EXHIBIT N

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NPDES PERMIT RENEWAL (REV. 1)

FOR

GREENVILLE MUNICIPAL WATER AUTHORITY
GREENVILLE WATER TREATMENT PLANT

BOROUGH OF GREENVILLE
MERCER COUNTY, PENNSYLVANIA

Prepared by:

ENTECH ENGINEERING, INC.
400 Industry Drive
Suite 200
Pittsburgh, PA 15275
800-825-1372

Entech Project No. 4631.012

May 2022

GREENVILLE MUNICIPAL WATER AUTHORITY
GREENVILLE WATER TREATMENT PLANT

NPDES PERMIT RENEWAL

TABLE OF CONTENTS

Tab	Contents
1	General Information Form
2	Checklist and Permit Application
3	Act 14 Notifications
4	Site Plan and Topographic Map
5	Process Flow Diagram
6	Process Narrative
7	Compiled Effluent and Process Data
8	Effluent and Process Water Analyses
9	Dewatered Sludge Analysis
10	PPC Plan

1 General Information Form

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This form is used by the Department of Environmental Protection (DEP) to inform our programs regarding what other DEP permits or authorizations may be needed for the proposed project or activity. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the DEP.

Related ID#s (If Known)				DEP USE ONLY
Client ID#	25179	APS ID#		Date Received & General Notes
Site ID#	262460	Auth ID#		
Facility ID#	281183			

CLIENT INFORMATION

DEP Client ID#	Client Type / Code	Dun & Bradstreet ID#
25179	AUTH	

Legal Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Is the EIN a SSN?
Greenville Municipal Water Authority		☐ Yes ☐ NO

State of Incorporation or Registration of Fictious Name
Pennsylvania

☒ Corporation ☐ LLC ☐ Partnership ☐ LLP ☐ LP
☐ Sole Proprietorship ☐ Association/Organization
☐ Estate/Trust ☐ Other

Individual Last Name	First Name	MI	Suffix
Paul	Carol		
Additional Individual Last Name	**First Name**	**MI**	**Suffix**

Mailing Address Line 1	Mailing Address Line 2
44 Clinton Street	

Address Last Line – City	State	ZIP+4	Country
Greenville	PA	16125	USA

Client Contact Last Name	First Name	MI	Suffix
Paul	Carol		

Client Contact Title	Phone	Ext	Cell Phone
Authority Manager	724-588-4340		

Email Address	FAX
carol.paul@gmwa.info	724-588-7868

SITE INFORMATION

DEP Site ID#	Site Name
262460	Greenville Water Treatment Plant

EPA ID# **Estimated Number of Employees to be Present at Site** 5-6

Description of Site
A 2.0 MGD surface water filtration plant that serves the greater Greenville Borough area with potable water.

Tax Parcel ID(s): 55 516 088 001

County Name(s)	Municipality(ies)	City	Boro	Twp	State
Mercer	Greenville	☐	☒	☐	PA
		☐	☐	☐	
		☐	☐	☐	
		☐	☐	☐	

Site Location Line 1	Site Location Line 2
44 Clinton St	

Site Location Last Line – City	State	ZIP+4
Greenville	PA	16125

Detailed Written Directions to Site
From I-79N, exit onto SR358 W towards Greenville, take a left on S Water Street and the WTP will be on your right. Note that the WTP site is located on S Water Street adjacent to the Municipal offices on Clinton Street, but both parcels are listed as 44 Clinton Street.

Site Contact Last Name	First Name	MI	Suffix
Paul	Carol		

Site Contact Title	Site Contact Firm
Authority Manager	Greenville Municipal Water Authority

Mailing Address Line 1	Mailing Address Line 2
44 Clinton Street	

Mailing Address Last Line – City	State	ZIP+4
Greenville	PA	16125

Phone	Ext	FAX	Email Address
724-588-4340		724-588-7868	carol.paul@gmwa.info

NAICS Codes (Two- & Three-Digit Codes – List All That Apply): 221 310 — **6-Digit Code** (Optional)

Client to Site Relationship: OWNOP

FACILITY INFORMATION

Modification of Existing Facility	Yes	No
1. Will this project modify an existing facility, system, or activity?	☐	☒
2. Will this project involve an addition to an existing facility, system, or activity?	☐	☒

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

	Facility Type	DEP Fac ID#		Facility Type	DEP Fac ID#
☐	Air Emission Plant		☐	Industrial Minerals Mining Operation	
☐	Beneficial Use (water)		☐	Laboratory Location	
☐	Blasting Operation		☐	Land Recycling Cleanup Location	
☐	Captive Hazardous Waste Operation		☐	Mine Drainage Treatment / Land Recycling Project Location	
☐	Coal Ash Beneficial Use Operation		☐	Municipal Waste Operation	
☐	Coal Mining Operation		☐	Oil & Gas Encroachment Location	
☐	Coal Pillar Location		☐	Oil & Gas Location	
☐	Commercial Hazardous Waste Operation		☐	Oil & Gas Water Poll Control Facility	
☐	Dam Location		☒	Public Water Supply System	
☐	Deep Mine Safety Operation -Anthracite		☐	Radiation Facility	
☐	Deep Mine Safety Operation -Bituminous		☐	Residual Waste Operation	
☐	Deep Mine Safety Operation -Ind Minerals		☐	Storage Tank Location	
☐	Encroachment Location (water, wetland)		☐	Water Pollution Control Facility	
☐	Erosion & Sediment Control Facility		☐	Water Resource	
☐	Explosive Storage Location		☐	Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
WTP Centroid	41	24	8	-80	23	26

Horizontal Accuracy Measure: Feet --or-- Meters

Horizontal Reference Datum Code
- ☐ North American Datum of 1927
- ☐ North American Datum of 1983
- ☐ World Geodetic System of 1984

Horizontal Collection Method Code

Reference Point Code

Altitude: Feet --or-- Meters

Altitude Datum Name
- ☐ The National Geodetic Vertical Datum of 1929
- ☐ The North American Vertical Datum of 1988 (NAVD88)

Altitude (Vertical) Location Datum Collection Method Code

Geometric Type Code

Data Collection Date

Source Map Scale Number: Inch(es) = Feet
--or-- Centimeter(s) = Meters

PROJECT INFORMATION

Project Name			
Greenville WTP NPDES Permit Renewal			
Project Description			
NPDES Permit Renewal - PA0221970			
Project Consultant Last Name	**First Name**	**MI**	**Suffix**
Widdersheim	Mark	R	
Project Consultant Title	**Consulting Firm**		
Senior Project Engineer	Entech Engineering		
Mailing Address Line 1	**Mailing Address Line 2**		
400 Industry Drive	Suite 200		
Address Last Line – City	**State**	**ZIP+4**	
Pittsburgh	PA	15275	

Phone	**Ext**	**FAX**	**Email Address**
800-825-1372	1507	412-264-2850	mwiddersheim@entecheng.com

Time Schedules	**Project Milestone (Optional)**
May 4, 2022	Submittal of Renewal Package to PADEP 180 Days in Advance of Expiration

1. Is the project located in or within a 0.5-mile radius of an Environmental Justice community as defined by DEP? ☒ Yes ☐ No

To determine if the project is located in or within a 0.5-mile radius of an environmental justice community, please use the online Environmental Justice Areas Viewer.

2. Have you informed the surrounding community prior to submitting the application to the Department? ☒ Yes ☐ No

Method of notification: Act 14 Notification Letters

3. Have you addressed community concerns that were identified? ☐ Yes ☐ No ☒ N/A

If no, please briefly describe the community concerns that have been expressed and not addressed.

4. Is your project funded by state or federal grants? ☐ Yes ☒ No

Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

Aspect of Project Related to Grant

Grant Source: _____

Grant Contact Person: _____

Grant Expiration Date: _____

5. Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions) ☐ Yes ☒ No

Note: If "No" to Question 5, the application is not subject to the Land Use Policy.
If "Yes" to Question 5, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants should submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1.	**Is there an adopted county or multi-county comprehensive plan?**	☒	Yes	☐	No
2.	**Is there a county stormwater management plan?**	☒	Yes	☐	No
3.	**Is there an adopted municipal or multi-municipal comprehensive plan?**	☒	Yes	☐	No
4.	**Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance?** **Note:** If the Applicant answers "No" to either Questions 1, 3 or 4, the provisions of the PA MPC are not applicable and the Applicant does not need to respond to questions 5 and 6 below. If the Applicant answers "Yes" to questions 1, 3 and 4, the Applicant should respond to questions 5 and 6 below.	☒	Yes	☐	No
5.	**Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval?** If zoning approval has been received, attach documentation.	☒	Yes	☐	No
6.	**Have you attached Municipal and County Land Use Letters for the project?**	☐	Yes	☒	No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 utilizing the Project Review Form.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	**Is this a coal mining project?** If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	☐	Yes	☒	No
1.1	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?**	☐	Yes	☐	No
1.2	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?**	☐	Yes	☐	No
1.3	**Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?**	☐	Yes	☐	No
1.4	**For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
1.5	**Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
1.6	**Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?**	☐	Yes	☐	No
2.0	**Is this a non-coal (industrial minerals) mining project?** If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	☐	Yes	☒	No
2.1	**Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?**	☐	Yes	☐	No
2.2	**Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?**	☐	Yes	☐	No

2.3	**Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?**	☐	Yes	☐	No
2.4	**For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
2.5	**Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
3.0	**Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well?** If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	☐	Yes	☒	No
3.1	**Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?**	☐	Yes	☐	No
3.2	**Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?** If "Yes", discuss in *Project Description*.	☐	Yes	☐	No
3.3	**Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☐	No
4.0	**Will the project involve a construction activity that results in earth disturbance?** If "Yes", specify the total disturbed acreage.	☐	Yes	☒	No
	4.0.1 Total Disturbed Acreage				
	4.0.2 Will the project discharge or drain to a special protection water (EV or HQ) or an EV wetland?	☐	Yes	☐	No
	4.0.3 Will the project involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively?	☐	Yes	☐	No
5.0	**Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility?** If "Yes", respond to 5.1-5.7. If "No", skip to Question 6.0.	☐	Yes	☒	No
5.1	**Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?**	☐	Yes	☐	No
5.2	**Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?**	☐	Yes	☐	No
5.3	**Floodplain Projects by the Commonwealth, a Political Subdivision of the Commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?**	☐	Yes	☐	No
5.4	**Is your project an interstate transmission natural gas pipeline?**	☐	Yes	☐	No

5.5	**Does your project consist of linear construction activities which result in earth disturbance in two or more DEP regions AND three or more counties?**	☐	Yes	☐	No
5.6	**Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
5.7	**Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
6.0	**Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?**	☐	Yes	☒	No
6.1	**Will the project involve discharge of industrial waste stormwater or wastewater from an industrial activity or sewage to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?**	☐	Yes	☐	No
7.0	**Will the project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☒	No
8.0	**Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations?** If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the *Project Description*, where applicable. **8.0.1 Estimated Proposed Flow (gal/day)**	☐	Yes	☒	No
9.0	**Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?**	☐	Yes	☒	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	☐	Yes	☐	No
10.0	**Is this project for the beneficial use of biosolids for land application within Pennsylvania?** If "Yes" indicate how much (i.e. gallons or dry tons per year). **10.0.1 Gallons Per Year (residential septage)** _____ **10.0.2 Dry Tons Per Year (biosolids)**	☐	Yes	☒	No
11.0	**Does the project involve construction, modification or removal of a dam?** If "Yes", identify the dam. **11.0.1 Dam Name**	☐	Yes	☒	No
12.0	**Will the project interfere with the flow from, or otherwise impact, a dam?** If "Yes", identify the dam. **12.0.1 Dam Name**	☐	Yes	☒	No
13.0	**Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?**	☐	Yes	☒	No
	13.0.1 If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1?	☐	Yes	☐	No
	13.0.2 If the answer to 13.0.1 is "No", identify each type of emission followed by the estimated amount of that emission. **Enter all types & amounts of emissions; separate each set with semicolons.**				

14.0	**Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year?** If "Yes", check all proposed sub-facilities.	☐	Yes	☒	No
	14.0.1 Number of Persons Served _____				
	14.0.2 Number of Employee/Guests _____				
	14.0.3 Number of Connections _____				
	14.0.4 Sub-Fac: Distribution System	☐	Yes	☐	No
	14.0.5 Sub-Fac: Water Treatment Plant	☐	Yes	☐	No
	14.0.6 Sub-Fac: Source	☐	Yes	☐	No
	14.0.7 Sub-Fac: Pump Station	☐	Yes	☐	No
	14.0.8 Sub Fac: Transmission Main	☐	Yes	☐	No
	14.0.9 Sub-Fac: Storage Facility	☐	Yes	☐	No
15.0	**Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?**	☐	Yes	☒	No
16.0	**Is your project to be served by an existing public water supply?** If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project.	☐	Yes	☒	No
	16.0.1 Supplier's Name _____				
	16.0.2 Letter of Approval from Supplier is Attached	☐	Yes	☐	No
17.0	**Will this project be served by on-lot drinking water wells?**	☐	Yes	☒	No
18.0	**Will this project involve a new or increased drinking water withdrawal from a river, stream, spring, lake, well or other water bod(ies)?** If "Yes", reference Safe Drinking Water Program.	☐	Yes	☒	No
	18.0.1 Source Name				
19.0	**Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste?** If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed.	☐	Yes	☒	No
	19.0.1 Type & Amount				
20.0	**Will your project involve the removal of coal, minerals, contaminated media, or solid waste as part of any earth disturbance activities?**	☐	Yes	☒	No
21.0	**Does your project involve installation of a field constructed underground storage tank?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	21.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
22.0	**Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	22.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
23.0	**Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	23.0.1 Enter all substances & capacity of each; separate each set with semicolons.				

24.0	**Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **24.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No

NOTE: If the project includes the installation of a regulated storage tank system, including diesel emergency generator systems, the project may require the use of a Department Certified Tank Handler. For a full list of regulated storage tanks and substances, please go to www.dep.pa.gov search term storage tanks

25.0	**Will the intended activity involve the use of a radiation source?**	☐	Yes	☒	No

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

For applicants supplying an EIN number: I am applying for a permit or authorization from the Pennsylvania Department of Environmental Protection (DEP). As part of this application, I will provide DEP with an accurate EIN number for the applicant entity. By filing this application with DEP, I hereby authorize DEP to confirm the accuracy of the EIN number provided with the Pennsylvania Department of Revenue. As applicant, I further consent to the Department of Revenue discussing the same with DEP prior to issuance of the Commonwealth permit or authorization.

Type or Print Name Mark R. Widdersheim, PE

Signature	Title	Date
Mark R. Widdersheim	Senior Project Engineer	12/29/2021

2 Checklist and Permit Application

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
APPLICATION FOR INDIVIDUAL PERMIT TO DISCHARGE
INDUSTRIAL WASTEWATER

APPLICANT'S ✓ CHECKLIST

Applicant Name | **Greenville Municipal Water Authority**

Check the following list to make sure you have included all the required information. Place a checkmark in the box provided for all items completed and/or provided.

ENCLOSE THIS CHECKLIST WITH YOUR COMPLETED APPLICATION. FAILURE TO SUBMIT ALL REQUIRED INFORMATION MAY RESULT IN DENIAL OF THE APPLICATION.

	REQUIREMENTS	Check ✓ If Included	DEP Use Only
1.	Application Fee (new applications only). Amount Enclosed $ _____	☐	☐
2.	One signed original and 2 copies of the *completed* application with all applicable Analytical Results Tables.	OnBase Upload	☐
3.	One additional copy of application for ECHD (if located in Erie County).	☐	☐
4.	One copy of application mailed to Delaware River Basin Commission (if discharge is in the Delaware River Basin)	☐	☐
5.	One copy of the General Information Form (0210-PM-PIO0001).	☒	☐
6.	Proper evidence of Act 14 municipal and county notifications.	☒	☐
7.	Evidence of newspaper publication for 4 consecutive weeks (new and modified discharges only)	☐	☐
8.	Copy of topographic map treatment facilities, intake structures, and outfalls.	☒	☐
9.	Site plan identifying significant site features.	☒	☐
10.	Line drawing / process flow diagram illustrating the flow of water and wastewater through the facility(ies), with a water balance.	☒	☐
11.	Chemical Additives Notification Form(s) (if applicable).	☐	☐
12.	Whole Effluent Toxicity Test Reports / WET Analysis Spreadsheet (if applicable).	☐	☐
13.	Documentation supporting variance requests (if applicable)	☐	☐
14.	Preparedness, Prevention and Contingency (PPC) Plan (optional)	☒	☐
15.	Module 1 – Stormwater, and attachments (if applicable).	☐	☐
16.	Module 2 – Groundwater Remediation, and attachments (if applicable).	☐	☐
17.	Module 3 – Aquatic Animal Production Facilities, and attachments (if applicable)	☐	☐
18.	Module 4 – Anti-Degradation, and attachments (if applicable)	☐	☐
19.	Module 5 – Cooling Water Intake Structures, and attachments (if applicable)	☐	☐
20.	Optional site-specific data: Dewatered Sludge Analysis	☒	☐

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) APPLICATION FOR INDIVIDUAL PERMIT TO DISCHARGE INDUSTRIAL WASTEWATER

Before completing this form, please read the instructions (3800-PM-BCW0008a). FAILURE TO FOLLOW THE INSTRUCTIONS MAY RESULT IN DENIAL OF THE APPLICATION.

Related ID#s (If Known)				DEP USE ONLY
Client ID#	25179	**APS ID#**		Date Received:
Site ID#	262460	**Facility ID#**		Permit No.:
				Auth ID: PDG?

GENERAL INFORMATION

Applicant/Operator Name	**Greenville Water Authority**	**25 Pa. Code § 92a.26 Fee Category** *(See instructions for fees)*

☐ New Permit (Anticipated Discharge Date: _____)
☒ Permit Renewal: NPDES No. PA **0221970**
Permit Expiration Date: October 31, 2022
Permit Renewal Application Due Date: May 4, 2022
WQM Permit No(s).: 4396408
WQM Permit Issuance Date(s): _____
Currently Using eDMR System? ☒ Yes ☐ No Start Date: _____

☒ Minor facility without ELG
☐ Minor facility with ELG
☐ Major facility < 250 MGD
☐ Major facility ≥ 250 MGD
☐ CAAP

Is applicant a "small business"?
☐ Yes ☒ No

Is there on-site sewage treatment facility? ☐ Yes ☒ No
If Yes, is the facility operated by operator(s) certified in compliance with the Operators Certification Act? ☐ Yes ☐ No

Describe the nature of the business or operations resulting in discharge(s): **Water Treatment Plant**

SIC Code	Primary?	Description	NAICS Code	Primary?	Description
4941	Yes	Water Treatment and Distribution	221310	Yes	Water Treatment and Distribution

OTHER ENVIRONMENTAL PERMITS

Type of Permit	Agency That Issued Permit	Date Issued
Public Water Supply	PADEP	7/21/2015

DISCHARGE INFORMATION

1. Attach a site plan, a line drawing with a water balance, and topographic map(s) that present the information requested in the instructions. Attached: ☒ Yes ☐ No

2. Total Hardness Upstream of Process Wastewater Outfall (mg/L): _____ Basis: _____

3. List all discharge points (outfalls) and internal monitoring points (IMPs). If numbers were previously assigned in a permit, use those numbers. Order sequentially and use additional pages as necessary.

Outfall / IMP No.	LATITUDE			LONGITUDE			RECEIVING WATERS			
	Deg	Min	Sec	Deg	Min	Sec	Name of Receiving Waters	Ch. 93 Class.	Impaired?	TMDL?
001	41	24	08	80	23	28	Shenango River	WWF	☐	☐
									☐	☐
									☐	☐
									☐	☐
									☐	☐
									☐	☐
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4. List all outfalls and IMPs in the same order as in question 2, above, and provide the requested information. Attach additional pages as necessary. See instructions.

Outfall / IMP No.	DISCHARGE CHARACTERIZATION							Design Flow (MGD)	Average Flow During Production / Operation (MGD)	Maximum Flow During Production / Operation (MGD)
	Process	Non-Process	Stormwater	Sewage	Groundwater	AAPF	Combined			
001	☒	☐	☐	☐	☐	☐	☐	0.12	0.10	0.48
	☐	☐	☐	☐	☐	☐	☐			
	☐	☐	☐	☐	☐	☐	☐			
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	☐	☐	☐	☐	☐	☐	☐			
	☐	☐	☐	☐	☐	☐	☐			

5. List all outfalls and IMPs in the same order as in questions 2 and 3, above, and provide the requested information. Attach additional pages as necessary. See instructions.

Outfall / IMP No.	Wastewater or Stormwater Description	Discharge Type	Frequency		Batch Discharges		
			Hours / Day	Days / Week	No. Discharge Cycles/Day	Length of Discharge Cycle (Hrs)	Batch Discharge Rate (MGD)
001	Water Treatment Plant Sludge Storage/Processing Operation	Process	16	7			

TREATMENT FACILITY INFORMATION

Complete this sheet for each existing and proposed industrial waste, sewage and/or stormwater treatment facility (one sheet per facility).

Treatment Facility Name: Greenville Borough WTP	Effluent Discharged To Outfall / IMP No.: 001

1. Provide a narrative description of the wastewater treatment process. Attach a line drawing or process flow diagram to the application.

   See Tab 5 - Process Flow Diagram. Wastewater sources include clarifier blowdown, filter backwash, and belt filter press return.

