JS
2	Access roads	Good	12/14/21	JS
3	Site utilities operational	Good	12/14/21	JS
4	Inspect fire extinguishers and sign tag	Good	12/14/21	JS
5	Inspect all fence lines for holes or breaks	Good	12/14/21	JS
6	Inspect all buildings for security	Good	12/14/21	JS
	Site Monitoring			
1	Inspect landfill cap	Small swale in center of RCRA - Good	12/14/21	JS
2	Vegitative cover	Good	12/14/21	JS
3	Cement company pond	Good - High	12/14/21	JS
4	Inspect rip-rap	Good	12/14/21	JS
5	Inspect ditches/swales and catch basins	Minor swales/ditches along road	12/14/21	JS
6	Inspect Hudson River bank	Minor erosion-drainage, groundhog, eaten veg) Good	12/14/21	JS
7	Download transducer data		12/14/21	JS

COMMENTS

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.

Site Location: 89 Lower Warren Street, Queensbury, NY

Routine Quarterly Activities

Quarter/year: 1Q21

Date of visit: 2/22/21

O&M Tech(s): Garrett Crowe & John Stangel

Item No.	Action	Date	Initials
	Discharge Monitoring		
1	Collect quarterly discharge samples from POTW	2/22	GC
2	Submit samples to laboratory for analysis	2/22	GC
	Site Security		
1	Inspect access roads for damage	2/22	GC
2	Inspect entire fence line and repair if necessary	2/22	GC
3	Inspect all locks and gates in upper and lower area	2/22	GC
4	Inspect all locks and gates across street	2/22	GC
5	Inspect old ~~remediation building~~ N/A and fence line	2/22	GC
6	Inspect offsite wells and for proper security	2/22	GC
	Groundwater Extraction System		
1	Electrical connection inspection in EPS and generator station	2/22	GC
2	Inspect discharge piping in EPS	2/22	GC
3	Inspect vegetation for uncovered electrical lines	2/22	GC
4	Inspect all vaults for leaks or standing water	2/22	GC
5	Quarterly PSD Inspections (Separate Form) N/A	2/22	GC
	Site Monitoring		
1	Inspect outfall structures along Hudson River	2/22	GC
2	Inspect all roadways	2/22	GC
3	Inspect all ditches/swales, catch basins and rip-rap	2/22	GC

COMMENTS

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.

Site Location: 89 Lower Warren Street, Queensbury, NY

Routine Quarterly Activities

Quarter/year: 2Q21

Date of visit: 4/29/21

O&M Tech(s): JStangel, L. Nanzik

Item No.	Action	Date	Initials
	Discharge Monitoring		
1	Collect quarterly discharge samples from POTW	4/29/21	JS
2	Submit samples to laboratory for analysis	4/29/21	JS
	Site Security		
1	Inspect access roads for damage	4/29/21	JS
2	Inspect entire fence line and repair if necessary	4/29/21	JS
3	Inspect all locks and gates in upper and lower area	4/29/21	JS
4	Inspect all locks and gates across street	4/29/21	JS
5	Inspect old remediation building and fence line	4/29/21	JS
6	Inspect offsite wells and for proper security	4/29/21	JS
	Groundwater Extraction System		
1	Electrical connection inspection in EPS and generator station	4/29/21	JS
2	Inspect discharge piping in EPS	4/29/21	JS
3	Inspect vegetation for uncovered electrical lines	4/29/21	JS
4	Inspect all vaults for leaks or standing water	4/29/21	JS
5	Quarterly PSD Inspections (Separate Form)	4/29/21	JS
	Site Monitoring		
1	Inspect outfall structures along Hudson River	4/29/21	JS
2	Inspect all roadways	4/29/21	JS
3	Inspect all ditches/swales, catch basins and rip-rap	4/29/21	JS

COMMENTS

John Stangel

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.

Site Location: 89 Lower Warren Street, Queensbury, NY

Routine Quarterly Activities

Quarter/year: 3Q 2021

Date of visit: July 29, 2021

O&M Tech(s): RT

Item No.	Action	Date	Initials
	Discharge Monitoring		
1	Collect quarterly discharge samples from POTW	7/29/21	RT
2	Submit samples to laboratory for analysis	7/29/21	RT
	Site Security		
1	Inspect access roads for damage	7/29/21	RT
2	Inspect entire fence line and repair if necessary	7/29/21	RT
3	Inspect all locks and gates in upper and lower area	7/29/21	RT
4	Inspect all locks and gates across street	7/29/21	RT
5	Inspect old remediation building and fence line	7/29/21	RT
6	Inspect offsite wells and for proper security	7/29/21	RT
	Groundwater Extraction System		
1	Electrical connection inspection in EPS and generator station	7/29/21	RT
2	Inspect discharge piping in EPS	7/29/21	RT
3	Inspect vegetation for uncovered electrical lines	7/29/21	RT
4	Inspect all vaults for leaks or standing water	7/29/21	RT
5	Quarterly PSD Inspections (Separate Form) GC	7/29/21	RT
	Site Monitoring		
1	Inspect outfall structures along Hudson River	7/29/21	RT
2	Inspect all roadways	7/29/21	RT
3	Inspect all ditches/swales, catch basins and rip-rap	7/29/21	RT

COMMENTS

FORMER HERCULES/CIBA-GEIGY O&M COMPLETION LOG

Client: Ashland, Inc.

Site Location: 89 Lower Warren Street, Queensbury, NY

Routine Quarterly Activities

Quarter/year: 4Q21

Date of visit: 12/14/21

O&M Tech(s): J. Stangel

Item No.	Action	Date	Initials
	Discharge Monitoring		
1	Collect quarterly discharge samples from POTW	12/14/21	JS
2	Submit samples to laboratory for analysis	12/14/21	JS
	Site Security		
1	Inspect access roads for damage	12/14/21	JS
2	Inspect entire fence line and repair if necessary	12/14/21	JS
3	Inspect all locks and gates in upper and lower area	12/14/21	JS
4	Inspect all locks and gates across street	12/14/21	JS
5	Inspect old remediation building and fence line	12/14/21	JS
6	Inspect offsite wells and for proper security	12/14/21	JS
	Groundwater Extraction System		
1	Electrical connection inspection in EPS and generator station	12/14/21	JS
2	Inspect discharge piping in EPS	12/14/21	JS
3	Inspect vegetation for uncovered electrical lines	12/14/21	JS
4	Inspect all vaults for leaks or standing water	12/14/21	JS
5	Quarterly PSD Inspections (Separate Form)	12/14/21	JS
	Site Monitoring		
1	Inspect outfall structures along Hudson River	12/14/21	JS
2	Inspect all roadways	12/14/21	JS
3	Inspect all ditches/swales, catch basins and rip-rap	12/14/21	JS

COMMENTS