2. List each treatment unit at the facility in sequential order of treatment.

Treatment Unit Description	Method for Handling and Disposal of Solid or Liquid Residue Resulting from Treatment
Flow Equalization	Gravity Thickening
Gravity Thickening	Belt Filtration
Belt Filtration	Solids to Landfill
Discharge to Surface Water	Liquids to Outfall 001

3. Describe any proposed upgrades to this treatment facility within the next five years.

4. Identify all chemicals that have been used for wastewater treatment over the past two years.

Chemical Name	Purpose	Max Usage Rate	Units	Acrylamide?
AS 1430PW	Flocculant	10	GPD	☐
				☐
				☐
				☐
				☐
				☐
				☐

5. List any additional proposed wastewater treatment chemicals anticipated in the next five years.

Chemical Name	Purpose	Max Usage Rate	Units	Acrylamide?
				☐
				☐
				☐
				☐

CHEMICAL ADDITIVES

1. Identify all chemical additives that have been introduced to any waste stream over the past two years.

Chemical Additive Name	Outfall / IMP No.	Purpose	Usage Frequency	Max Usage Rate	Units
Chlorine (Liquified Gas)	001	Disinfectant	Daily	62	PPD
Sodium Hydroxide	001	pH Adjustment	Daily	956	PPD
Superfloc N-1986	001	Flocculant	Daily	0.3	PPD
Disodium Phosphate Anhydrous (Aquamag)	001	Phosphate	Daily	2	GPD
Hydrofluorsilic Acid	001	Promote Dental Health	Daily	70	PPD
Liquid Ammonium Sulfate	001	Monochloramine Residual Formation	Daily	37	PPD

2. List all chemical additives that the applicant is requesting approval to use upon issuance of the permit by DEP. Identify the point of introduction on a line or process diagram.

Chemical Additive Name	Outfall / IMP No.	Purpose	Proposed Usage Frequency	Proposed Max Usage Rate	Units

3. List all chemical additives in the same order as question 2, above, and provide the requested information. For chemical additives that are not on DEP's Approved List, submit New Chemical Additive Request Form(s) to DEP's Central Office. For chemical additives that are on DEP's Approved List but a Chemical Additives Notification Form was not previously submitted, attach a Chemical Additives Notification Form to the application.

Chemical Additive Name	On Approved List?	Notification Form Attached?	Notification Form Previously Submitted?	Notification Form Submission Date	Analytical Method
	☐	☐	☐		
	☐	☐	☐		
	☐	☐	☐		
	☐	☐	☐		
	☐	☐	☐		
	☐	☐	☐		

PRODUCTION DATA FOR EFFLUENT LIMITATION GUIDELINES (ELGs)

Complete this section for each production line with an applicable ELG. See instructions and use additional sheets as necessary.

1. Production line and process description: _____
2. Applicable ELG: 40 CFR: Subpart:
3. Is this production considered a new source? ☐ Yes ☐ No
4. Outfall / IMP No. receiving wastewater: _____
5. Units of production measurement for ELG: _____
6. Design production capacity: _____
7. Complete the table below for the five last years of production. Report production data using the same units of measurement as reported in question 5.

Parameter	Production Years				
	20	20	20	20	20
Total Annual Production					
Max Monthly Production					
Month of Max Production					
Avg Annual Production					
Avg Production Hours/Day					
Avg Production Days/Month					
Avg Annual Water Usage (MGD)					
Avg Annual Wastewater Flow (MGD)					

8. Average annual production over the past five years: _____ Units: _____
9. Anticipated average annual production for the next five years: _____ Units: _____
10. Explain the basis for the anticipated average annual production for the next five years:

11. Attach any pertinent information from the applicable ELG in 40 CFR that would allow DEP to appropriately determine technology-based effluent limitations.

ANTI-DEGRADATION

If the applicant is proposing a new or increased discharge to High Quality (HQ) or Exceptional Value (EV) waters, Module 4 (Anti Degradation Module) must be attached to the application. In addition, for HQ waters only, if the analysis concludes that the new or increased discharge will produce a measurable change in water quality, a social or economic justification (SEJ) must be attached if the applicant desires approval for the discharge.

1. Is the Anti-Degradation Module (Module 4) attached to the application? ☐ Yes ☒ No
2. Is a social or economic justification (SEJ) (HQ waters only) attached to the application? ☐ Yes ☒ No

VARIANCES

If the applicant is requesting a variance authorized under federal regulations at 40 CFR 122.21(m), complete the section below and attach to this application documentation necessary under federal regulations to support the variance request.

1. Description of variance requested: _____
2. Federal regulation authorizing the variance: _____
3. Supporting documentation attached to the application? ☐ Yes ☐ No

LABORATORY INFORMATION

Did an off-site laboratory perform any of the analyses required by this application? ☒ Yes ☐ No
If Yes, provide the information below.

Name	**Fairway Laboratories, Inc.**	Analyses Performed:
Address	**2019 Ninth Avenue, Altoona, PA 16603**	Group 1 and 2 Pollutants
Phone	(**814**) **946-4306**	
Name	**Diane Kisner - Project Manger ; Michael P. Tyler - Laboratory Director**	Analyses Performed:
Address		
Phone	( )	

COMPLIANCE HISTORY REVIEW

Is the facility owner or operator in violation of any DEP regulation, permit, order or schedule of compliance at this or any other facility?
☐ Yes ☒ No

If Yes, list each permit, order or schedule of compliance and provide compliance status. Use additional sheets as necessary.

Permit Program:		Permit No.:	
Permit Program:		Permit No.:	
Permit Program:		Permit No.:	

Brief Description of Non-Compliance:

Steps Taken to Achieve Compliance	Date(s) Compliance Achieved

Current Compliance Status: ☐ In Compliance ☐ In Non-Compliance

POLLUTANT IDENTIFICATION AND ANALYSIS

1. Summary of Required Analyses (see instructions):

Outfall / IMP No.	Pollutant Groups which must be sampled for and analyzed							Other Pollutants Analyzed
	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	
001	☒	☒	☐	☐	☐	☐	☐	
	☐	☐	☐	☐	☐	☐	☐	
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2. Is screening for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) required? ☐ Yes ☒ No

Method used:	Describe results:

3. Other Potentially Toxic Pollutants Known or Expected to be Present in the Discharge.

a. GC/MS "Five Peaks" Pollutants (see instructions).

Outfall / IMP No.	Group Number (3 - 6)	Chemical or Compound Name	Quantitation Limit (µg/L)	Avg Effluent Concentration (µg/L)	Max Effluent Concentration (µg/L)	No. Samples Positive / No. Analyzed
						/
						/
						/
						/
						/

b. Other Potential Pollutants.

Outfall / IMP No.	Chemical Substance or Compound Name	Reason/Suspected Reason for Presence in Discharge	Avg Concentration (µg/L)	Indicate if Presence is Known (K) or Suspected (S)

☐ If additional peaks were not available for one or more groups with the method used check here and attach an explanation of why the method was selected.

4. Additional Analysis Results Tables may be attached to provide any of the optional site-specific information discussed in Appendix A of the instructions.
Optional site-specific data is attached to this application? ☐ Yes ☒ No

WHOLE EFFLUENT TOXICITY

1. Summarize the results of all Whole Effluent Toxicity (WET) tests completed in the last five years (or attach a separate sheet with these results). If required by the NPDES permit, attach a copy of DEP's WET Analysis Spreadsheet to the application (electronic transmission to DEP is acceptable) that provides replicate data for all species tested and for the most recent four consecutive tests.

   Outfall No. Tested:

   Type of tests completed: ☐ Chronic ☐ Acute

   Dilution series used: %, %, %, %, and % effluent

   Target Instream Waste Concentration (TIWC): % effluent

	Ceriodaphnia Results (% Effluent)			Pimephales Results (% Effluent)			
Test Date	Survival NOEC	Reproduction NOEC	LC50	Survival NOEC	Growth NOEC	LC50	Pass or Fail

2. Describe the status of any Phase I or II Toxicity Reduction Evaluation (if applicable):

PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN

The applicant may optionally attach its PPC Plan or related plan to the application. This information may be useful to DEP in completing its review of the application. If the PPC Plan is not attached to the application, DEP may request submission of the Plan during the review. Electronic transmission of large PPC Plans is encouraged.

Type or Description of Plan (e.g., PPC, SPCC, etc.)	Attached?	Date of Latest Plan Update
Preparedness, Prevention and Contingency Plan	☒	**October 2017**
	☐	
	☐	

COOLING WATER INTAKE STRUCTURES

1. Does the facility use cooling water? ☐ Yes ☒ No If no, the rest of this section may remain blank

2. Identify the source(s) of cooling water: ☐ Surface water ☐ Groundwater ☐ Treated effluent
☐ Public water system (Potable): PWS ID: _____ ☐ Public water system (Raw): PWS ID: _____
☐ Independent supplier: _____ ☐ Other: _____

3. Facility Type: ☐ New Facility ☐ New Offshore O&G Facility ☐ Existing Facility ☐ Facility below 2 MGD or 25% cooling

4. Is Module 5 is attached to this application? ☐ Yes ☐ No

5. Number of CWISs at facility:

6. CWIS Flow Data:

CWIS ID No.	DIF (MGD)	AIF (MGD)	Max Screen Velocity (fps)	% Used for Cooling	% Mean Annual Flow

7. Type of CWIS Location:

CWIS ID No.	Type (check box):				
	☐ Intake Canal	☐ Embayment, Bank or Cove	☐ Submerged Offshore Intake	☐ Near-shore Submerged Intake	☐ Shoreline Submerged Intake
	☐ Intake Canal	☐ Embayment, Bank or Cove	☐ Submerged Offshore Intake	☐ Near-shore Submerged Intake	☐ Shoreline Submerged Intake
	☐ Intake Canal	☐ Embayment, Bank or Cove	☐ Submerged Offshore Intake	☐ Near-shore Submerged Intake	☐ Shoreline Submerged Intake

8. Describe all Impingement Control Technologies employed:

9. Describe all Entrainment Control Technologies employed:

10. Has the facility conducted any impingement or entrainment studies in the last 10 years? ☐ Yes ☐ No If yes, attach the results

11. Attach any information required by your current permit to the application (existing facilities only)

ANALYSIS RESULTS TABLE
POLLUTANT GROUP 1

Please read instructions carefully before completing this form.

APPLICANT NAME	Greenville Water Authority

☒ **Outfall / IMP Number 001** (Show location of sampling point on Line Drawing)
☐ Treatment Facility Influent Sampling Results (Show location of sampling point on Line Drawing)
☐ Intake Sampling Results (Specify Source: _____)
☐ Background (Upstream) Sampling Results (Specify Location: _____)
☐ New Discharge (Basis for Information: _____)

Mass loading estimates based on 10% wastewater by volume on a 2.0 MGD produced water plant at highest concentration listed.

POLLUTANT GROUP 1 PARAMETERS	CONCENTRATION / MASS PRESENT						No. Analyses	No. "Non-Detect" Results	QL Used	Method Used
	Min/Max Daily Value		Max Avg Monthly Value		Long-Term Avg Value					
	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)				
BOD_5 (mg/L)	<2.40	0	<2.14 - <2.40				3	3	2.4	SM(22) 5210 B-2001
COD (mg/L)	<15.0	0	<15.0 - <15.0				3	3	15.0	HACH 8000
TOC (mg/L)	2.64	4.90	2.35 - 2.64				3	0	0.500	SM 5310 C-11
TSS (mg/L)	4.00	7.42	<1.60 - 4.00				3	2	2.50	SM(22) 2540 D-1997
Ammonia-Nitrogen (mg/L)	<0.0475	0	<0.0475 - <0.0475				3	3	0.04750	ASTM D6919-09
Temperature (Winter) (°F)	39.7	XXX	44.1	XXX		XXX	3	XXX	XXX	SM 2550B-11
Temperature (Summer) (°F)	---	XXX	---	XXX		XXX	---	XXX	XXX	SM 2550B-11
pH – Minimum (S.U.)	7.05	XXX	XXX	XXX		XXX	3	XXX	XXX	SM20-4500H + B FIELD
pH – Maximum (S.U.)	7.38	XXX	XXX	XXX		XXX	3	XXX	XXX	SM20-4500H + B FIELD
Fecal Coliform (No./100 mL)	33.6	XXX	<1.0 - 33.6	XXX		XXX	3	2	XXX	Colilert-18
Oil and Grease (mg/L)	<4.75	0	<1.67 - <4.75				3	3	4.75	EPA 1664B
TRC (mg/L)	1.25	XXX	<0.2 - 1.25	XXX		XXX	3	1	0.05	SM 4500 Cl-G-11
Total Phosphorus (mg/L)	0.0130	0.02	0.009 - <0.0179				3	1	0.01	EPA 365.3
TKN (mg/L)	1.405	2.61	<0.5 - 1.405				3	1	0.5	SM 4500NorgC-11/ASTMD6919-09
Nitrite + Nitrate-Nitrogen (mg/L)	1.158	2.15	1.063 - 1.158				3	0	2.4	EPA 300.0/2.1
Total Dissolved Solids (mg/L)	180	334	74 - 180				3	0	10.0	SM 2540C-11

Color (Pt-Co Units)	33.0	XXX	<5.00 - 33.0	XXX		XXX	3	2	5.00	SM 2120 B-11
Bromide (mg/L)	<0.072	0	<0.036 - <0.072				3	3	0.20	EPA 300.0/2.1
Chloride (mg/L)	33.8	62.7	29.3 - 33.8				3	0	20.0	EPA 300.0/2.1
Sulfate (mg/L)	16.1	29.9	13.3- 16.1				3	0	1.0	EPA 300.0/2.1
Sulfide (mg/L)	<1.0	0	<0.05 - <1.0				3	3	0.05	SM 4500 S2 F-11
Surfactants (mg/L)	0.031	0.06	<0.025 - 0.031				2	1	0.025	SM 5540 C-11
Fluoride (mg/L)	1.29	2.39	0.893 - 1.29				3	0	1.00	EPA 300.0/2.1
Total Hardness (mg/L)	74.2	138	55.6 - 74.2				3	0	2.07	CALC

ANALYSIS RESULTS TABLE
POLLUTANT GROUP 2

Please read instructions carefully before completing this form.

APPLICANT NAME	Greenville Water Authority

☒ **Outfall / IMP Number 001** (Show location of sampling point on Line Drawing)
☐ Treatment Facility Influent Sampling Results (Show location of sampling point on Line Drawing)
☐ Intake Sampling Results (Specify Source: _____)
☐ Background (Upstream) Sampling Results (Specify Location: _____)
☐ New Discharge (Basis for Information: _____)

Mass loading estimates based on 10% wastewater by volume on a 2.0 MGD produced water plant at highest concentration listed.

POLLUTANT GROUP 2 PARAMETERS	CONCENTRATION / MASS PRESENT						No. Analyses	No. "Non-Detect" Results	QL Used	Method Used
	Min/Max Daily Value		Max Avg Monthly Value		Long-Term Avg Value					
	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)				
Aluminum, Total (µg/L)	359	0.666	36.4 - 359				3	0	20	EPA 200.8 / Rev. 5.4
Antimony, Total (µg/L)	<1.0	0	<0.2 - <1.0				3	3	0.200	EPA 200.8 / Rev. 5.4
Arsenic, Total (µg/L)	<1.5	0	<0.5 - <1.5				3	3	0.5	EPA 200.8
Barium, Total (µg/L)	18.1	0.034	16.2 - 18.1				3	3	2.5	EPA 200.8 / Rev. 5.4
Beryllium, Total (µg/L)	<0.676	0	<0.5 - <0.676				3	3	0.500	EPA 200.8 / Rev. 5.4
Boron, Total (µg/L)	<100	0	<100 - <100				3	3	100	EPA 200.7/4.4
Cadmium, Total (µg/L)	0.035	0.0001	<0.025 - <0.123				3	2	0.500	EPA 200.8 / Rev. 5.4
Chromium, Total (µg/L)	<1.99	0	<1.99 - <1.99				3	3	5.00	EPA 200.7/4.4
Chromium, Hexavalent (µg/L)	<0.25	0	<0.04 - <0.25				3	3	0.04	EPA 218.6 Rev 3.3
Cobalt, Total (µg/L)	0.325	0.001	0.325 - <0.400				3	2	0.400	EPA 200.8 / Rev. 5.4
Copper, Total (µg/L)	5.50	0.010	<2.50 - 5.50				3	1	2.50	EPA 200.8 / Rev. 5.4
Cyanide, Total (µg/L)	<10	0	<10 - <10				3	3	10.0	EPA 200.8 / Rev. 5.4
Iron, Total (µg/L)	47	0.087	<10 - 47				3	2	10	EPA 200.7
Iron, Dissolved (µg/L)	<20	0	<20 - <20				3	3	20	EPA 200.7
Lead, Total (µg/L)	<0.5	0	<0.1 - <0.5				3	3	0.100	EPA 200.8 / Rev. 5.4
Manganese, Total (µg/L)	626	1.161	109 - 626				3	0	10.0	EPA 200.8 / Rev. 5.4

Mercury, Total (µg/L)	<0.2	0	<0.2 - <0.2				3	3	0.200	EPA 245.1/3.0
Molybdenum, Total (µg/L)	0.279	0.001	0.252 - <0.5				3	1	0.100	EPA 200.8 / Rev. 5.4
Nickel, Total (µg/L)	0.931	0.002	0.931 - <2.50				3	2	0.500	EPA 200.8 / Rev. 5.4
Phenols, Total (µg/L)	<5	0	<2 - <5				3	3	2	EPA 420.4
Selenium, Total (µg/L)	<2.50	0	<1.67 - <2.50				3	3	2.50	EPA 200.8 / Rev. 5.4
Silver, Total (µg/L)	<1.37	0	<0.274 - <1.37				3	3	0.500	EPA 200.8 / Rev. 5.4
Thallium, Total (µg/L)	<0.5	0	<0.1 - <0.5				3	3	0.100	EPA 200.8 / Rev. 5.4
Zinc, Total (µg/L)	11.8	0.022	<2.5 - 11.8				3	1	2.50	EPA 200.8 / Rev. 5.4

ANALYSIS RESULTS TABLE
POLLUTANT GROUP 1

Please read instructions carefully before completing this form.

APPLICANT NAME	Greenville Water Authority

☐ **Outfall / IMP Number** _____ (Show location of sampling point on Line Drawing)
☒ Treatment Facility Influent Sampling Results (Show location of sampling point on Line Drawing)
☐ Intake Sampling Results (Specify Source: _____)
☐ Background (Upstream) Sampling Results (Specify Location: _____)
☐ New Discharge (Basis for Information: _____)

1 Backwash Influent

POLLUTANT GROUP 1 PARAMETERS	CONCENTRATION / MASS PRESENT						No. Analyses	No. "Non-Detect" Results	QL Used	Method Used
	Min/Max Daily Value		Max Avg Monthly Value		Long-Term Avg Value					
	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)				
BOD_5 (mg/L)	<40.0						1	1	2.4	SM(22) 5210 B-2001
COD (mg/L)	<15.0						1	1	15.0	HACH 8000
TOC (mg/L)	4.21						1	0	0.500	SM 5310 C-11
TSS (mg/L)	60.0						1	0	2.50	SM(22) 2540 D-1997
Ammonia-Nitrogen (mg/L)	<0.0475						1	1	0.04750	ASTM D6919-09
Temperature (Winter) (°F)	42	XXX		XXX		XXX	1	XXX	XXX	SM 2550B-11
Temperature (Summer) (°F)	---	XXX		XXX		XXX	1	XXX	XXX	SM 2550B-11
pH – Minimum (S.U.)	7.41	XXX	XXX	XXX		XXX	1	XXX	XXX	SM20-4500H + B FIELD
pH – Maximum (S.U.)	---	XXX	XXX	XXX		XXX	1	XXX	XXX	SM20-4500H + B FIELD
Fecal Coliform (No./100 mL)	2.0	XXX		XXX		XXX	1	0	XXX	Colilert-18
Oil and Grease (mg/L)	<4.90						1	1	4.75	EPA 1664B
TRC (mg/L)	0.99	XXX		XXX		XXX	1	0	0.05	SM 4500 Cl-G-11
Total Phosphorus (mg/L)	0.0700						1	0	0.01	EPA 365.3
TKN (mg/L)	1.845						1	0	0.5	SM 4500NorgC-11/ASTMD6919-09
Nitrite + Nitrate-Nitrogen (mg/L)	1.102						1	0	2.4	EPA 300.0/2.1
Total Dissolved Solids (mg/L)	1080						1	0	10.0	SM 2540C-11
Color (Pt-Co Units)	<5.00	XXX		XXX		XXX	1	1	5.00	SM 2120 B-11

Bromide (mg/L)	<0.072						1	1	0.20	EPA 300.0/2.1
Chloride (mg/L)	27.8						1	0	20.0	EPA 300.0/2.1
Sulfate (mg/L)	12.2						1	0	1.0	EPA 300.0/2.1
Sulfide (mg/L)	2.52						1	0	0.05	SM 4500 S2 F-11
Surfactants (mg/L)	0.0380						1	0	0.025	SM 5540 C-11
Fluoride (mg/L)	1.14						1	0	1.00	EPA 300.0/2.1
Total Hardness (mg/L)	54.9						1	0	2.07	CALC

ANALYSIS RESULTS TABLE
POLLUTANT GROUP 2

Please read instructions carefully before completing this form.

APPLICANT NAME	Greenville Water Authority

☐ **Outfall / IMP Number** _____ (Show location of sampling point on Line Drawing)
☒ Treatment Facility Influent Sampling Results (Show location of sampling point on Line Drawing) (1) Backwash Influent
☐ Intake Sampling Results (Specify Source: _____)
☐ Background (Upstream) Sampling Results (Specify Location: _____)
☐ New Discharge (Basis for Information: _____)

POLLUTANT GROUP 2 PARAMETERS	CONCENTRATION / MASS PRESENT						No. Analyses	No. "Non-Detect" Results	QL Used	Method Used
	Min/Max Daily Value		Max Avg Monthly Value		Long-Term Avg Value					
	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)				
Aluminum, Total (µg/L)	6240						1	0	20	EPA 200.8 / Rev. 5.4
Antimony, Total (µg/L)	<0.200						1	1	0.200	EPA 200.8 / Rev. 5.4
Arsenic, Total (µg/L)	0.76						1	0	0.5	EPA 200.8
Barium, Total (µg/L)	24.0						1	0	2.5	EPA 200.8 / Rev. 5.4
Beryllium, Total (µg/L)	<0.500						1	1	0.500	EPA 200.8 / Rev. 5.4
Boron, Total (µg/L)	<100						1	1	100	EPA 200.7/4.4
Cadmium, Total (µg/L)	0.041						1	0	0.500	EPA 200.8 / Rev. 5.4
Chromium, Total (µg/L)	<1.99						1	1	5.00	EPA 200.7/4.4
Chromium, Hexavalent (µg/L)	<0.25						1	1	0.04	EPA 218.6 Rev 3.3
Cobalt, Total (µg/L)	0.644						1	0	0.400	EPA 200.8 / Rev. 5.4
Copper, Total (µg/L)	2.61						1	0	2.50	EPA 200.8 / Rev. 5.4
Cyanide, Total (µg/L)	<10.0						1	1	10.0	EPA 200.8 / Rev. 5.4
Iron, Total (µg/L)	870						1	0	10	EPA 200.7
Iron, Dissolved (µg/L)	<20						1	1	20	EPA 200.7
Lead, Total (µg/L)	1.67						1	0	0.100	EPA 200.8 / Rev. 5.4
Manganese, Total (µg/L)	419						1	0	10.0	EPA 200.8 / Rev. 5.4

Mercury, Total (µg/L)	<0.2						1	0	0.200	EPA 245.1/3.0
Molybdenum, Total (µg/L)	0.287						1	1	0.100	EPA 200.8 / Rev. 5.4
Nickel, Total (µg/L)	2.60						1	0	0.500	EPA 200.8 / Rev. 5.4
Phenols, Total (µg/L)	<2						1	1	2	EPA 420.4
Selenium, Total (µg/L)	<2.50						1	1	2.50	EPA 200.8 / Rev. 5.4
Silver, Total (µg/L)	<0.274						1	1	0.500	EPA 200.8 / Rev. 5.4
Thallium, Total (µg/L)	<0.100						1	1	0.100	EPA 200.8 / Rev. 5.4
Zinc, Total (µg/L)	15.2						1	0	2.50	EPA 200.8 / Rev. 5.4

ANALYSIS RESULTS TABLE
POLLUTANT GROUP 1

Please read instructions carefully before completing this form.

APPLICANT NAME	Greenville Water Authority

☐ **Outfall / IMP Number** _____ (Show location of sampling point on Line Drawing)
☒ Treatment Facility Influent Sampling Results (Show location of sampling point on Line Drawing)
☐ Intake Sampling Results (Specify Source: _____)
☐ Background (Upstream) Sampling Results (Specify Location: _____)
☐ New Discharge (Basis for Information: _____)

2 Blowdown Influent

POLLUTANT GROUP 1 PARAMETERS	CONCENTRATION / MASS PRESENT						No. Analyses	No. "Non-Detect" Results	QL Used	Method Used
	Min/Max Daily Value		Max Avg Monthly Value		Long-Term Avg Value					
	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)				
BOD_5 (mg/L)	6.42						1	0	2.4	SM(22) 5210 B-2001
COD (mg/L)	20.5						1	0	15.0	HACH 8000
TOC (mg/L)	3.94						1	0	0.500	SM 5310 C-11
TSS (mg/L)	31.0						1	0	2.50	SM(22) 2540 D-1997
Ammonia-Nitrogen (mg/L)	<0.0475						1	1	0.04750	ASTM D6919-09
Temperature (Winter) (°F)	39	XXX		XXX		XXX	1	XXX	XXX	SM 2550B-11
Temperature (Summer) (°F)	---	XXX		XXX		XXX	1	XXX	XXX	SM 2550B-11
pH – Minimum (S.U.)	7.39	XXX	XXX	XXX		XXX	1	XXX	XXX	SM20-4500H + B FIELD
pH – Maximum (S.U.)	---	XXX	XXX	XXX		XXX	1	XXX	XXX	SM20-4500H + B FIELD
Fecal Coliform (No./100 mL)	152.3	XXX		XXX		XXX	1	0	XXX	Colilert-18
Oil and Grease (mg/L)	<1.69						1	1	4.75	EPA 1664B
TRC (mg/L)	<0.200	XXX		XXX		XXX	1	1	0.05	SM 4500 Cl-G-11
Total Phosphorus (mg/L)	0.0700						1	0	0.01	EPA 365.3
TKN (mg/L)	1.13						1	0	0.5	SM 4500NorgC-11/ASTMD6919-09
Nitrite + Nitrate-Nitrogen (mg/L)	1.121						1	0	2.4	EPA 300.0/2.1
Total Dissolved Solids (mg/L)	132						1	0	10.0	SM 2540C-11
Color (Pt-Co Units)	5.00	XXX		XXX		XXX	1	0	5.00	SM 2120 B-11

Bromide (mg/L)	<0.036						1	1	0.20	EPA 300.0/2.1
Chloride (mg/L)	28.6						1	0	20.0	EPA 300.0/2.1
Sulfate (mg/L)	16.6						1	0	1.0	EPA 300.0/2.1
Sulfide (mg/L)	<0.05						1	1	0.05	SM 4500 S2 F-11
Surfactants (mg/L)	<0.025						1	1	0.025	SM 5540 C-11
Fluoride (mg/L)	1.07						1	0	1.00	EPA 300.0/2.1
Total Hardness (mg/L)	63.4						1	0	2.07	CALC

ANALYSIS RESULTS TABLE
POLLUTANT GROUP 2

Please read instructions carefully before completing this form.

APPLICANT NAME	Greenville Water Authority

☒ **Outfall / IMP Number 001** (Show location of sampling point on Line Drawing)
☐ Treatment Facility Influent Sampling Results (Show location of sampling point on Line Drawing)
☐ Intake Sampling Results (Specify Source: _____)
☐ Background (Upstream) Sampling Results (Specify Location: _____)
☐ New Discharge (Basis for Information: _____)

2 Blowdown Influent

POLLUTANT GROUP 2 PARAMETERS	CONCENTRATION / MASS PRESENT						No. Analyses	No. "Non-Detect" Results	QL Used	Method Used
	Min/Max Daily Value		Max Avg Monthly Value		Long-Term Avg Value					
	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)				
Aluminum, Total (µg/L)	26.4						1	0	20	EPA 200.8 / Rev. 5.4
Antimony, Total (µg/L)	<0.200						1	1	0.200	EPA 200.8 / Rev. 5.4
Arsenic, Total (µg/L)	0.52						1	0	0.5	EPA 200.8
Barium, Total (µg/L)	13.6						1	0	2.5	EPA 200.8 / Rev. 5.4
Beryllium, Total (µg/L)	<0.135						1	1	0.500	EPA 200.8 / Rev. 5.4
Boron, Total (µg/L)	<100						1	1	100	EPA 200.7/4.4
Cadmium, Total (µg/L)	0.043						1	0	0.500	EPA 200.8 / Rev. 5.4
Chromium, Total (µg/L)	<1.99						1	1	5.00	EPA 200.7/4.4
Chromium, Hexavalent (µg/L)	<0.25						1	1	0.04	EPA 218.6 Rev 3.3
Cobalt, Total (µg/L)	0.108						1	0	0.400	EPA 200.8 / Rev. 5.4
Copper, Total (µg/L)	2.31						1	0	2.50	EPA 200.8 / Rev. 5.4
Cyanide, Total (µg/L)	<10						1	1	10.0	EPA 200.8 / Rev. 5.4
Iron, Total (µg/L)	190						1	0	10	EPA 200.7
Iron, Dissolved (µg/L)	<20						1	1	20	EPA 200.7
Lead, Total (µg/L)	<0.100						1	1	0.100	EPA 200.8 / Rev. 5.4
Manganese, Total (µg/L)	142						1	0	10.0	EPA 200.8 / Rev. 5.4

Mercury, Total (µg/L)	<0.200						1	1	0.200	EPA 245.1/3.0
Molybdenum, Total (µg/L)	0.279						1	0	0.100	EPA 200.8 / Rev. 5.4
Nickel, Total (µg/L)	1.51						1	0	0.500	EPA 200.8 / Rev. 5.4
Phenols, Total (µg/L)	8						1	0	2	EPA 420.4
Selenium, Total (µg/L)	<0.335						1	1	2.50	EPA 200.8 / Rev. 5.4
Silver, Total (µg/L)	<0.274						1	1	0.500	EPA 200.8 / Rev. 5.4
Thallium, Total (µg/L)	<0.100						1	1	0.100	EPA 200.8 / Rev. 5.4
Zinc, Total (µg/L)	27.7						1	0	2.50	EPA 200.8 / Rev. 5.4

ANALYSIS RESULTS TABLE
POLLUTANT GROUP 1

Please read instructions carefully before completing this form.

APPLICANT NAME	Greenville Water Authority

☐ **Outfall / IMP Number** _____ (Show location of sampling point on Line Drawing)
☒ Treatment Facility Influent Sampling Results (Show location of sampling point on Line Drawing) (3) Belt Filter Press Influent
☐ Intake Sampling Results (Specify Source: _____)
☐ Background (Upstream) Sampling Results (Specify Location: _____)
☐ New Discharge (Basis for Information: _____)

POLLUTANT GROUP 1 PARAMETERS	CONCENTRATION / MASS PRESENT						No. Analyses	No. "Non-Detect" Results	QL Used	Method Used
	Min/Max Daily Value		Max Avg Monthly Value		Long-Term Avg Value					
	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)				
BOD_5 (mg/L)	<2.40						1	1	2.4	SM(22) 5210 B-2001
COD (mg/L)	15.9						1	0	15.0	HACH 8000
TOC (mg/L)	4.77						1	0	0.500	SM 5310 C-11
TSS (mg/L)	90.0						1	0	2.50	SM(22) 2540 D-1997
Ammonia-Nitrogen (mg/L)	0.06500						1	0	0.04750	ASTM D6919-09
Temperature (Winter) (°F)	44.9	XXX		XXX		XXX	1	XXX	XXX	SM 2550B-11
Temperature (Summer) (°F)	---	XXX		XXX		XXX	1	XXX	XXX	SM 2550B-11
pH – Minimum (S.U.)	7.18	XXX	XXX	XXX		XXX	1	XXX	XXX	SM20-4500H + B FIELD
pH – Maximum (S.U.)	---	XXX	XXX	XXX		XXX	1	XXX	XXX	SM20-4500H + B FIELD
Fecal Coliform (No./100 mL)	<1.0	XXX		XXX		XXX	1	1	XXX	Colilert-18
Oil and Grease (mg/L)	<1.69						1	1	4.75	EPA 1664B
TRC (mg/L)	0.08	XXX		XXX		XXX	1	0	0.05	SM 4500 Cl-G-11
Total Phosphorus (mg/L)	0.184						1	0	0.01	EPA 365.3
TKN (mg/L)	<1.0						1	1	0.5	SM 4500NorgC-11/ASTMD6919-09
Nitrite + Nitrate-Nitrogen (mg/L)	1.091						1	0	2.4	EPA 300.0/2.1
Total Dissolved Solids (mg/L)	140						1	0	10.0	SM 2540C-11
Color (Pt-Co Units)	7.00	XXX		XXX		XXX	1		5.00	SM 2120 B-11

Bromide (mg/L)	<0.072						1	1	0.20	EPA 300.0/2.1
Chloride (mg/L)	32.4						1	0	20.0	EPA 300.0/2.1
Sulfate (mg/L)	16.6						1	0	1.0	EPA 300.0/2.1
Sulfide (mg/L)	<0.05						1	1	0.05	SM 4500 S2 F-11
Surfactants (mg/L)	<0.025						1	1	0.025	SM 5540 C-11
Fluoride (mg/L)	1.39						1	0	1.00	EPA 300.0/2.1
Total Hardness (mg/L)	71.8						1	0	2.07	CALC

ANALYSIS RESULTS TABLE
POLLUTANT GROUP 2

Please read instructions carefully before completing this form.

APPLICANT NAME	Greenville Water Authority

☐ **Outfall / IMP Number** _____ (Show location of sampling point on Line Drawing)
☒ Treatment Facility Influent Sampling Results (Show location of sampling point on Line Drawing)
☐ Intake Sampling Results (Specify Source: _____)
☐ Background (Upstream) Sampling Results (Specify Location: _____)
☐ New Discharge (Basis for Information: _____)

3 Belt Filter Press Influent

POLLUTANT GROUP 2 PARAMETERS	CONCENTRATION / MASS PRESENT						No. Analyses	No. "Non-Detect" Results	QL Used	Method Used
	Min/Max Daily Value		Max Avg Monthly Value		Long-Term Avg Value					
	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)	Conc	Mass (lbs/day)				
Aluminum, Total (µg/L)	12000						1	0	20	EPA 200.8 / Rev. 5.4
Antimony, Total (µg/L)	<1.00						1	1	0.200	EPA 200.8 / Rev. 5.4
Arsenic, Total (µg/L)	1.4						1	1	0.5	EPA 200.8
Barium, Total (µg/L)	74.7						1	0	2.5	EPA 200.8 / Rev. 5.4
Beryllium, Total (µg/L)	<0.676						1	1	0.500	EPA 200.8 / Rev. 5.4
Boron, Total (µg/L)	<100						1	1	100	EPA 200.7/4.4
Cadmium, Total (µg/L)	<0.123						1	1	0.500	EPA 200.8 / Rev. 5.4
Chromium, Total (µg/L)	<1.99						1	1	5.00	EPA 200.7/4.4
Chromium, Hexavalent (µg/L)	<0.04						1	1	0.04	EPA 218.6 Rev 3.3
Cobalt, Total (µg/L)	0.442						1	0	0.400	EPA 200.8 / Rev. 5.4
Copper, Total (µg/L)	6.19						1	0	2.50	EPA 200.8 / Rev. 5.4
Cyanide, Total (µg/L)	<10						1	1	10.0	EPA 200.8 / Rev. 5.4
Iron, Total (µg/L)	860						1	1	10	EPA 200.7
Iron, Dissolved (µg/L)	<20						1	0	20	EPA 200.7
Lead, Total (µg/L)	2.75						1	0	0.100	EPA 200.8 / Rev. 5.4
Manganese, Total (µg/L)	979						1	0	10.0	EPA 200.8 / Rev. 5.4

Mercury, Total (µg/L)	<0.200						1	1	0.200	EPA 245.1/3.0
Molybdenum, Total (µg/L)	<0.500						1	1	0.100	EPA 200.8 / Rev. 5.4
Nickel, Total (µg/L)	<2.50						1	1	0.500	EPA 200.8 / Rev. 5.4
Phenols, Total (µg/L)	4						1	0	2	EPA 420.4
Selenium, Total (µg/L)	<1.67						1	1	2.50	EPA 200.8 / Rev. 5.4
Silver, Total (µg/L)	<1.37						1	1	0.500	EPA 200.8 / Rev. 5.4
Thallium, Total (µg/L)	<0.500						1	1	0.100	EPA 200.8 / Rev. 5.4
Zinc, Total (µg/L)	14.2						1	0	2.50	EPA 200.8 / Rev. 5.4

OTHER TOXIC POLLUANTS AND HAZARDOUS SUBSTANCES TABLE

Other Pollutants Which Must Be Identified If Known Or Expected To Be Present in Discharges

Please read instructions carefully before completing this form

Outfall No.	Chemical Substance or Compound	Reason for Presence in Discharge	Avg Effluent Concentration (µg/L)	Max Effluent Concentration (µg/L)	No. of Analyses	Quantitation Limit (µg/L)

Is the applicant requesting a hazardous substance spill reporting requirement exemption for any of the substances listed in Attachment A, Table 3 of the instructions?

☐ Yes ☐ No (If Yes, attach the information specified in the instructions).

CERTIFICATION AND SIGNATURE OF APPLICANT

I certify under penalty of law that this document and all attachments and modules were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

THOMAS C. STRAHLER	BOARD CHAIRMAN
Name (Type or Print Legibly)	**Official Title**
Thomas C. Strahler	**April 29, 2022**
Signature	**Date**

3 Act 14 Notifications

400 Industry Drive | Suite 200 | Pittsburgh, PA 15275

December 29, 2021

Entech No. 4631.012

Mercer County Regional Planning Commission
2491 Highland Road
Hermitage, PA 16148

Re: Greenville Municipal Water Authority
NPDES Permit Renewal Application
Mercer County, Pennsylvania

Dear Commissioners:

On behalf of Greenville Municipal Water Authority and in compliance with Act 14 of the Commonwealth of Pennsylvania's Administrative Code, notice is hereby given to file the NPDES Permit Renewal Application to the Pennsylvania Department of Environmental Protection for the following water system improvements:

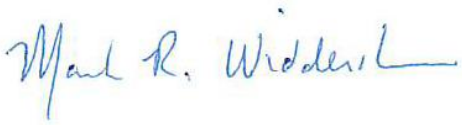
Applicant Name:	Greenville Municipal Water Authority
Applicant Contact:	Carol Paul, Authority Manager 724-588-4340
Project Location:	Greenville WTP
Project Description:	NPDES Permit No. PA0221970 Renewal

Acts 67, 68, and 127, which amended the Municipalities Planning Code to support sound land use practices and planning efforts, direct state agencies to consider comprehensive plans and zoning ordinances when reviewing applications for permitting of facilities or infrastructure and specify that state agencies may rely upon comprehensive plans and zoning ordinances under certain conditions as described in Sections 619.2 and 1105 of the Municipalities Planning Code. Acts 67, 68, and 127 went into effect in 2000.

Enclosed is a General Information Form (GIF) that has been completed for this project and a County Land Use Letter. You are invited to complete the County Land Use Form and to identify any land use concerns or issues related to this project; please be specific when identifying any areas of conflict. You are encouraged to send the County Land Use Form to Entech Engineering, Inc. (Entech) with as much information as necessary to support any comments made in the County Land Use Form, including copies of applicable ordinances, appropriate sections of your comprehensive plan, efforts to preserve farmland and open space, and locally designated growth areas or Keystone Opportunity Zones and similar information.

In addition to any information submitted to Entech, please submit your comments concerning this project within 30 days from date of receipt of this letter to: PADEP Northwest Regional Office, 220 Chestnut Street, Meadville, PA 16335. If there are no comments received by the end of the comment period, Entech and PADEP will assume that there are no substantive land use conflicts and proceed with the normal application review process.

Sincerely,



Mark R. Widdersheim, PE
Senior Project Engineer

Enclosures: General Information Form (GIF)
Location Exhibit (EXH-1)
County Land Use Form

Via e-mail to: info@greenvilleborough.com

GREENVILLE MUNICIPAL WATER AUTHORITY
NPDES PERMIT NO. PA0221970 RENEWAL APPLICATION
COUNTY LAND USE LETTER

Date:

To: Entech Engineering, Inc. – Mark R. Widdersheim

From: Mercer County

Re: Greenville Municipal Water Authority – NPDES Permit No. PA0221970 Renewal Application
Entech No. 4631.012

The County of Mercer states that it:

_____ has adopted a county or multi-county comprehensive plan.
If yes, please provide date of adoption: _____

_____ has not adopted a county or multi-county comprehensive plan.

If applicable:

The above referenced project:

___ is consistent with the adopted county or multi-county comprehensive plan.
___ is not consistent with the adopted county or multi-county comprehensive plan.

Additional Comments (attach additional sheets if necessary):

_____

_____

_____

_____

Submitted By:

Name	
Title	
Contact Information (Address & Phone)	
Signature	
Date	

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This form is used by the Department of Environmental Protection (DEP) to inform our programs regarding what other DEP permits or authorizations may be needed for the proposed project or activity. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the DEP.

Related ID#s (If Known)				DEP USE ONLY
Client ID#	25179	APS ID#		Date Received & General Notes
Site ID#	262460	Auth ID#		
Facility ID#	281183			

CLIENT INFORMATION

DEP Client ID#	Client Type / Code	Dun & Bradstreet ID#
25179	AUTH	

Legal Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Is the EIN a SSN?
Greenville Municipal Water Authority		☐ Yes ☐ NO

State of Incorporation or Registration of Fictious Name
Pennsylvania

☒ Corporation ☐ LLC ☐ Partnership ☐ LLP ☐ LP
☐ Sole Proprietorship ☐ Association/Organization
☐ Estate/Trust ☐ Other

Individual Last Name	First Name	MI	Suffix
Paul	Carol		
Additional Individual Last Name	**First Name**	**MI**	**Suffix**

Mailing Address Line 1	Mailing Address Line 2
44 Clinton Street	

Address Last Line – City	State	ZIP+4	Country
Greenville	PA	16125	USA

Client Contact Last Name	First Name	MI	Suffix
Paul	Carol		

Client Contact Title	Phone	Ext	Cell Phone
Authority Manager	724-588-4340		

Email Address	FAX
carol.paul@gmwa.info	724-588-7868

SITE INFORMATION

DEP Site ID#	Site Name
262460	Greenville Water Treatment Plant

EPA ID# **Estimated Number of Employees to be Present at Site** 5-6

Description of Site
A 2.0 MGD surface water filtration plant that serves the greater Greenville Borough area with potable water.

Tax Parcel ID(s): 55 516 088 001

County Name(s)	Municipality(ies)	City	Boro	Twp	State
Mercer	Greenville	☐	☒	☐	PA
		☐	☐	☐	
		☐	☐	☐	
		☐	☐	☐	

Site Location Line 1	Site Location Line 2
44 Clinton St	

Site Location Last Line – City	State	ZIP+4
Greenville	PA	16125

Detailed Written Directions to Site
From I-79N, exit onto SR358 W towards Greenville, take a left on S Water Street and the WTP will be on your right. Note that the WTP site is located on S Water Street adjacent to the Municipal offices on Clinton Street, but both parcels are listed as 44 Clinton Street.

Site Contact Last Name	First Name	MI	Suffix
Paul	Carol		

Site Contact Title	Site Contact Firm
Authority Manager	Greenville Municipal Water Authority

Mailing Address Line 1	Mailing Address Line 2
44 Clinton Street	

Mailing Address Last Line – City	State	ZIP+4
Greenville	PA	16125

Phone	Ext	FAX	Email Address
724-588-4340		724-588-7868	carol.paul@gmwa.info

NAICS Codes (Two- & Three-Digit Codes – List All That Apply): 221 310 — **6-Digit Code** (Optional)

Client to Site Relationship: OWNOP

FACILITY INFORMATION

Modification of Existing Facility	Yes	No
1. Will this project modify an existing facility, system, or activity?	☐	☒
2. Will this project involve an addition to an existing facility, system, or activity?	☐	☒

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

	Facility Type	DEP Fac ID#		Facility Type	DEP Fac ID#
☐	Air Emission Plant		☐	Industrial Minerals Mining Operation	
☐	Beneficial Use (water)		☐	Laboratory Location	
☐	Blasting Operation		☐	Land Recycling Cleanup Location	
☐	Captive Hazardous Waste Operation		☐	Mine Drainage Treatment / Land Recycling Project Location	
☐	Coal Ash Beneficial Use Operation		☐	Municipal Waste Operation	
☐	Coal Mining Operation		☐	Oil & Gas Encroachment Location	
☐	Coal Pillar Location		☐	Oil & Gas Location	
☐	Commercial Hazardous Waste Operation		☐	Oil & Gas Water Poll Control Facility	
☐	Dam Location		☒	Public Water Supply System	
☐	Deep Mine Safety Operation -Anthracite		☐	Radiation Facility	
☐	Deep Mine Safety Operation -Bituminous		☐	Residual Waste Operation	
☐	Deep Mine Safety Operation -Ind Minerals		☐	Storage Tank Location	
☐	Encroachment Location (water, wetland)		☐	Water Pollution Control Facility	
☐	Erosion & Sediment Control Facility		☐	Water Resource	
☐	Explosive Storage Location		☐	Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
WTP Centroid	41	24	8	-80	23	26

Horizontal Accuracy Measure: Feet --or-- Meters

Horizontal Reference Datum Code
- ☐ North American Datum of 1927
- ☐ North American Datum of 1983
- ☐ World Geodetic System of 1984

Horizontal Collection Method Code

Reference Point Code

Altitude: Feet --or-- Meters

Altitude Datum Name
- ☐ The National Geodetic Vertical Datum of 1929
- ☐ The North American Vertical Datum of 1988 (NAVD88)

Altitude (Vertical) Location Datum Collection Method Code

Geometric Type Code

Data Collection Date

Source Map Scale Number: Inch(es) = Feet
--or-- Centimeter(s) = Meters

PROJECT INFORMATION

Project Name			
Greenville WTP NPDES Permit Renewal			
Project Description			
NPDES Permit Renewal - PA0221970			
Project Consultant Last Name	**First Name**	**MI**	**Suffix**
Widdersheim	Mark	R	
Project Consultant Title	**Consulting Firm**		
Senior Project Engineer	Entech Engineering		
Mailing Address Line 1	**Mailing Address Line 2**		
400 Industry Drive	Suite 200		
Address Last Line – City	**State**	**ZIP+4**	
Pittsburgh	PA	15275	

Phone	**Ext**	**FAX**	**Email Address**
800-825-1372	1507	412-264-2850	mwiddersheim@entecheng.com

Time Schedules	**Project Milestone (Optional)**
May 4, 2022	Submittal of Renewal Package to PADEP 180 Days in Advance of Expiration

1. Is the project located in or within a 0.5-mile radius of an Environmental Justice community as defined by DEP? ☒ Yes ☐ No

To determine if the project is located in or within a 0.5-mile radius of an environmental justice community, please use the online Environmental Justice Areas Viewer.

2. Have you informed the surrounding community prior to submitting the application to the Department? ☒ Yes ☐ No

Method of notification: Act 14 Notification Letters

3. Have you addressed community concerns that were identified? ☐ Yes ☐ No ☒ N/A

If no, please briefly describe the community concerns that have been expressed and not addressed.

4. Is your project funded by state or federal grants? ☐ Yes ☒ No

Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

Aspect of Project Related to Grant

Grant Source: _____

Grant Contact Person: _____

Grant Expiration Date: _____

5. Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions) ☐ Yes ☒ No

Note: If "No" to Question 5, the application is not subject to the Land Use Policy.
If "Yes" to Question 5, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants should submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1.	**Is there an adopted county or multi-county comprehensive plan?**	☒	Yes	☐	No
2.	**Is there a county stormwater management plan?**	☒	Yes	☐	No
3.	**Is there an adopted municipal or multi-municipal comprehensive plan?**	☒	Yes	☐	No
4.	**Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance?** **Note:** If the Applicant answers "No" to either Questions 1, 3 or 4, the provisions of the PA MPC are not applicable and the Applicant does not need to respond to questions 5 and 6 below. If the Applicant answers "Yes" to questions 1, 3 and 4, the Applicant should respond to questions 5 and 6 below.	☒	Yes	☐	No
5.	**Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval?** If zoning approval has been received, attach documentation.	☒	Yes	☐	No
6.	**Have you attached Municipal and County Land Use Letters for the project?**	☐	Yes	☒	No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 utilizing the Project Review Form.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	**Is this a coal mining project?** If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	☐	Yes	☒	No
1.1	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?**	☐	Yes	☐	No
1.2	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?**	☐	Yes	☐	No
1.3	**Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?**	☐	Yes	☐	No
1.4	**For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
1.5	**Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
1.6	**Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?**	☐	Yes	☐	No
2.0	**Is this a non-coal (industrial minerals) mining project?** If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	☐	Yes	☒	No
2.1	**Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?**	☐	Yes	☐	No
2.2	**Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?**	☐	Yes	☐	No

2.3	**Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?**	☐	Yes	☐	No
2.4	**For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
2.5	**Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
3.0	**Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well?** If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	☐	Yes	☒	No
3.1	**Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?**	☐	Yes	☐	No
3.2	**Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?** If "Yes", discuss in *Project Description*.	☐	Yes	☐	No
3.3	**Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☐	No
4.0	**Will the project involve a construction activity that results in earth disturbance?** If "Yes", specify the total disturbed acreage.	☐	Yes	☒	No
	4.0.1 Total Disturbed Acreage				
	4.0.2 Will the project discharge or drain to a special protection water (EV or HQ) or an EV wetland?	☐	Yes	☐	No
	4.0.3 Will the project involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively?	☐	Yes	☐	No
5.0	**Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility?** If "Yes", respond to 5.1-5.7. If "No", skip to Question 6.0.	☐	Yes	☒	No
5.1	**Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?**	☐	Yes	☐	No
5.2	**Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?**	☐	Yes	☐	No
5.3	**Floodplain Projects by the Commonwealth, a Political Subdivision of the Commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?**	☐	Yes	☐	No
5.4	**Is your project an interstate transmission natural gas pipeline?**	☐	Yes	☐	No

5.5	**Does your project consist of linear construction activities which result in earth disturbance in two or more DEP regions AND three or more counties?**	☐	Yes	☐	No
5.6	**Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
5.7	**Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
6.0	**Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?**	☐	Yes	☒	No
6.1	**Will the project involve discharge of industrial waste stormwater or wastewater from an industrial activity or sewage to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?**	☐	Yes	☐	No
7.0	**Will the project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☒	No
8.0	**Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations?** If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the *Project Description*, where applicable. **8.0.1 Estimated Proposed Flow (gal/day)**	☐	Yes	☒	No
9.0	**Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?**	☐	Yes	☒	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	☐	Yes	☐	No
10.0	**Is this project for the beneficial use of biosolids for land application within Pennsylvania?** If "Yes" indicate how much (i.e. gallons or dry tons per year). **10.0.1 Gallons Per Year (residential septage)** _____ **10.0.2 Dry Tons Per Year (biosolids)**	☐	Yes	☒	No
11.0	**Does the project involve construction, modification or removal of a dam?** If "Yes", identify the dam. **11.0.1 Dam Name**	☐	Yes	☒	No
12.0	**Will the project interfere with the flow from, or otherwise impact, a dam?** If "Yes", identify the dam. **12.0.1 Dam Name**	☐	Yes	☒	No
13.0	**Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?**	☐	Yes	☒	No
	13.0.1 If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1?	☐	Yes	☐	No
	13.0.2 If the answer to 13.0.1 is "No", identify each type of emission followed by the estimated amount of that emission. **Enter all types & amounts of emissions; separate each set with semicolons.**				

14.0	**Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year?** If "Yes", check all proposed sub-facilities.	☐	Yes	☒	No
	14.0.1 Number of Persons Served _____				
	14.0.2 Number of Employee/Guests _____				
	14.0.3 Number of Connections _____				
	14.0.4 Sub-Fac: Distribution System	☐	Yes	☐	No
	14.0.5 Sub-Fac: Water Treatment Plant	☐	Yes	☐	No
	14.0.6 Sub-Fac: Source	☐	Yes	☐	No
	14.0.7 Sub-Fac: Pump Station	☐	Yes	☐	No
	14.0.8 Sub Fac: Transmission Main	☐	Yes	☐	No
	14.0.9 Sub-Fac: Storage Facility	☐	Yes	☐	No
15.0	**Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?**	☐	Yes	☒	No
16.0	**Is your project to be served by an existing public water supply?** If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project.	☐	Yes	☒	No
	16.0.1 Supplier's Name _____				
	16.0.2 Letter of Approval from Supplier is Attached	☐	Yes	☐	No
17.0	**Will this project be served by on-lot drinking water wells?**	☐	Yes	☒	No
18.0	**Will this project involve a new or increased drinking water withdrawal from a river, stream, spring, lake, well or other water bod(ies)?** If "Yes", reference Safe Drinking Water Program.	☐	Yes	☒	No
	18.0.1 Source Name				
19.0	**Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste?** If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed.	☐	Yes	☒	No
	19.0.1 Type & Amount				
20.0	**Will your project involve the removal of coal, minerals, contaminated media, or solid waste as part of any earth disturbance activities?**	☐	Yes	☒	No
21.0	**Does your project involve installation of a field constructed underground storage tank?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	21.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
22.0	**Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	22.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
23.0	**Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	23.0.1 Enter all substances & capacity of each; separate each set with semicolons.				

24.0	**Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **24.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No

NOTE: If the project includes the installation of a regulated storage tank system, including diesel emergency generator systems, the project may require the use of a Department Certified Tank Handler. For a full list of regulated storage tanks and substances, please go to www.dep.pa.gov search term storage tanks

25.0	**Will the intended activity involve the use of a radiation source?**	☐	Yes	☒	No

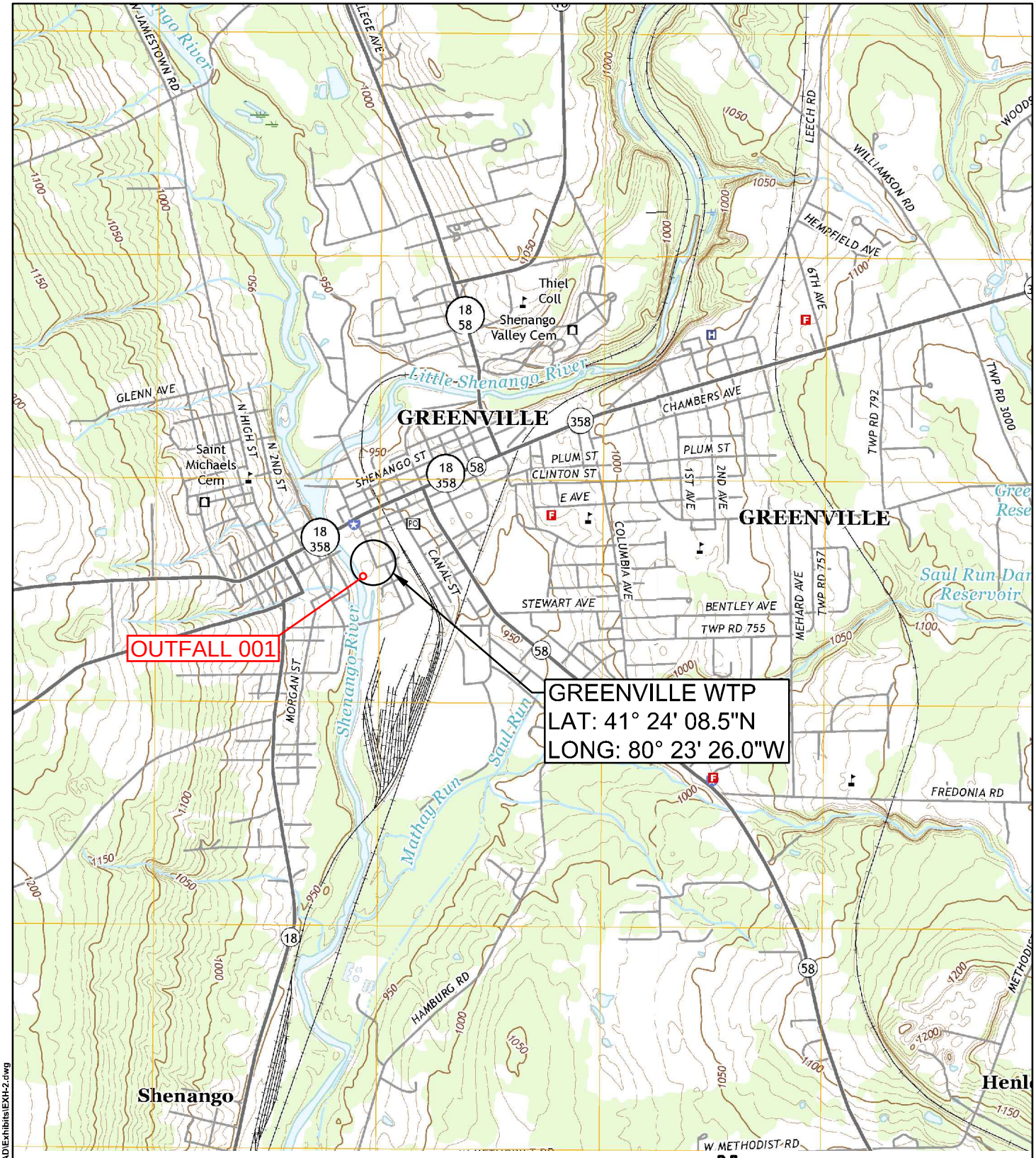
CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

For applicants supplying an EIN number: I am applying for a permit or authorization from the Pennsylvania Department of Environmental Protection (DEP). As part of this application, I will provide DEP with an accurate EIN number for the applicant entity. By filing this application with DEP, I hereby authorize DEP to confirm the accuracy of the EIN number provided with the Pennsylvania Department of Revenue. As applicant, I further consent to the Department of Revenue discussing the same with DEP prior to issuance of the Commonwealth permit or authorization.

Type or Print Name Mark R. Widdersheim, PE

Signature	Title	Date
Mark R. Widdersheim	Senior Project Engineer	12/29/2021



1 LOCATION MAP

SCALE: 1" = 2000'

0 2000' 4000'

N

Entech Engineering - Printed: Jul. 19, 2017 H:\0004631.01\04-CAD\Exhibits\EXH-2.dwg

ENTECH ENGINEERING 1.800.825.1372 www.entecheng.com

GREENVILLE MUNICIPAL WATER AUTHORITY
GREENVILLE, MERCER COUNTY, PENNSYLVANIA
GREENVILLE WTP
LOCATION EXHIBIT

DATE:	SCALE: AS NOTED
PREPARED BY: PDM	PROJECT NO.
CHECKED BY: XXX	DRAWING NO. EXH-1
APPROVED BY: XXX	

7016 0910 0000 5373 0808

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Hermitage, PA 16148

OFFICIAL USE

Certified Mail Fee	$3.75
Extra Services & Fees *(check box, add fee as appropriate)*	$3.05
☐ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$1.56
Total Postag	$8.36

0226
35
DEC 29 2021
Postmark Here

12/29/2021

Sent To
Mercer County Regional Planning Commission
Street and A 2491 Highland Road
City, State, Z Hermitage, PA 16148

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mercer County Regional Planning Commission
2491 Highland Road
Hermitage, PA 16148

9590 9402 5998 0069 4351 56

2. Article Number *(Transfer from service label)*
7016 0910 0000 5373 0808

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Evelyn Wike ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* Evelyn Wike
C. Date of Delivery 1-3-22

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Delivery Restricted Delivery
☐ ail
☐ ail Restricted Delivery (over $500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

400 Industry Drive | Suite 200 | Pittsburgh, PA 15275

December 29, 2021

Entech No. 4631.012

Greenville Planning Commission
125 Main Street
Greenville, PA 16125

Re: Greenville Municipal Water Authority
NPDES Permit Renewal Application
Mercer County, Pennsylvania

Dear Commissioners:

On behalf of Greenville Municipal Water Authority and in compliance with Act 14 of the Commonwealth of Pennsylvania's Administrative Code, notice is hereby given to file the NPDES Permit Renewal Application to the Pennsylvania Department of Environmental Protection for the following water system improvements:

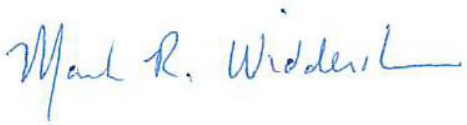
Applicant Name:	Greenville Municipal Water Authority
Applicant Contact:	Carol Paul, Authority Manager 724-588-4340
Project Location:	Greenville WTP
Project Description:	NPDES Permit No. PA0221970 Renewal

Acts 67, 68, and 127, which amended the Municipalities Planning Code to support sound land use practices and planning efforts, direct state agencies to consider comprehensive plans and zoning ordinances when reviewing applications for permitting of facilities or infrastructure and specify that state agencies may rely upon comprehensive plans and zoning ordinances under certain conditions as described in Sections 619.2 and 1105 of the Municipalities Planning Code. Acts 67, 68, and 127 went into effect in 2000.

Enclosed is a General Information Form (GIF) that has been completed for this project and a Municipal Land Use Letter. You are invited to complete the Municipal Land Use Form and to identify any land use concerns or issues related to this project; please be specific when identifying any areas of conflict. You are encouraged to send the Municipal Land Use Form to Entech Engineering, Inc. (Entech) with as much information as necessary to support any comments made in the Municipal Land Use Form, including copies of applicable ordinances, appropriate sections of your comprehensive plan, efforts to preserve farmland and open space, and locally designated growth areas or Keystone Opportunity Zones and similar information.

In addition to any information submitted to Entech, please submit your comments concerning this project within 30 days from date of receipt of this letter to: PADEP Northwest Regional Office, 220 Chestnut Street, Meadville, PA 16335. If there are no comments received by the end of the comment period, Entech and PADEP will assume that there are no substantive land use conflicts and proceed with the normal application review process.

Sincerely,



Mark R. Widdersheim, PE
Senior Project Engineer

Enclosures: General Information Form (GIF)
Location Exhibit (EXH-1)
Municipal Land Use Form

via e-mail to: info@greenvilleborough.com

GREENVILLE MUNICIPAL WATER AUTHORITY
NPDES PERMIT NO. PA0221970 RENEWAL APPLICATION
MUNICIPAL LAND USE LETTER

Date:

To: Entech Engineering, Inc. – Mark R. Widdersheim

From: Borough of Greenville

Re: Greenville Municipal Water Authority – NPDES Permit No. PA0221970 Renewal Application
Entech No. 4631.012

The municipality of Greenville states that it:
_____ has adopted a municipal or multi-municipal comprehensive plan.
If yes, please provide date of adoption: _____

_____ has not adopted a municipal or multi-municipal comprehensive plan.

The municipality of Greenville states that it:
_____ has adopted a county zoning ordinance, or a municipal or joint-municipal zoning ordinance.
_____ has not adopted a county zoning ordinance, or a municipal or joint-municipal zoning ordinance.

If applicable:

The municipality of Greenville states that its zoning ordinance is generally consistent with its municipal comprehensive plan and the county comprehensive plan.

The above referenced proposed project
_____ meet the provisions of the local zoning ordinance

If zoning approval is required for the project to proceed, the above referenced project:
_____ has received zoning approval.
_____ has not received zoning approval.

If the proposed project has not received zoning approval:

What is the status of the zoning request for the proposed project? (e.g., Special Exception Approval from the Zoning Hearing Board required, Conditional Use approval from the Governing Body required)

_____

_____

_____

_____

_____

_____

Is there a legal challenge by the applicant with regard to zoning for the proposed project?

Name and Contact Information for Municipal Zoning Officer:

Additional Comments (attach additional sheets if necessary):

Submitted By:

Name	
Title	
Contact Information (Address & Phone)	
Signature	
Date	

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This form is used by the Department of Environmental Protection (DEP) to inform our programs regarding what other DEP permits or authorizations may be needed for the proposed project or activity. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the DEP.

Related ID#s (If Known)				DEP USE ONLY
Client ID#	25179	APS ID#		Date Received & General Notes
Site ID#	262460	Auth ID#		
Facility ID#	281183			

CLIENT INFORMATION

DEP Client ID#	Client Type / Code	Dun & Bradstreet ID#
25179	AUTH	

Legal Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Is the EIN a SSN?
Greenville Municipal Water Authority		☐ Yes ☐ NO

State of Incorporation or Registration of Fictious Name
Pennsylvania

☒ Corporation ☐ LLC ☐ Partnership ☐ LLP ☐ LP
☐ Sole Proprietorship ☐ Association/Organization
☐ Estate/Trust ☐ Other

Individual Last Name	First Name	MI	Suffix
Paul	Carol		
Additional Individual Last Name	**First Name**	**MI**	**Suffix**

Mailing Address Line 1	Mailing Address Line 2
44 Clinton Street	

Address Last Line – City	State	ZIP+4	Country
Greenville	PA	16125	USA

Client Contact Last Name	First Name	MI	Suffix
Paul	Carol		

Client Contact Title	Phone	Ext	Cell Phone
Authority Manager	724-588-4340		

Email Address	FAX
carol.paul@gmwa.info	724-588-7868

SITE INFORMATION

DEP Site ID#	Site Name
262460	Greenville Water Treatment Plant

EPA ID# **Estimated Number of Employees to be Present at Site** 5-6

Description of Site
A 2.0 MGD surface water filtration plant that serves the greater Greenville Borough area with potable water.

Tax Parcel ID(s): 55 516 088 001

County Name(s)	Municipality(ies)	City	Boro	Twp	State
Mercer	Greenville	☐	☒	☐	PA
		☐	☐	☐	
		☐	☐	☐	
		☐	☐	☐	

Site Location Line 1	Site Location Line 2
44 Clinton St	

Site Location Last Line – City	State	ZIP+4
Greenville	PA	16125

Detailed Written Directions to Site
From I-79N, exit onto SR358 W towards Greenville, take a left on S Water Street and the WTP will be on your right. Note that the WTP site is located on S Water Street adjacent to the Municipal offices on Clinton Street, but both parcels are listed as 44 Clinton Street.

Site Contact Last Name	First Name	MI	Suffix
Paul	Carol		

Site Contact Title	Site Contact Firm
Authority Manager	Greenville Municipal Water Authority

Mailing Address Line 1	Mailing Address Line 2
44 Clinton Street	

Mailing Address Last Line – City	State	ZIP+4
Greenville	PA	16125

Phone	Ext	FAX	Email Address
724-588-4340		724-588-7868	carol.paul@gmwa.info

NAICS Codes (Two- & Three-Digit Codes – List All That Apply): 221 310 — **6-Digit Code** (Optional)

Client to Site Relationship: OWNOP

FACILITY INFORMATION

Modification of Existing Facility	Yes	No
1. Will this project modify an existing facility, system, or activity?	☐	☒
2. Will this project involve an addition to an existing facility, system, or activity?	☐	☒

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

	Facility Type	DEP Fac ID#		Facility Type	DEP Fac ID#
☐	Air Emission Plant		☐	Industrial Minerals Mining Operation	
☐	Beneficial Use (water)		☐	Laboratory Location	
☐	Blasting Operation		☐	Land Recycling Cleanup Location	
☐	Captive Hazardous Waste Operation		☐	Mine Drainage Treatment / Land Recycling Project Location	
☐	Coal Ash Beneficial Use Operation		☐	Municipal Waste Operation	
☐	Coal Mining Operation		☐	Oil & Gas Encroachment Location	
☐	Coal Pillar Location		☐	Oil & Gas Location	
☐	Commercial Hazardous Waste Operation		☐	Oil & Gas Water Poll Control Facility	
☐	Dam Location		☒	Public Water Supply System	
☐	Deep Mine Safety Operation -Anthracite		☐	Radiation Facility	
☐	Deep Mine Safety Operation -Bituminous		☐	Residual Waste Operation	
☐	Deep Mine Safety Operation -Ind Minerals		☐	Storage Tank Location	
☐	Encroachment Location (water, wetland)		☐	Water Pollution Control Facility	
☐	Erosion & Sediment Control Facility		☐	Water Resource	
☐	Explosive Storage Location		☐	Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
WTP Centroid	41	24	8	-80	23	26

Horizontal Accuracy Measure: Feet --or-- Meters

Horizontal Reference Datum Code
- ☐ North American Datum of 1927
- ☐ North American Datum of 1983
- ☐ World Geodetic System of 1984

Horizontal Collection Method Code

Reference Point Code

Altitude: Feet --or-- Meters

Altitude Datum Name
- ☐ The National Geodetic Vertical Datum of 1929
- ☐ The North American Vertical Datum of 1988 (NAVD88)

Altitude (Vertical) Location Datum Collection Method Code

Geometric Type Code

Data Collection Date

Source Map Scale Number: Inch(es) = Feet
--or-- Centimeter(s) = Meters

PROJECT INFORMATION

Project Name			
Greenville WTP NPDES Permit Renewal			
Project Description			
NPDES Permit Renewal - PA0221970			
Project Consultant Last Name	**First Name**	**MI**	**Suffix**
Widdersheim	Mark	R	
Project Consultant Title	**Consulting Firm**		
Senior Project Engineer	Entech Engineering		
Mailing Address Line 1	**Mailing Address Line 2**		
400 Industry Drive	Suite 200		
Address Last Line – City	**State**	**ZIP+4**	
Pittsburgh	PA	15275	

Phone	**Ext**	**FAX**	**Email Address**
800-825-1372	1507	412-264-2850	mwiddersheim@entecheng.com

Time Schedules	**Project Milestone (Optional)**
May 4, 2022	Submittal of Renewal Package to PADEP 180 Days in Advance of Expiration

1. Is the project located in or within a 0.5-mile radius of an Environmental Justice community as defined by DEP? ☒ Yes ☐ No

To determine if the project is located in or within a 0.5-mile radius of an environmental justice community, please use the online Environmental Justice Areas Viewer.

2. Have you informed the surrounding community prior to submitting the application to the Department? ☒ Yes ☐ No

Method of notification: Act 14 Notification Letters

3. Have you addressed community concerns that were identified? ☐ Yes ☐ No ☒ N/A

If no, please briefly describe the community concerns that have been expressed and not addressed.

4. Is your project funded by state or federal grants? ☐ Yes ☒ No

Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

Aspect of Project Related to Grant

Grant Source: _____

Grant Contact Person: _____

Grant Expiration Date: _____

5. Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions) ☐ Yes ☒ No

Note: If "No" to Question 5, the application is not subject to the Land Use Policy.
If "Yes" to Question 5, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants should submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1.	**Is there an adopted county or multi-county comprehensive plan?**	☒	Yes	☐	No
2.	**Is there a county stormwater management plan?**	☒	Yes	☐	No
3.	**Is there an adopted municipal or multi-municipal comprehensive plan?**	☒	Yes	☐	No
4.	**Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance?** **Note:** If the Applicant answers "No" to either Questions 1, 3 or 4, the provisions of the PA MPC are not applicable and the Applicant does not need to respond to questions 5 and 6 below. If the Applicant answers "Yes" to questions 1, 3 and 4, the Applicant should respond to questions 5 and 6 below.	☒	Yes	☐	No
5.	**Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval?** If zoning approval has been received, attach documentation.	☒	Yes	☐	No
6.	**Have you attached Municipal and County Land Use Letters for the project?**	☐	Yes	☒	No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 utilizing the Project Review Form.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	**Is this a coal mining project?** If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	☐	Yes	☒	No
1.1	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?**	☐	Yes	☐	No
1.2	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?**	☐	Yes	☐	No
1.3	**Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?**	☐	Yes	☐	No
1.4	**For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
1.5	**Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
1.6	**Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?**	☐	Yes	☐	No
2.0	**Is this a non-coal (industrial minerals) mining project?** If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	☐	Yes	☒	No
2.1	**Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?**	☐	Yes	☐	No
2.2	**Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?**	☐	Yes	☐	No

2.3	**Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?**	☐	Yes	☐	No
2.4	**For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
2.5	**Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
3.0	**Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well?** If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	☐	Yes	☒	No
3.1	**Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?**	☐	Yes	☐	No
3.2	**Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?** If "Yes", discuss in *Project Description*.	☐	Yes	☐	No
3.3	**Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☐	No
4.0	**Will the project involve a construction activity that results in earth disturbance?** If "Yes", specify the total disturbed acreage.	☐	Yes	☒	No
	4.0.1 Total Disturbed Acreage				
	4.0.2 Will the project discharge or drain to a special protection water (EV or HQ) or an EV wetland?	☐	Yes	☐	No
	4.0.3 Will the project involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively?	☐	Yes	☐	No
5.0	**Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility?** If "Yes", respond to 5.1-5.7. If "No", skip to Question 6.0.	☐	Yes	☒	No
5.1	**Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?**	☐	Yes	☐	No
5.2	**Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?**	☐	Yes	☐	No
5.3	**Floodplain Projects by the Commonwealth, a Political Subdivision of the Commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?**	☐	Yes	☐	No
5.4	**Is your project an interstate transmission natural gas pipeline?**	☐	Yes	☐	No

5.5	**Does your project consist of linear construction activities which result in earth disturbance in two or more DEP regions AND three or more counties?**	☐	Yes	☐	No
5.6	**Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
5.7	**Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?**	☐	Yes	☐	No
6.0	**Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?**	☐	Yes	☒	No
6.1	**Will the project involve discharge of industrial waste stormwater or wastewater from an industrial activity or sewage to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?**	☐	Yes	☐	No
7.0	**Will the project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☒	No
8.0	**Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations?** If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the *Project Description*, where applicable. **8.0.1 Estimated Proposed Flow (gal/day)**	☐	Yes	☒	No
9.0	**Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?**	☐	Yes	☒	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	☐	Yes	☐	No
10.0	**Is this project for the beneficial use of biosolids for land application within Pennsylvania?** If "Yes" indicate how much (i.e. gallons or dry tons per year). **10.0.1 Gallons Per Year (residential septage)** _____ **10.0.2 Dry Tons Per Year (biosolids)**	☐	Yes	☒	No
11.0	**Does the project involve construction, modification or removal of a dam?** If "Yes", identify the dam. **11.0.1 Dam Name**	☐	Yes	☒	No
12.0	**Will the project interfere with the flow from, or otherwise impact, a dam?** If "Yes", identify the dam. **12.0.1 Dam Name**	☐	Yes	☒	No
13.0	**Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?**	☐	Yes	☒	No
	13.0.1 If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1?	☐	Yes	☐	No
	13.0.2 If the answer to 13.0.1 is "No", identify each type of emission followed by the estimated amount of that emission. **Enter all types & amounts of emissions; separate each set with semicolons.**				

14.0	**Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year?** If "Yes", check all proposed sub-facilities.	☐	Yes	☒	No
	14.0.1 Number of Persons Served _____				
	14.0.2 Number of Employee/Guests _____				
	14.0.3 Number of Connections _____				
	14.0.4 Sub-Fac: Distribution System	☐	Yes	☐	No
	14.0.5 Sub-Fac: Water Treatment Plant	☐	Yes	☐	No
	14.0.6 Sub-Fac: Source	☐	Yes	☐	No
	14.0.7 Sub-Fac: Pump Station	☐	Yes	☐	No
	14.0.8 Sub Fac: Transmission Main	☐	Yes	☐	No
	14.0.9 Sub-Fac: Storage Facility	☐	Yes	☐	No
15.0	**Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?**	☐	Yes	☒	No
16.0	**Is your project to be served by an existing public water supply?** If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project.	☐	Yes	☒	No
	16.0.1 Supplier's Name _____				
	16.0.2 Letter of Approval from Supplier is Attached	☐	Yes	☐	No
17.0	**Will this project be served by on-lot drinking water wells?**	☐	Yes	☒	No
18.0	**Will this project involve a new or increased drinking water withdrawal from a river, stream, spring, lake, well or other water bod(ies)?** If "Yes", reference Safe Drinking Water Program.	☐	Yes	☒	No
	18.0.1 Source Name				
19.0	**Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste?** If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed.	☐	Yes	☒	No
	19.0.1 Type & Amount				
20.0	**Will your project involve the removal of coal, minerals, contaminated media, or solid waste as part of any earth disturbance activities?**	☐	Yes	☒	No
21.0	**Does your project involve installation of a field constructed underground storage tank?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	21.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
22.0	**Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	22.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
23.0	**Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	23.0.1 Enter all substances & capacity of each; separate each set with semicolons.				

24.0	**Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **24.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No

NOTE: If the project includes the installation of a regulated storage tank system, including diesel emergency generator systems, the project may require the use of a Department Certified Tank Handler. For a full list of regulated storage tanks and substances, please go to www.dep.pa.gov search term storage tanks

25.0	**Will the intended activity involve the use of a radiation source?**	☐	Yes	☒	No

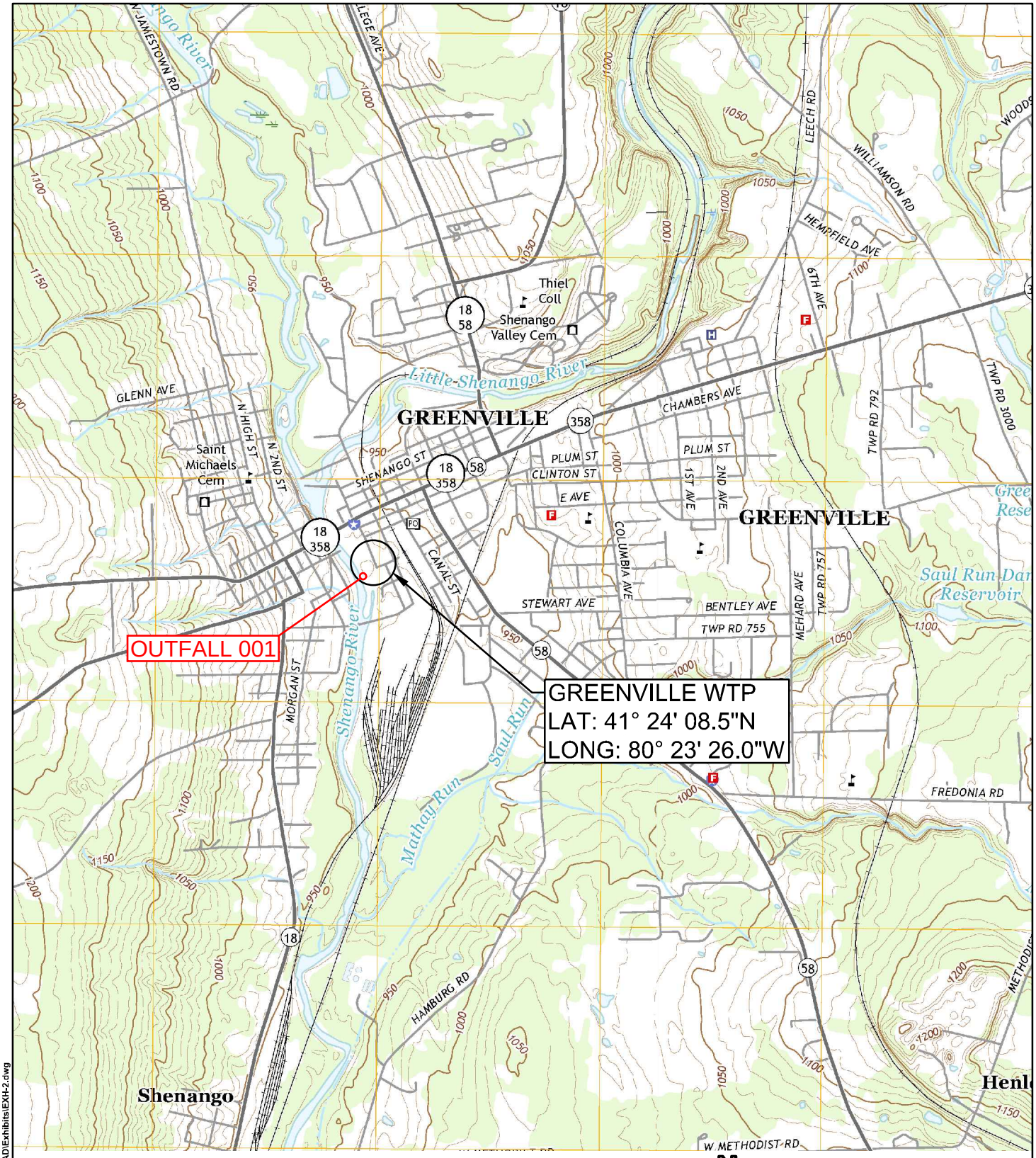
CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

For applicants supplying an EIN number: I am applying for a permit or authorization from the Pennsylvania Department of Environmental Protection (DEP). As part of this application, I will provide DEP with an accurate EIN number for the applicant entity. By filing this application with DEP, I hereby authorize DEP to confirm the accuracy of the EIN number provided with the Pennsylvania Department of Revenue. As applicant, I further consent to the Department of Revenue discussing the same with DEP prior to issuance of the Commonwealth permit or authorization.

Type or Print Name Mark R. Widdersheim, PE

Signature	Title	Date
Mark R. Widdersheim	Senior Project Engineer	12/29/2021



1 LOCATION MAP

SCALE: 1" = 2000'

0 2000' 4000'

N

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ENTECH ENGINEERING 1.800.825.1372 www.entecheng.com

GREENVILLE MUNICIPAL WATER AUTHORITY
GREENVILLE, MERCER COUNTY, PENNSYLVANIA
GREENVILLE WTP
LOCATION EXHIBIT

DATE:	SCALE: AS NOTED
PREPARED BY: PDM	PROJECT NO.
CHECKED BY: XXX	DRAWING NO. EXH-1
APPROVED BY: XXX	

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Greenville PA 16125

OFFICIAL USE

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- Certified Mail Restricted Delivery $ $0.00
- Adult Signature Required $ $0.00
- Adult Signature Restricted Delivery $

Postage $1.56

Total $8.36

DEC 29 2021 Postmark Here

0226 35

12/29/2021

Sen

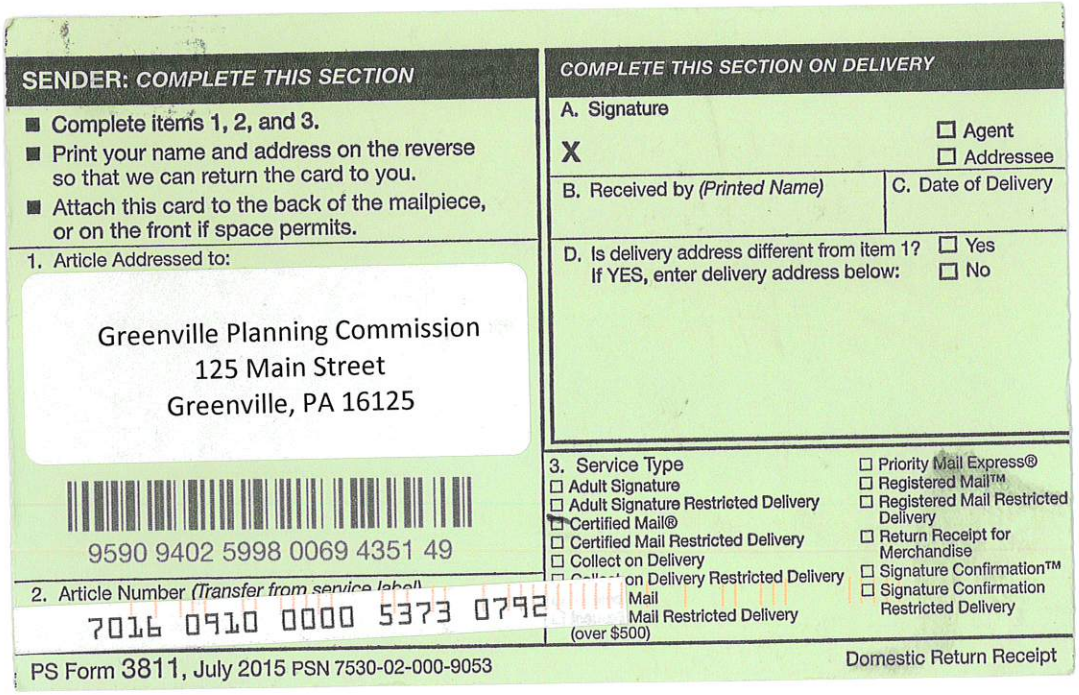
Stre

City,

Greenville Planning Commission
125 Main Street
Greenville, PA 16125

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 0910 0000 5373 0792



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Greenville Planning Commission
125 Main Street
Greenville, PA 16125

9590 9402 5998 0069 4351 49

2. Article Number (Transfer from service label)
7016 0910 0000 5373 0792

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☑ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Mail
- ☐ Mail Restricted Delivery (over $500)
- ☐ Priority Mail Express®
- ☐ Registered Mail™
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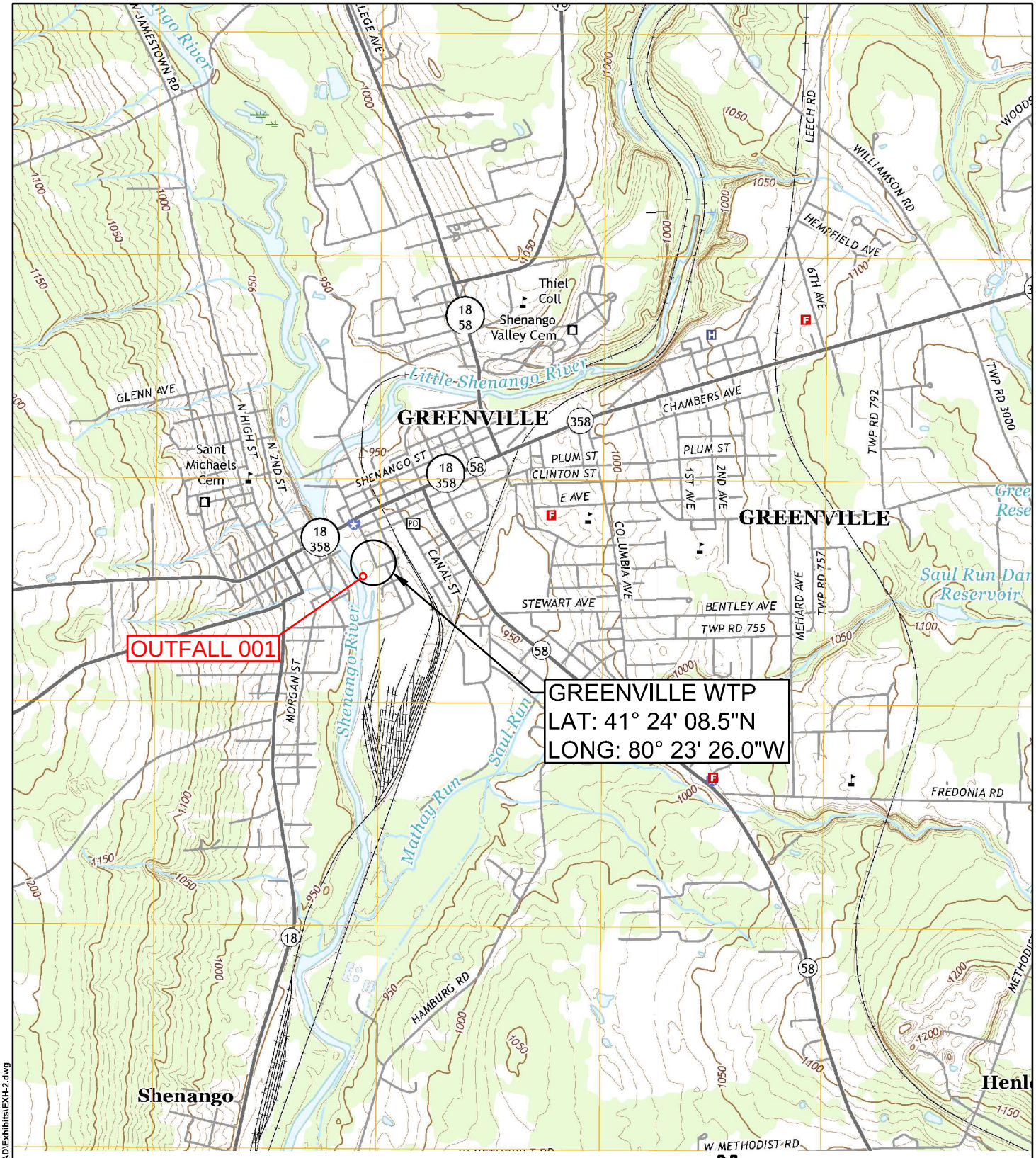
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

Returned unsigned.

4 Site Plan and Topographic Map



1 LOCATION MAP

SCALE: 1" = 2000'

0 2000' 4000'

N

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GREENVILLE MUNICIPAL WATER AUTHORITY
GREENVILLE, MERCER COUNTY, PENNSYLVANIA
GREENVILLE WTP
LOCATION EXHIBIT

DATE:	SCALE: AS NOTED
PREPARED BY: PDM	PROJECT NO.
CHECKED BY: XXX	DRAWING NO. EXH-1
APPROVED BY: XXX	

1 **SITE PLAN**

SCALE: 1" = 50'-0"

0 50' 100'

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GREENVILLE MUNICIPAL WATER AUTHORITY

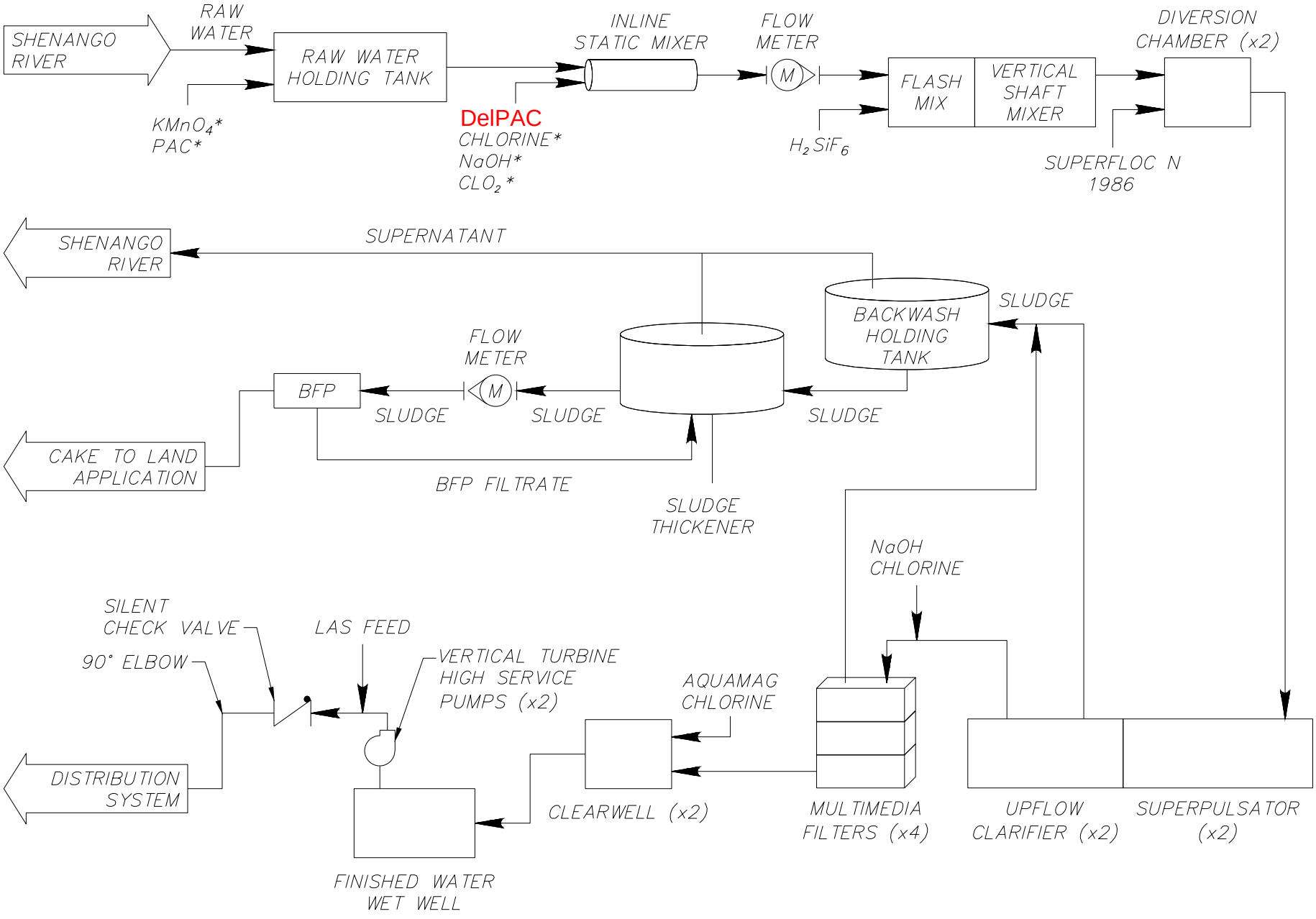
PROJECT TITLE

GREENVILLE - 2022 NPDES PERMIT RENEWAL

SITE PLAN EXHIBIT

DATE: XXXXX	SCALE: AS NOTED
PREPARED BY: SAB	PROJECT NO. 4631.012
CHECKED BY: MRW	DRAWING NO. EXH-2
APPROVED BY: MRW	

5 Process Flow Diagram



* – NOT CURRENTLY FED

SCALE: AS NOTED
PROJECT NO. 4631.012
DRAWING NO. EXH-3
DATE: XXXXX
PREPARED BY: SAB
CHECKED BY: MRW
APPROVED BY: MRW

GREENVILLE MUNICIPAL WATER AUTHORITY
PROJECT TITLE
GREENVILLE - 2022 NPDES PERMIT RENEWAL
PROCESS FLOW DIAGRAM

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6 Process Narrative

The Greenville Municipal Water Authority (GMWA) provides drinking water for about 2,600 customers located in Hempfield Township, West Salem Township, and the Borough of Greenville in northwest Mercer County, Pennsylvania. The GMWA public water system is supplied by a 2.0-MGD rapid filtration plant, which withdraws raw water from the Shenango River and utilizes Super-Pulsator clarifiers and Greenleaf dual-media filters for treatment.

The GMWA WTP has the ability to feed the following chemicals throughout the process. These chemical feeds are shown in the treatment schematic attached to this permit application under Tab 5:

- Potassium Permanganate (oxidation)
  - Raw water holding tank
- DelPAC (coagulation)
  - Prior to flash mix
- Gaseous Chlorine (oxidation, primary disinfection)
  - Prior to flash mix
  - Applied water (top of filters)
  - Combined filter effluent
- Sodium Hydroxide (pH and alkalinity adjustment)
  - Prior to flash mix
  - Applied water (top of filters)
- Superfloc N 1986 Polymer (coagulant aid)
  - Prior to Super-Pulsator clarifiers
- Hydrofluorosilicic Acid (fluoridation)
  - Added in flash mix
- AquaMag Blended Phosphate (corrosion control)
  - Combined filter effluent
- Liquid Ammonium Sulfate (secondary disinfection)
  - Clearwell effluent

Following disinfection, finished water pumps transmit water from the WTP into the western side of the distribution system, where it is either stored in one of the three (3) West Tanks, consumed, or pumped into the eastern side of the distribution system. The West Tank gallery consists of two (2) 750,000 gallon tanks, and one (1) 250,000-gallon tank. Once in the eastern side of the system, the water is then either stored in one of the two (2) East Tanks, or

consumed. The East Tank gallery consists of one (1) 250,000-gallon tank and one (1) 1,000,000-gallon tank.

Blowdown from the Super-Pulsator clarifiers, backwash water from the Greenleaf dual-media filters, and filtrate from the belt filter press filtrate are directed to a backwash holding tank and thickener system for gravity solids separation. Sludge from the thickener is further processed through the belt filter press; dewatered solids from the press are landfilled off-site. Supernatant from the holding tank and thickener are directed to Outfall 001 on the Shenango River under NPDES Permit No. 0221970.

7 Compiled Effluent and Process Data

TABLE 7-1
GROUP 1 POLLUTANT SUMMARY: OUTFALL 001 AND PROCESS SAMPLES
2022 NPDES PERMIT RENEWAL
GREENVILLE MUNICIPAL WATER AUTHORITY
GREENVILLE, PENNSYLVANIA

PARAMETER	UNITS	OUTFALL 001 EFFLUENT			PROCESS SAMPLES		
					BW INFLUENT	BD INFLUENT	BFP INFLUENT
		2/23/2022	3/2/2022	3/16/2022	2/23/2022	3/2/2022	3/16/2022
GROUP 1 POLLUTANTS							
Biochemical Oxygen Demand	mg/l	<2.40	<2.14	<2.40	<40.0	6.42	<2.40
Chemcial Oxygen Demand	mg/l	<15.0	<15.0	<15.0	<15.0	20.5	15.9
Total Organic Carbon	mg/l	2.35	2.63	2.64	4.21	3.94	4.77
Total Suspended Solids	mg/l	4.00	<1.60	<1.60	60.0	31.0	90.0
Ammonia (as N)	mg/l	<0.04750	<0.04750	<0.04750	<0.04750	<0.04750	0.06500
Temperature	deg C	5.60	4.30	6.70	5.60	4.10	7.10
pH - Field	SU	7.38	7.29	7.05	7.41	7.39	7.18
Fecal Coliform	MPN/100 ml	<1.0000	<1.0000	33.6	2.0000	152.30	<1.0000
Oil & Grease	mg/l	<4.75	<1.69	<1.67	<4.90	<1.69	<1.69
Residual Chlorine, Total	mg/l	1.25	<0.200	0.480	0.99	<0.200	0.450
Phosphorus	mg/l	0.0130	<0.0179	0.00900	0.0700	0.0700	0.184
Total Kjeldahl Nitrogen	mg/l	1.405	1.050	<0.5000	1.845	1.130	<1.000
Nitrate (as N)	mg/l	1.158	---	---	1.102	---	---
Nitrite (as N)	mg/l	<0.013	---	---	<0.013	---	---
Nitrate-Nitrite (as N)	mg/l	---	1.142	1.063	---	1.121	1.091
Total Dissolved Solids	mg/l	74.0	180	146	1080	132	140
True Color, Filtered	Color Units	<5.00	<5.00	33.0	<5.00	5.00	7.00
Bromide	mg/l	<0.072	<0.036	<0.072	<0.072	<0.036	<0.072
Chloride	mg/l	29.3	33.8	32.5	27.8	28.6	32.4
Sulfate (as SO_4)	mg/l	13.3	16.1	15.6	12.2	16.6	16.6
Sulfide	mg/l	<1.00	<0.0500	<0.0500	2.52	<0.0500	<0.0500
MBAS	mg/l	*	<0.0250	0.0310	0.0380	<0.0250	<0.0250
Fluoride	mg/l	0.893	0.952	1.29	1.14	1.07	1.39
Hardness	mg/l as $CaCO_3$	55.6	64.5	74.2	54.9	63.4	71.8

* Requested MBAS (surfactants) analysis for the 2/23/22 effuent sample was never logged by the laboratory and was not subsequently resampled.

TABLE 7-2
GROUP 2 POLLUTANT SUMMARY: OUTFALL 001 AND PROCESS SAMPLES
2022 NPDES PERMIT RENEWAL
GREENVILLE MUNICIPAL WATER AUTHORITY
GREENVILLE, PENNSYLVANIA

PARAMETER	UNITS	OUTFALL 001 EFFLUENT			PROCESS SAMPLES		
					BW INFLUENT	BD INFLUENT	BFP INFLUENT
		2/23/2022	3/2/2022	3/16/2022	2/23/2022	3/2/2022	3/16/2022
GROUP 2 POLLUTANTS							
Aluminum	ug/l	359	36.4	271	6240	26.4	12000
Antimony	ug/l	<0.200	<0.200	<1.00	<0.200	<0.200	<1.00
Arsenic, Total	ug/l	<0.5	<1.5	<0.5	0.76	0.52	1.4
Barium	ug/l	17.0	18.1	16.2	24.0	13.6	74.7
Beryllium	ug/l	<0.500	<0.676	<0.676	<0.500	<0.135	<0.676
Boron	ug/l	<100	<100	<100	<100	<100	<100
Cadmium	ug/l	<0.025	0.035	<0.123	0.041	0.043	<0.123
Chromium	ug/l	<1.99	<1.99	<1.99	<1.99	<1.99	<1.99
Chromium, Hexavalent	ug/l	<0.04	<0.25	<0.04	<0.25	<0.25	<0.04
Cobalt	ug/l	<0.400	<0.400	0.325	0.644	0.108	0.442
Copper	ug/l	<2.50	5.50	3.21	2.61	2.31	6.19
Cyanide	ug/l	<10	<10	<10	<10	<10	<10
Iron, Total	ug/l	47	<10	<10	870	190	860
Iron, Dissolved	ug/l	<20	<20	<20	<20	<20	<20
Lead	ug/l	<0.100	<0.100	<0.500	1.67	<0.100	2.75
Manganese	ug/l	115	109	626	419	142	979
Mercury	ug/l	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
Molybdenum	ug/l	0.252	0.279	<0.500	0.287	0.279	<0.500
Nickel	ug/l	0.931	<2.50	<2.50	2.60	1.51	<2.50
Phenolics	ug/l	<2	<5	<4	<2	8	4
Selenium	ug/l	<2.50	<2.50	<1.67	<2.50	<0.335	<1.67
Silver	ug/l	<0.274	<0.274	<1.37	<0.274	<0.274	<1.37
Thallium	ug/l	<0.100	<0.100	<0.500	<0.100	<0.100	<0.500
Zinc	ug/l	<2.50	11.8	6.60	15.2	27.7	14.2

8 Effluent and Process Water Analyses

2019 Ninth Avenue
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NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/16/22 17:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
Effluent	AWB4835-01	Water	Composite	02/23/22 09:00	02/23/22 14:50
Fecal	AWB4835-02	Water	Grab	02/23/22 10:00	02/23/22 14:50
Effluent Grab	AWB4835-03	Water	Grab	02/23/22 09:00	02/23/22 14:50

AWB4823-01 Nitrate + Nitrite (calculated): <1.171 mg/L

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/16/22 17:33

Client Sample ID: **Effluent**

Date/Time Sampled: 02/23/22 09:00

Laboratory Sample ID: **AWB4835-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
GENERAL CHEMISTRY - DUBOIS								
Biochemical Oxygen Demand	<2.40		2.40	mg/l	02/24/22 14:45	SM(22) 5210 B-2001	bek-D	AA, D4
Total Suspended Solids	4.00		2.50	mg/l	02/24/22 16:00	SM(22) 2540 D-1997	kjm-D	
Calculated Analytes								
Hardness	55.6	0.0657	2.07	mg equiv. CaCO3/L	02/24/22 23:56	CALC	rjd	
Conventional Chemistry Parameters by SM/EPA Methods								
Bromide	<0.072	0.072	0.400	mg/l	02/24/22 11:30	EPA 300.0/2.1	bdw	U
Chloride	29.3		2.00	mg/l	02/24/22 11:30	EPA 300.0/2.1	bdw	
Chemical Oxygen Demand	<15.0		15.0	mg/l	03/04/22 15:53	HACH 8000	djm	
True Color, Filtered	<5.00		5.00	Color Units	02/24/22 16:29	SM 2120 B-11	vdg	
Fluoride	0.893 J	0.099	2.00	mg/l	02/24/22 11:30	EPA 300.0/2.1	bdw	
Nitrate as N	1.158 J	0.085	2.000	mg/l	02/24/22 11:30	EPA 300.0/2.1	bdw	
Nitrite as N	<0.013	0.013	0.400	mg/l	02/24/22 11:30	EPA 300.0/2.1	bdw	U
Phosphorus	0.0130		0.0100	mg/l	02/25/22 10:19	EPA 365.3	sac	
Total Dissolved Solids	74.0		20.0	mg/l	02/24/22 16:00	SM 2540C-11	ark	
Sulfate as SO4	13.3		2.00	mg/l	02/24/22 11:30	EPA 300.0/2.1	bdw	
Sulfide	<1.00		1.00	mg/l	03/01/22 17:18	SM 4500 S2 F-11	nlk	

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/16/22 17:33

Client Sample ID: **Effluent**

Date/Time Sampled: 02/23/22 09:00

Laboratory Sample ID: **AWB4835-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Total Kjeldahl Nitrogen	1.405		0.5000	mg/l	03/09/22 11:11	SM 4500NorgC-11/ASTMD6919-09	MMD	
Total Organic Carbon	2.35		0.500	mg/l	03/02/22 16:00	SM 5310 C-11	bdw	
Metals by EPA 245.1								
Mercury	<0.000200		0.000200	mg/l	02/24/22 10:53	EPA 245.1/3.0	smh	
Metals by Prep Method EPA 200.8								
Silver	<0.274	0.274	0.500	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	U
Aluminum	359		20.0	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	T
Barium	17.0		2.50	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	
Beryllium	<0.500		0.500	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	F
Cadmium	<0.025	0.025	0.500	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	U
Cobalt	<0.400		0.400	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	
Copper	<2.50		2.50	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	
Manganese	115		10.0	ug/l	03/02/22 14:02	EPA 200.8/Rev. 5.4	TJO	

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/16/22 17:33

Client Sample ID: **Effluent**

Date/Time Sampled: 02/23/22 09:00

Laboratory Sample ID: **AWB4835-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Metals by Prep Method EPA 200.8								
Molybdenum	0.252		0.100	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	
Nickel	0.931		0.500	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	
Lead	<0.100		0.100	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	
Antimony	<0.200		0.200	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	
Selenium	<2.50		2.50	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	F
Thallium	<0.100		0.100	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	
Zinc	<2.50		2.50	ug/l	03/01/22 15:02	EPA 200.8/Rev. 5.4	TJO	
Metals by Prep Method EPA 200.2								
Boron	<0.100		0.100	mg/l	02/24/22 23:58	EPA 200.7/4.4	rjd	
Chromium	<0.00199	0.00199	0.00500	mg/l	02/24/22 23:58	EPA 200.7/4.4	rjd	U
Physical Parameters by APHA/ASTM/EPA Methods								
Ammonia as N	<0.04750	0.04750	0.1000	mg/l	03/08/22 00:17	ASTM D6919-09	MMD	U

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44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/16/22 17:33

Client Sample ID: **Effluent**

Date/Time Sampled: 02/23/22 09:00

Laboratory Sample ID: **AWB4835-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Metals								
Iron, Total	0.047	0.01	0.03	mg/L	03/02/22 14:02	EPA 200.7	SUB	C1a
Iron, Dissolved	<0.02	0.02	0.06	mg/L	03/02/22 15:46	EPA 200.7	SUB	Ua, C1a
Arsenic, Total	<0.0005	0.0005	0.0015	mg/L	03/09/22 15:02	EPA 200.8	SUB	Ua, C1a
Subcontracted General Chemistry								
Chromium VI	<0.00004	0.00004	0.00025	mg/l	02/28/22 16:44	EPA 218.6 Rev 3.3	SUB	C1

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44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/16/22 17:33

Client Sample ID: **Fecal**

Date/Time Sampled: 02/23/22 10:00

Laboratory Sample ID: **AWB4835-02 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
GENERAL MICROBIOLOGY - DUBOIS								
Fecal Coliform	<1.0000		1.0000	MPN/100 ml	02/23/22 15:40	Colilert-18	peg-D	

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Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/16/22 17:33

Client Sample ID: **Effluent Grab**

Date/Time Sampled: 02/23/22 09:00

Laboratory Sample ID: **AWB4835-03 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Cyanide (total)	<0.0100		0.0100	mg/l	03/05/22 15:56	SM 4500 CN C+E-11	djm	
Oil & Grease	<4.75		4.75	mg/l	03/01/22 10:20	EPA 1664B	evk	
Field Sampled Parameters								
pH- Field @ 5.6°C	7.38			pH Units	02/23/22 09:00	SM20-4500H + B FIELD	CLNT	
Residual Chlorine - Total	1.25		0.05	mg/l	02/23/22 09:00	SM 4500 Cl-G-11	CLNT	
Temperature	5.60		0.100	degrees C	02/23/22 09:00	SM 2550B-11	CLNT	

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Wet Chemistry								
Phenolics	<0.002	0.002	0.005	mg/L	03/02/22 16:01	EPA 420.4	SUB	Ua, C1a

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Greenville Water Authority		Project:	NPDES Permit Renewal
44 Clinton Street		Project Number:	[none]
Greenville, PA 16125		Collector:	Client
Project Manager:	Carol Paul	Number of Containers:	**Reported:** 03/16/22 17:33

Notes

AA	The seed correction factor was 0.53 mg/L which was less than the QC limits of 0.6-1.0 mg/L.
C1	This Sample was subcontracted to Laboratory ID# 06-00003
C1a	This Sample was subcontracted to Laboratory ID# 22-293
D4	This result is an estimated value because the sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2mg/L.
F	The Laboratory Control Sample (LCS) analyzed with this preparation batch recovered above the acceptance range for the noted analyte.
J	Detected between the Method Detection Limit (MDL) and the Reporting Limit (RL); therefore, the result is an estimated value.
T	Result was over the calibration range, but within the linear dynamic range of the instrument for the noted analyte.
U	Analysis has been reported to the Method Detection Limit (MDL). All reported result values that are less than the Reporting Limit (RL) are considered estimated values.
Ua	Indicates that the analyte was Not Detected (ND)

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	03/16/22 17:33

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

\+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
D: Indicates analysis performed by Fairway Laboratories, Inc., 40 Hoover Ave., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
E: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
P: Indicates analysis performed by Fairway Laboratories, Inc., 89 Kristi Rd., Pennsdale, PA 17756. PA DEP Chapter 252 certification: PA 41-04684.
W: Indicates analysis performed by Fairway Laboratories, Inc., 1980 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	03/16/22 17:33

Definitions Continued:

[CALC]	Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.
ND	Non Detect. The noted analyte was not detected in the sample.

(-) Method Revision Indicator - West Virginia Samples

EPA 8270D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8270E.
EPA 8260B - : Indicates that samples collected in West Virginia are analyzed by Method SW 8260D.
EPA 8015D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8015C.
EPA 1010 - : Indicates that samples collected in West Virginia are analyzed by Method SW 1010B.
EPA 6010B - : Indicates that samples collected in West Virginia are analyzed by Method SW 6010D.

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	03/16/22 17:33

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

CONFIDENTIALITY Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

CONTRACTS All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

PAYMENT/BILLING Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

SAMPLE COLLECTION AND SUBMISSION Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

SUBCONTRACTING Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

RETURN OF RESULTS Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

SAMPLE DISPOSAL Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

HAZARD COMMUNICATION The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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FAIRWAY LABORATORIES

40 Hoover Ave. Dubois, PA 15801

p: (814) 371-6030 f: (814) 375-0823

WWW.FAIRWAYLABORATORIES.COM

Pg 1 of 2

AWB4835

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☒

TURN AROUND TIME

☐ NORMAL

☒ RUSH

DATE REQUIRED ___ / ___ / _____

SAMPLER INITIALS

JJP & RWH

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

ANALYSES REQUESTED

INCLUDE ONE CONTAINER TYPE PER ROW

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	NPDES INDUSTRY GROUPS I-II	BOD	COD, Ammoina, Phosphorus, TKN, NO3+NO2	Hexavalent Chromium by 218.6 Diss	Sulfate, Fluoride, MBAS	TSS, TDS, Color, Bromide, Chloride	Sulfide	TOC	Total Ag, Al, As, Ba, Be, B, Cd, Cr, Co, Cu, Fe	Hardness, Hg, Mn, Mo, Ni, Pb, Sb, Se, Tl, Zn	Dissolved Iron Diss	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE
Effluent	W		X	2-22-22	0900	2-23-22	0900		X										1	500mL Poly NP
										X									1	250mL Poly H2SO4
											X								1	150mL Poly
											X								1	250mL Poly NP
												X	X						3	1L Poly NP
														X					1	1L Poly ZnAce + NaOH
															X				1	125mL Amber H2SO4
																X	(X)	X	2	250mL Poly HNO3

COMPLETE UPON LAB RECEIPT

COC ID# AWB4835

PAGE 1 OF 2

ON ICE (Y) N

TEMP #1

GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

TEMP °C	Indicate pH value			COC ID# FRACTION
3.7	<2	NP		01
	<2	NP		
	<2	NP		

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
JJP	2-23-22	10	Chad Holera	2-23-22	10:00
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holera	2-23-22	14:50
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES

Add Mark Emmert mwiddesheim@gmwa.org

CR6 FILTERED IN FIELD

DISS FE FILTERED & PRESERVED IN FIELD

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p: (814) 371-6030 f: (814) 375-0823
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LAB USE ONLY DO NOT WRITE IN THIS AREA

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☒

TURN AROUND TIME
☐ NORMAL
☒ RUSH
DATE REQUIRED ___ / ___ / ____

SAMPLER INITIALS: MM & Rich

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# AWB4835 Cont

PAGE 2 OF 2

ON ICE (Y) N

TEMP ~~#1~~

GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	Fecal	Oil & Grease	Total Cyanide	Phenolics	Total Residual Chlorine, pH mg	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value	COC ID# FRACTION
Fecal	W	X		NA	NA	2-23-22	10	X					1	120mL Bacti Na2S2O3	3.7	<2 NP	02
Effluent Grab	W	X		NA	NA	2-23-22	0900		X				2	1L Amber HCl	3.7	<2 NP	03
										X			1	250mL NaOH		<2 NP	
											X		1	1L Amber H2SO4		<2 NP	
												X	1	250mL Poly NP		<2 NP	
pH 2.38 Field												~~#1~~				<2 NP	
1.25ppm Total Chlorine												~~#1~~				<2 NP	
5.6°C Temperature												~~#1~~				<2 NP	
																<2 NP	
																<2 NP	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
MM Alcott	2-23-22	10	Chad Holera	2-23-22	10:00
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holera	2-23-22	14:50
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES
Add Mark email
mwiddersheim@entrienv.com

FLI SAMPLE RECEIPT PROTOCOL

WORK ORDER: AWB4835

CLIENT: Greenville Water Authority — Permit Renewal

DATE SAMPLED: 2-23-22 DATE RECEIVED: 2-23-22 TIME RECEIVED: 14:50

FAIRWAY LABORATORIES

1. CHECK ALL THAT APPLY: PA ☑ WV ☐ MD ☐ P W S ☐ NPDES/COMPLIANCE ☑ DAIRY ☐ RUSH ☐

2. WERE ANY OF THE SAMPLE CONTAINERS DAMAGED/LEAKING? (ARE CUSTODY SEALS BROKEN?) YES ☐ NO ☑

IF YES, EXPLAIN: _____

3. NUMBER OF CONTAINERS RECEIVED: 16

4. WERE THE SAMPLES RECEIVED ON ICE/OTHER ACCEPTABLE REFRIGERANT? YES ☑ NO ☐

IF NO, EXPLAIN: _____

5. RECEIVING TEMP: 3.7 °C TEMP CONTROL(S) PRESENT YES ☐ NO ☐ BOTTLE(S) TEMPED: 16

6. WERE THE SAMPLES PROPERLY PRESERVED? YES ☑ NO ☐

IF NO, EXPLAIN: _____

7. WERE THE SAMPLES COLLECTED IN THE CORRECT CONTAINERS? YES ☑ NO ☐

IF NO, EXPLAIN: _____

8. IS THERE HEADSPACE PRESENT FOR VOLATILES/ODOR SAMPLES? YES ☐ NO ☐ N/A ☑

9. WAS THE COC FILLED OUT PROPERLY? YES ☑ NO ☐

IF NO, EXPLAIN: _____

10. DID THE SAMPLE LABEL(S) CONTAIN ADEQUATE INFO? (CLIENT/DATE/TIME/PRESERVATIVE) YES ☑ NO ☐

IF NO, EXPLAIN: _____

11. WERE ANY OF THE SAMPLES RECEIVED OUTSIDE OF HOLDING TIME? YES ☐ NO ☑

IF YES, EXPLAIN: _____

12. DO THE SAMPLES REQUIRE ANALYSES THAT HAVE A SHORT HOLDING TIME? YES ☑ NO ☐

IF YES, WHAT ANALYSES? BOD, Cr_6, MBAS, Color, Fecal **PLEASE NOTIFY LABORATORY ANALYSTS!**

13. IS SUBCONTRACTING REQUIRED? YES ☑ NO ☐ JSA 2/24/22

IF YES, WHAT ANALYSES? Cr6, Fe, Cyanide, Phenol

14. WAS THE CLIENT CONTACTED? IF YES, FILL OUT THE FOLLOWING:

FLI EMPLOYEE INITIALS: CLIENT SPOKEN TO: DATE/TIME:

OUTCOME:

SIGNATURE: Chad Holena

L60.30.A r3 Sample Receipt Form

For FLI Use Only

2019 Ninth Avenue
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State Certifications: MD 275, WV 364

FAIRWAY LABORATORIES
www.fairwaylaboratories.com

Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/01/22 17:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
Effluent Comp	AWC0803-01	Water	Composite	03/02/22 09:00	03/02/22 15:50
Effluent Grab	AWC0803-02	Water	Grab	03/02/22 09:00	03/02/22 15:50

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

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Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/01/22 17:34

Client Sample ID: **Effluent Comp**

Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0803-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
GENERAL CHEMISTRY - DUBOIS								
Biochemical Oxygen Demand	<2.14		2.14	mg/l	03/03/22 11:05	SM(22) 5210 B-2001	bek-D	AA, D4
Calculated Analytes								
Hardness	64.5		2.07	mg equiv. CaCO3/L	03/07/22 19:11	CALC	seg	
Conventional Chemistry Parameters by SM/EPA Methods								
Bromide	<0.036	0.036	0.200	mg/l	03/04/22 17:56	EPA 300.0/2.1	bdw	U
Chloride	33.8		20.0	mg/l	03/04/22 18:12	EPA 300.0/2.1	bdw	
Chemical Oxygen Demand	<15.0		15.0	mg/l	03/10/22 14:19	HACH 8000	djm	
True Color, Filtered	<5.00		5.00	Color Units	03/04/22 08:20	SM 2120 B-11	vdg	H1
Fluoride	0.952 J	0.050	1.00	mg/l	03/04/22 17:56	EPA 300.0/2.1	bdw	
+ Methylene Blue Active Substances	<0.0250		0.0250	mg/l	03/04/22 08:54	SM 5540 C-11	djm	
Phosphorus	<0.0179	0.0179	0.0250	mg/l	03/04/22 13:05	EPA 365.3	sac	U
Total Dissolved Solids	180		20.0	mg/l	03/04/22 16:08	SM 2540C-11	ark	
Total Suspended Solids	<1.60		1.60	mg/l	03/08/22 10:45	SM 2540D-11	ark	
Sulfate as SO4	16.1		1.00	mg/l	03/04/22 17:56	EPA 300.0/2.1	bdw	
Sulfide	<0.0500		0.0500	mg/l	03/08/22 11:49	SM 4500 S2 D	nlk	

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Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported: 04/01/22 17:34

Client Sample ID: **Effluent Comp**

Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0803-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Total Kjeldahl Nitrogen	1.050		0.5000	mg/l	03/15/22 08:36	SM 4500NorgC-11/ASTMD6919-09	MMD	
Total Organic Carbon	2.63		0.500	mg/l	03/10/22 14:57	SM 5310 C-11	bdw	
Nitrate-Nitrite (as N)	1.142 J	0.09859	2.400	mg/l	03/09/22 18:59	EPA 300.0/2.1	bdw	C
Metals by EPA 245.1								
Mercury	<0.000200		0.000200	mg/l	03/04/22 11:44	EPA 245.1/3.0	smh	
Metals by Prep Method EPA 200.8								
Silver	<0.274	0.274	0.500	ug/l	03/15/22 18:36	EPA 200.8/Rev. 5.4	TJO	U
Aluminum	36.4		20.0	ug/l	03/15/22 18:36	EPA 200.8/Rev. 5.4	TJO	
Barium	18.1		2.50	ug/l	03/15/22 18:36	EPA 200.8/Rev. 5.4	TJO	
Beryllium	<0.676	0.676	2.50	ug/l	03/21/22 20:00	EPA 200.8/Rev. 5.4	TJO	U
Cadmium	0.035 J	0.025	0.500	ug/l	03/15/22 18:36	EPA 200.8/Rev. 5.4	TJO	
Cobalt	<0.400		0.400	ug/l	03/15/22 18:36	EPA 200.8/Rev. 5.4	TJO	
Copper	5.50 J	4.42	25.0	ug/l	03/23/22 10:47	EPA 200.8/Rev. 5.4	TJO	

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Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/01/22 17:34

Client Sample ID: **Effluent Comp**

Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0803-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Metals by Prep Method EPA 200.8								
Manganese	109		0.500	ug/l	03/15/22 18:36	EPA 200.8/Rev. 5.4	TJO	R
Molybdenum	0.279		0.100	ug/l	03/15/22 18:36	EPA 200.8/Rev. 5.4	TJO	
Nickel	<2.50		2.50	ug/l	03/21/22 20:00	EPA 200.8/Rev. 5.4	TJO	
Lead	<0.100		0.100	ug/l	03/15/22 18:36	EPA 200.8/Rev. 5.4	TJO	
Antimony	<0.200		0.200	ug/l	03/16/22 21:19	EPA 200.8/Rev. 5.4	TJO	
Selenium	<2.50		2.50	ug/l	03/16/22 21:19	EPA 200.8/Rev. 5.4	TJO	F
Thallium	<0.100		0.100	ug/l	03/15/22 18:36	EPA 200.8/Rev. 5.4	TJO	
Zinc	11.8		2.50	ug/l	03/16/22 21:19	EPA 200.8/Rev. 5.4	TJO	F
Metals by Prep Method EPA 200.2								
Boron	<0.100		0.100	mg/l	03/07/22 19:13	EPA 200.7/4.4	seg	
Calcium	19.3		0.500	mg/l	03/07/22 19:11	EPA 200.7/4.4	seg	
Chromium	<0.00199	0.00199	0.00500	mg/l	03/07/22 19:13	EPA 200.7/4.4	seg	U
Magnesium	3.97		0.200	mg/l	03/07/22 19:11	EPA 200.7/4.4	seg	
Physical Parameters by APHA/ASTM/EPA Methods								

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Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/01/22 17:34

Client Sample ID: **Effluent Comp**

Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0803-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Physical Parameters by APHA/ASTM/EPA Methods								
Ammonia as N	<0.04750	0.04750	0.1000	mg/l	03/12/22 00:26	ASTM D6919-09	MMD	U

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Metals								
Iron, Total	<0.01	0.01	0.03	mg/L	03/10/22 10:53	EPA 200.7	sub	Ua, C1a
Iron, Dissolved	<0.02	0.02	0.06	mg/L	03/11/22 10:30	EPA 200.7	sub	Ua, C1a
Arsenic, Total	<0.0015		0.0015	mg/L	03/11/22 18:23	EPA 200.8	sub	Ua, C1a
Subcontracted General Chemistry								
Chromium VI	<0.00025		0.00025	mg/l	03/16/22 14:35	EPA 218.6 Rev 3.3	sub	C1

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Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/01/22 17:34

Client Sample ID: **Effluent Grab**

Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0803-02 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
FIELD CHEMISTRY - DUBOIS								
Chlorine, Total Residual	<0.200		0.200	mg/l	03/02/22 09:00	SM(22) 4500-Cl G-2000	CLNT	
pH Field @ 4.3°C	7.29			pH Units	03/02/22 09:00	SM(22) 4500-H+ B-2000	CLNT	
Temperature	4.30		0.100	°C	03/02/22 09:00	SM 2550 B-2000	CLNT	
Conventional Chemistry Parameters by SM/EPA Methods								
Cyanide (total)	<0.0100		0.0100	mg/l	03/12/22 12:25	SM 4500 CN C+E-11	djm	
Oil & Grease	<1.69	1.69	4.90	mg/l	03/09/22 09:30	EPA 1664B	evk	U
GENERAL MICROBIOLOGY - DUBOIS								
Fecal Coliform	<1.0000		1.0000	MPN/100 ml	03/02/22 16:15	Colilert-18	peg-D	

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Wet Chemistry								
Phenolics	<0.005		0.005	mg/L	03/11/22 12:56	EPA 420.4	sub	Ua, C1a

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Greenville Water Authority		Project:	NPDES Permit Renewal
44 Clinton Street		Project Number:	[none]
Greenville, PA 16125		Collector:	Client
Project Manager:	Carol Paul	Number of Containers:	**Reported:** 04/01/22 17:34

Notes

AA	Seed correction factor was 0.57 mg/L which was less than the QC limits of 0.6-1.0 mg/L.
C	Nitrate + Nitrite analysis performed from a sulfuric acid preserved bottle.
C1	This Sample was subcontracted to Laboratory ID# 06-00003
C1a	This Sample was subcontracted to Laboratory ID# 22-293
D4	This result is an estimated value because the sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2mg/L.
F	The Laboratory Control Sample (LCS) analyzed with this preparation batch recovered above the acceptance range for the noted analyte.
H1	The pH of the sample at the time of color analysis: 11.84.
J	Detected between the Method Detection Limit (MDL) and the Reporting Limit (RL); therefore, the result is an estimated value.
R	The result was above the calibration range for the noted analyte; therefore it is an estimated value.
U	Analysis has been reported to the Method Detection Limit (MDL). All reported result values that are less than the Reporting Limit (RL) are considered estimated values.
Ua	Indicates that the analyte was Not Detected (ND)

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2019 Ninth Avenue
PO Box 1925
Altoona, PA 16603
(814) 946-4306

NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

www.fairwaylaboratories.com

Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	04/01/22 17:34

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

\+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
D: Indicates analysis performed by Fairway Laboratories, Inc., 40 Hoover Ave., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
E: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
P: Indicates analysis performed by Fairway Laboratories, Inc., 89 Kristi Rd., Pennsdale, PA 17756. PA DEP Chapter 252 certification: PA 41-04684.
W: Indicates analysis performed by Fairway Laboratories, Inc., 1980 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

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Greenville Water Authority		Project:	NPDES Permit Renewal
44 Clinton Street		Project Number:	[none]
Greenville, PA 16125		Collector:	Client
Project Manager:	Carol Paul	Number of Containers:	**Reported:** 04/01/22 17:34

Definitions Continued:

[CALC]	Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.
ND	Non Detect. The noted analyte was not detected in the sample.

(-) Method Revision Indicator - West Virginia Samples

EPA 8270D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8270E.
EPA 8260B - : Indicates that samples collected in West Virginia are analyzed by Method SW 8260D.
EPA 8015D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8015C.
EPA 1010 - : Indicates that samples collected in West Virginia are analyzed by Method SW 1010B.
EPA 6010B - : Indicates that samples collected in West Virginia are analyzed by Method SW 6010D.

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	04/01/22 17:34

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

CONFIDENTIALITY Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

CONTRACTS All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

PAYMENT/BILLING Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

SAMPLE COLLECTION AND SUBMISSION Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

SUBCONTRACTING Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

RETURN OF RESULTS Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

SAMPLE DISPOSAL Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

HAZARD COMMUNICATION The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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FAIRWAY LABORATORIES

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WWW.FAIRWAYLABORATORIES.COM

AWC0803

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☒

TURN AROUND TIME
☐ NORMAL
☒ RUSH
DATE REQUIRED ___/___/_____

SAMPLER INITIALS: WP & RCH

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

ANALYSES REQUESTED — INCLUDE ONE CONTAINER TYPE PER ROW

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# AWC0803

PAGE 1 OF 2

ON ICE (Y) N

TEMP #1

GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	NPDES INDUSTRY GROUPS I-II	BOD	COD, Ammoina, Phosphorus, TKN, NO3+NO2	Hexavalent Chromium by 218.6	Sulfate, Fluoride, MBAS	TSS, TDS, Color, Bromide, Chloride	Sulfide	TOC	Total Ag, Al, As, Ba, Be, B, Cd, Cr, Co, Cu, Fe	Hardness, Hg, Mn, Mo, Ni, Pb, Sb, Se, Tl, Zn	Dissolved Iron	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value			COC ID# FRACTION
Effluent	W		X	3-1-22	09:00	3-2-22	09:00		X										1	500mL Poly NP		<2	(NP)		01
										X									1	250mL Poly H2SO4		(<2)	NP		
											X								1	150mL Poly		<2	NP		
											X								1	250mL Poly NP		<2	NP		
												X	X						3	1L Poly NP		<2	(NP)		
														X					1	1L Poly ZnAce + NaOH		<2	NP		
															X				1	125mL Amber H2SO4	1.0	<2	NP		
																X	X	X	2	250mL Poly HNO3		(<2)	NP		
																						<2	NP		
																						<2	NP		

Add 2 mL 2:1 Acetic Acid to 1-as received bottle

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
WP Paul	3-2-2022	10:15	Chad Halera	3-2-22	10:15
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Halera 290	3-2-22	15:50
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES
Add March email 15
CR6 FILTERED IN FIELD
DISS FE FILTERED & PRESERVED IN FIELD

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LAB USE ONLY DO NOT WRITE IN THIS AREA

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☒

TURN AROUND TIME
☐ NORMAL
☑ RUSH
DATE REQUIRED ___ / ___ / _____

SAMPLER INITIALS JJP & RCH

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# Cont BWC0803

PAGE 2 OF 2

ON ICE (Y) N

TEMP #1
GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	Fecal	Oil & Grease	Total Cyanide	Phenolics	Total Residual Chlorine, pH	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value			COC ID# FRACTION
Fecal	W	X		NA	NA	3-2-22	09:00	X					1	120mL Bacti Na2S2O3	1.0	<2	NP		02
Effluent Grab	W	X		NA	NA	3-2-22	09:00		X				2	1L Amber HCl	1.0	<2	NP		
										X			1	250mL NaOH		<2	NP	>12	
											X		1	1L Amber H2SO4		<2	NP		
												X	1	250mL Poly NP		<2	(NP)		
																<2	NP		
pH >2.9																<2	NP		
Temp 4.3°C																<2	NP		
Tchlorine 0.06																<2	NP		
																<2	NP		

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Jeff Marcott	3-2-2022	10:15	Chad Halva	3-2-22	10:15
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Halva 290	3-2-22	15:50
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES
Add Mark M email

FLI SAMPLE RECEIPT PROTOCOL

WORK ORDER: AWC0803

CLIENT: Greenville Water Authority — Permit Renewal

DATE SAMPLED: 3-2-22 DATE RECEIVED: 3-2-22 TIME RECEIVED: 15:50

FAIRWAY LABORATORIES

1. CHECK ALL THAT APPLY: PA ☑ WV ☐ MD ☐ P W S ☐ NPDES/COMPLIANCE ☑ DAIRY ☐ RUSH ☐

2. WERE ANY OF THE SAMPLE CONTAINERS DAMAGED/LEAKING? (ARE CUSTODY SEALS BROKEN?) YES ☐ NO ☑

IF YES, EXPLAIN: _____

3. NUMBER OF CONTAINERS RECEIVED: 16

4. WERE THE SAMPLES RECEIVED ON ICE/OTHER ACCEPTABLE REFRIGERANT? YES ☑ NO ☐

IF NO, EXPLAIN: _____

5. RECEIVING TEMP: 1.0 °C TEMP CONTROL(S) PRESENT YES ☐ NO ☐ BOTTLE(S) TEMPED: 16

6. WERE THE SAMPLES PROPERLY PRESERVED? YES ☑ NO ☐

IF NO, EXPLAIN: _____

7. WERE THE SAMPLES COLLECTED IN THE CORRECT CONTAINERS? YES ☑ NO ☐

IF NO, EXPLAIN: _____

8. IS THERE HEADSPACE PRESENT FOR VOLATILES/ODOR SAMPLES? YES ☐ NO ☐ N/A ☑

9. WAS THE COC FILLED OUT PROPERLY? YES ☑ NO ☐

IF NO, EXPLAIN: _____

10. DID THE SAMPLE LABEL(S) CONTAIN ADEQUATE INFO? (CLIENT/DATE/TIME/PRESERVATIVE) YES ☑ NO ☐

IF NO, EXPLAIN: _____

11. WERE ANY OF THE SAMPLES RECEIVED OUTSIDE OF HOLDING TIME? YES ☐ NO ☑

IF YES, EXPLAIN: _____

12. DO THE SAMPLES REQUIRE ANALYSES THAT HAVE A SHORT HOLDING TIME? YES ☑ NO ☐

IF YES, WHAT ANALYSES? BOD, Cr_6, MBAS, Color, Fecal **PLEASE NOTIFY LABORATORY ANALYSTS!**

13. IS SUBCONTRACTING REQUIRED? YES ☐ NO ☑

IF YES, WHAT ANALYSES? _____

14. WAS THE CLIENT CONTACTED? IF YES, FILL OUT THE FOLLOWING:

FLI EMPLOYEE INITIALS: CLIENT SPOKEN TO: DATE/TIME:

OUTCOME:

SIGNATURE: Chad Kolena

L60.30.A r3 Sample Receipt Form

For FLI Use Only

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/27/22 14:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
Effluent Belt Filter Press Comp	AWC3746-01	Water	Composite	03/16/22 09:00	03/16/22 14:40
Effluent Belt Filter Press Grab	AWC3746-02	Water	Grab	03/16/22 09:00	03/16/22 14:40

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

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Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/27/22 14:49

Client Sample ID: **Effluent Belt Filter Press Comp**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3746-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
GENERAL CHEMISTRY								
Total Dissolved Solids (Residue, Filterable)	146		10.0	mg/l	03/21/22 15:00	SM(22) 2540 C-1997	kjm-D	
GENERAL CHEMISTRY - DUBOIS								
Biochemical Oxygen Demand	<2.40		2.40	mg/l	03/17/22 13:40	SM(22) 5210 B-2001	bek-D	D4
Calculated Analytes								
Hardness	74.2	0.0657	2.07	mg equiv. CaCO3/L	03/24/22 20:02	CALC	rjd	
Conventional Chemistry Parameters by SM/EPA Methods								
Bromide	<0.072	0.072	0.400	mg/l	03/18/22 20:37	EPA 300.0/2.1	bdw	U
Chloride	32.5		2.00	mg/l	03/18/22 20:37	EPA 300.0/2.1	bdw	
Chemical Oxygen Demand	<15.0		15.0	mg/l	03/25/22 16:29	HACH 8000	djm	
Fluoride	1.29 J	0.099	2.00	mg/l	03/18/22 20:37	EPA 300.0/2.1	bdw	
+ Methylene Blue Active Substances	0.0310		0.0250	mg/l	03/18/22 08:57	SM 5540 C-11	djm	H, K
Phosphorus	0.00900 J	0.00717	0.0100	mg/l	03/21/22 13:54	EPA 365.3	sac	
Total Suspended Solids	<1.60		1.60	mg/l	03/18/22 10:37	SM 2540D-11	ark	
Sulfate as SO4	15.6		2.00	mg/l	03/18/22 20:37	EPA 300.0/2.1	bdw	
Sulfide	<0.0500		0.0500	mg/l	03/22/22 14:45	SM 4500 S2 D	nlk	F

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Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/27/22 14:49

Client Sample ID: **Effluent Belt Filter Press Comp**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3746-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Total Kjeldahl Nitrogen	<0.5000		0.5000	mg/l	03/30/22 01:21	SM 4500NorgC-11/ASTMD6919-09	MMD	
Total Organic Carbon	2.64		0.500	mg/l	03/24/22 18:35	SM 5310 C-11	bdw	
Nitrate-Nitrite (as N)	1.063 J	0.09859	2.400	mg/l	03/22/22 17:45	EPA 300.0/2.1	bdw	C
Metals by EPA 245.1								
Mercury	<0.000200		0.000200	mg/l	03/22/22 12:21	EPA 245.1/3.0	smh	
Metals by Prep Method EPA 200.8								
Silver	<1.37	1.37	2.50	ug/l	04/15/22 13:36	EPA 200.8/Rev. 5.4	TJO	U
Aluminum	271		100	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	
Barium	16.2		12.5	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	
Beryllium	<0.676	0.676	2.50	ug/l	03/30/22 13:28	EPA 200.8/Rev. 5.4	TJO	U
Cadmium	<0.123	0.123	2.50	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	U
Cobalt	0.325 J	0.119	2.00	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	
Copper	3.21 J	2.21	12.5	ug/l	03/30/22 13:28	EPA 200.8/Rev. 5.4	TJO	

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Reported:
04/27/22 14:49

Client Sample ID: **Effluent Belt Filter Press Comp**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3746-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Metals by Prep Method EPA 200.8								
Manganese	626		12.5	ug/l	03/30/22 13:49	EPA 200.8/Rev. 5.4	TJO	T
Molybdenum	<0.500		0.500	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	
Nickel	<2.50		2.50	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	F
Lead	<0.500		0.500	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	
Antimony	<1.00		1.00	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	
Selenium	<1.67	1.67	12.5	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	U
Thallium	<0.500		0.500	ug/l	03/25/22 02:27	EPA 200.8/Rev. 5.4	TJO	
Zinc	6.60 J	3.54	12.5	ug/l	03/30/22 13:28	EPA 200.8/Rev. 5.4	TJO	
Metals by Prep Method EPA 200.2								
Boron	<0.100		0.100	mg/l	03/24/22 20:04	EPA 200.7/4.4	rjd	
Chromium	<0.00199	0.00199	0.00500	mg/l	03/24/22 20:04	EPA 200.7/4.4	rjd	U
Physical Parameters by APHA/ASTM/EPA Methods								
Ammonia as N	<0.04750	0.04750	0.1000	mg/l	04/01/22 23:05	ASTM D6919-09	mlf	U

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04/27/22 14:49

Client Sample ID: **Effluent Belt Filter Press Comp**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3746-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Metals								
Iron, Total	<0.01	0.01	0.03	mg/L	03/24/22 11:56	EPA 200.7	sub	C1a, Ua
Iron, Dissolved	<0.02	0.02	0.06	mg/L	03/24/22 14:44	EPA 200.7	sub	C1a, Ua
Arsenic, Total	<0.0005	0.0005	0.0015	mg/L	03/28/22 14:53	EPA 200.8	sub	C1a, Ua
Subcontracted General Chemistry								
Chromium VI	<0.00004	0.00004	0.00025	mg/l	03/24/22 17:21	EPA 218.6 Rev 3.3	sub	C1

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2019 Ninth Avenue
PO Box 1925
Altoona, PA 16603
(814) 946-4306

NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

FAIRWAY LABORATORIES
www.fairwaylaboratories.com

Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/27/22 14:49

Client Sample ID: **Effluent Belt Filter Press Grab**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3746-02 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
FIELD CHEMISTRY - DUBOIS								
Chlorine, Total Residual	0.480		0.200	mg/l	03/16/22 09:00	SM(22) 4500-Cl G-2000	CLNT	
Oxygen, Dissolved	12.0		0.500	mg/l	03/16/22 09:00	EPA 360.1	CLNT	
pH Field @ 6.7°C	7.05			pH Units	03/16/22 09:00	SM(22) 4500-H+ B-2000	CLNT	
Temperature	6.70		0.100	°C	03/16/22 09:00	SM 2550 B-2000	CLNT	
Conventional Chemistry Parameters by SM/EPA Methods								
Cyanide (total)	<0.0100		0.0100	mg/l	03/26/22 11:29	SM 4500 CN C+E-11	djm	
Oil & Grease	<1.67	1.67	4.85	mg/l	03/22/22 10:30	EPA 1664B	evk	U
GENERAL MICROBIOLOGY - DUBOIS								
Fecal Coliform	33.600		1.0000	MPN/100 ml	03/16/22 15:10	Colilert-18	peg-D	

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Wet Chemistry								
Phenolics	<0.004	0.004	0.005	mg/L	04/08/22 11:25	EPA 420.4	sub	C1a, Ua

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Greenville Water Authority		Project:	NPDES Permit Renewal
44 Clinton Street		Project Number:	[none]
Greenville, PA 16125		Collector:	Client
Project Manager:	Carol Paul	Number of Containers:	**Reported:** 04/27/22 14:49

Notes

C	Nitrate + Nitrite analysis performed from a sulfuric acid preserved bottle.
C1	This Sample was subcontracted to Laboratory ID# 06-00003
C1a	This Sample was subcontracted to Laboratory ID# 22-293
D4	This result is an estimated value because the sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2mg/L.
F	The Laboratory Control Sample (LCS) analyzed with this preparation batch recovered above the acceptance range for the noted analyte.
H	The spike recovery was above the acceptance range for the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) sample analyzed with the preparation batch.
J	Detected between the Method Detection Limit (MDL) and the Reporting Limit (RL); therefore, the result is an estimated value.
K	The RPD result exceeded the quality control limits for the duplicate, Laboratory Control Sample Duplicate (LCSD), or Matrix Spike Duplicate (MSD) sample analyzed with the preparation batch.
T	Result was over the calibration range, but within the linear dynamic range of the instrument for the noted analyte.
U	Analysis has been reported to the Method Detection Limit (MDL). All reported result values that are less than the Reporting Limit (RL) are considered estimated values.
Ua	Indicates that the analyte was Not Detected (ND)

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	04/27/22 14:49

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

\+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
D: Indicates analysis performed by Fairway Laboratories, Inc., 40 Hoover Ave., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
E: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
P: Indicates analysis performed by Fairway Laboratories, Inc., 89 Kristi Rd., Pennsdale, PA 17756. PA DEP Chapter 252 certification: PA 41-04684.
W: Indicates analysis performed by Fairway Laboratories, Inc., 1980 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

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Greenville Water Authority		Project:	NPDES Permit Renewal
44 Clinton Street		Project Number:	[none]
Greenville, PA 16125		Collector:	Client
Project Manager:	Carol Paul	Number of Containers:	**Reported:** 04/27/22 14:49

Definitions Continued:

[CALC]	Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.
ND	Non Detect. The noted analyte was not detected in the sample.

(-) Method Revision Indicator - West Virginia Samples

EPA 8270D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8270E.
EPA 8260B - : Indicates that samples collected in West Virginia are analyzed by Method SW 8260D.
EPA 8015D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8015C.
EPA 1010 - : Indicates that samples collected in West Virginia are analyzed by Method SW 1010B.
EPA 6010B - : Indicates that samples collected in West Virginia are analyzed by Method SW 6010D.

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	04/27/22 14:49

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

CONFIDENTIALITY Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

CONTRACTS All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

PAYMENT/BILLING Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

SAMPLE COLLECTION AND SUBMISSION Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

SUBCONTRACTING Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

RETURN OF RESULTS Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

SAMPLE DISPOSAL Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

HAZARD COMMUNICATION The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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FAIRWAY LABORATORIES

40 Hoover Ave. Dubois, PA 15801
p: (814) 371-6030 f: (814) 375-0823
WWW.FAIRWAYLABORATORIES.COM

AWC3746

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☐

TURN AROUND TIME: ☐ NORMAL ☐ RUSH (RUSH) DATE REQUIRED 3/30/22

SAMPLER INITIALS: JHD & Rich

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

ANALYSES REQUESTED — INCLUDE ONE CONTAINER TYPE PER ROW

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# AWC3746

PAGE 1 OF 2

ON ICE (Y) N

TEMP ~~4°C~~

GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	NPDES INDUSTRY GROUPS I-II	BOD	COD, Ammoina, Phosphorus, TKN, NO3+NO2	Hexavalent Chromium by 218.6	Sulfate, Fluoride, MBAS	TSS, TDS, Color, Bromide, Chloride	Sulfide	TOC	Total Ag, Al, As, Ba, Be, B, Cd, Cr, Co, Cu, Fe	Hardness, Hg, Mn, Mo, Ni, Pb, Sb, Se, Tl, Zn	Dissolved Iron	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value			COC ID# FRACTION
Effluent Belt filter Press	W		X	3-15-22	0900	3-16-22	0900		X										1	500mL Poly NP	1.3	<2	(NP)		01
										X									1	250mL Poly H2SO4		(<2)	NP		
											X								1	150mL Poly		<2	NP		
											X								1	250mL Poly NP		<2	NP		
												X	X						3	1L Poly NP		<2	(NP)		
														X					1	1L Poly ZnAce + NaOH		<2	NP	79	
															X				1	125mL Amber H2SO4		<2	NP		
																X	X	X	2	250mL Poly HNO3		(<2)	NP		
																						<2	NP		
																						<2	NP		

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
JHD Brown	3-16-22	10	Chad Holera	3-16-22	10:15
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holera 290	3-16-22	14:40
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES

CR6 FILTERED IN FIELD

DISS FE FILTERED & PRESERVED IN FIELD

FAIRWAY LABORATORIES

40 Hoover Ave. Dubois, PA 15801
p: (814) 371-6030 f: (814) 375-0823
WWW.FAIRWAYLABORATORIES.COM

on ice Y

LAB USE ONLY DO NOT WRITE IN THIS AREA

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☑

TURN AROUND TIME: ☐ ~~NORMAL~~ ☐ RUSH — RUSH

DATE REQUIRED: 3/30/22

SAMPLER INITIALS: JJA & RCH

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

ANALYSES REQUESTED — INCLUDE ONE CONTAINER TYPE PER ROW

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# Cont. AWC 3746

PAGE 2 OF 2

ON ICE (Y) N

TEMP #1

GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	Fecal	Oil & Grease	Total Cyanide	Phenolics	Total Residual Chlorine, pH	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value			COC ID# FRACTION
Fecal	W	X		NA	NA			X					1	120mL Bacti Na2S2O3	1.3	<2	NP		
									X				2	1L Amber HCl		<2	NP		02
Effluent Grab	W	X		NA	NA	3-16-22	0900			X			1	250mL NaOH	1.3	<2	NP	712	
Brit Filter Press											X		1	1L Amber H2SO4		<2	NP		
												X	1	250mL Poly NP	MB 3.17.22	<2	(NP)		
																<2	NP		
pH 7.05 SU																<2	NP		
Temperature 6.7																<2	NP		
T. Chlorine 0.48																<2	NP		
DO 12.03																<2	NP		

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	3-16-22	10	Chad Holera	3-16-22	10:15
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holera 290	3-16-22	14:40
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES

FLI SAMPLE RECEIPT PROTOCOL

WORK ORDER: AWC3746

CLIENT: Greenville — Permit Renewal

DATE SAMPLED: 3-16-22 DATE RECEIVED: 3-16-22 TIME RECEIVED: 14:40

FAIRWAY LABORATORIES

1. CHECK ALL THAT APPLY: PA ☑ WV ☐ MD ☐ P W S ☐ NPDES/COMPLIANCE ☑ DAIRY ☐ RUSH ☐

2. WERE ANY OF THE SAMPLE CONTAINERS DAMAGED/LEAKING? (ARE CUSTODY SEALS BROKEN?) YES ☐ NO ☑

IF YES, EXPLAIN: _____

3. NUMBER OF CONTAINERS RECEIVED: 16

4. WERE THE SAMPLES RECEIVED ON ICE/OTHER ACCEPTABLE REFRIGERANT? YES ☑ NO ☐

IF NO, EXPLAIN: _____

5. RECEIVING TEMP: 1.3 °C TEMP CONTROL(S) PRESENT YES ☐ NO ☐ BOTTLE(S) TEMPED: 16

6. WERE THE SAMPLES PROPERLY PRESERVED? YES ☑ NO ☐

IF NO, EXPLAIN: _____

7. WERE THE SAMPLES COLLECTED IN THE CORRECT CONTAINERS? YES ☑ NO ☐

IF NO, EXPLAIN: _____

8. IS THERE HEADSPACE PRESENT FOR VOLATILES/ODOR SAMPLES? YES ☐ NO ☐ N/A ☑

9. WAS THE COC FILLED OUT PROPERLY? YES ☑ NO ☐

IF NO, EXPLAIN: _____

10. DID THE SAMPLE LABEL(S) CONTAIN ADEQUATE INFO? (CLIENT/DATE/TIME/PRESERVATIVE) YES ☑ NO ☐

IF NO, EXPLAIN: _____

11. WERE ANY OF THE SAMPLES RECEIVED OUTSIDE OF HOLDING TIME? YES ☐ NO ☑

IF YES, EXPLAIN: _____

12. DO THE SAMPLES REQUIRE ANALYSES THAT HAVE A SHORT HOLDING TIME? YES ☑ NO ☐

IF YES, WHAT ANALYSES? BOD, Cr_6, MBAS, Color, Fecal **PLEASE NOTIFY LABORATORY ANALYSTS!**

13. IS SUBCONTRACTING REQUIRED? YES ☐ NO ☑

IF YES, WHAT ANALYSES? _____

14. WAS THE CLIENT CONTACTED? IF YES, FILL OUT THE FOLLOWING:

FLI EMPLOYEE INITIALS: CLIENT SPOKEN TO: DATE/TIME:

OUTCOME:

SIGNATURE: Chad Hobra

For FLI Use Only

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

1

Reported:
03/21/22 12:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
Backwash Influent	AWB4823-01	Water	Composite	02/23/22 09:00	02/23/22 14:50
Backwash Influent	AWB4823-02	Water	Composite	02/23/22 10:00	02/23/22 14:50
Backwash Influent	AWB4823-03	Water	Grab	02/23/22 08:15	02/23/22 14:50

AWB4823-01 Nitrate + Nitrite (calculated): <1.115 mg/L

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/21/22 12:56

Client Sample ID: **Backwash Influent**

Date/Time Sampled: 02/23/22 09:00

Laboratory Sample ID: **AWB4823-01 (Water/Composite)**

Analyte	Result		MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
GENERAL CHEMISTRY - DUBOIS									
Biochemical Oxygen Demand	<40.0			40.0	mg/l	02/24/22 14:45	SM(22) 5210 B-2001	bek-D	AA, D4
Total Suspended Solids	60.0			2.50	mg/l	02/24/22 16:00	SM(22) 2540 D-1997	kjm-D	
Calculated Analytes									
Hardness	54.9		0.0657	2.07	mg equiv. CaCO3/L	02/24/22 23:48	CALC	rjd	
Conventional Chemistry Parameters by SM/EPA Methods									
Bromide	<0.072		0.072	0.400	mg/l	02/24/22 10:58	EPA 300.0/2.1	bdw	U
Chloride	27.8			2.00	mg/l	02/24/22 10:58	EPA 300.0/2.1	bdw	
Chemical Oxygen Demand	<15.0			15.0	mg/l	03/16/22 15:38	HACH 8000	djm	
True Color, Filtered	<5.00			5.00	Color Units	02/24/22 16:29	SM 2120 B-11	vdg	
Fluoride	1.14	J	0.099	2.00	mg/l	02/24/22 10:58	EPA 300.0/2.1	bdw	
+ Methylene Blue Active Substances	0.0380			0.0250	mg/l	02/24/22 09:31	SM 5540 C-11	djm	
Nitrate as N	1.102	J	0.085	2.000	mg/l	02/24/22 10:58	EPA 300.0/2.1	bdw	
Nitrite as N	<0.013		0.013	0.400	mg/l	02/24/22 10:58	EPA 300.0/2.1	bdw	U
Phosphorus	0.0700			0.0250	mg/l	02/25/22 10:19	EPA 365.3	sac	
Total Dissolved Solids	1080			100	mg/l	02/24/22 16:00	SM 2540C-11	ark	
Sulfate as SO4	12.2			2.00	mg/l	02/24/22 10:58	EPA 300.0/2.1	bdw	
Sulfide	2.52			1.00	mg/l	03/01/22 17:18	SM 4500 S2 F-11	nlk	

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/21/22 12:56

Project Manager: Carol Paul

Client Sample ID: **Backwash Influent**

Date/Time Sampled: 02/23/22 09:00

Laboratory Sample ID: **AWB4823-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Total Kjeldahl Nitrogen	1.845		0.5000	mg/l	03/09/22 11:00	SM 4500NorgC-11/ASTMD6919-09	MMD	
Total Organic Carbon	4.21		0.500	mg/l	03/02/22 15:19	SM 5310 C-11	bdw	
Metals by EPA 245.1								
Mercury	<0.000200		0.000200	mg/l	02/24/22 10:52	EPA 245.1/3.0	smh	
Metals by Prep Method EPA 200.8								
Silver	<0.274	0.274	0.500	ug/l	03/04/22 17:41	EPA 200.8/Rev. 5.4	TJO	U
Aluminum	6240		20.0	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	T
Barium	24.0		2.50	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Beryllium	<0.500		0.500	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	F
Cadmium	0.041 J	0.025	0.500	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Cobalt	0.644		0.400	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Copper	2.61		2.50	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Manganese	419		10.0	ug/l	03/02/22 13:55	EPA 200.8/Rev. 5.4	TJO	T

Fairway Laboratories, Inc.

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2019 Ninth Avenue
PO Box 1925
Altoona, PA 16603
(814) 946-4306

NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

FAIRWAY LABORATORIES
www.fairwaylaboratories.com

Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/21/22 12:56

Client Sample ID: **Backwash Influent**

Date/Time Sampled: 02/23/22 09:00

Laboratory Sample ID: **AWB4823-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Metals by Prep Method EPA 200.8								
Molybdenum	0.287		0.100	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Nickel	2.60		0.500	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Lead	1.67		0.100	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Antimony	<0.200		0.200	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Selenium	<2.50		2.50	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	F
Thallium	<0.100		0.100	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Zinc	15.2		2.50	ug/l	03/01/22 14:48	EPA 200.8/Rev. 5.4	TJO	
Metals by Prep Method EPA 200.2								
Boron	<0.100		0.100	mg/l	02/24/22 23:50	EPA 200.7/4.4	rjd	
Chromium	<0.00199	0.00199	0.00500	mg/l	02/24/22 23:50	EPA 200.7/4.4	rjd	U
Physical Parameters by APHA/ASTM/EPA Methods								
Ammonia as N	<0.04750	0.04750	0.1000	mg/l	03/08/22 00:05	ASTM D6919-09	MMD	U

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/21/22 12:56

Client Sample ID: **Backwash Influent**

Date/Time Sampled: 02/23/22 09:00

Laboratory Sample ID: **AWB4823-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Metals								
Iron, Total	0.87	0.01	0.03	mg/L	03/02/22 14:13	EPA 200.7	SUB	C1a
Iron, Dissolved	<0.02	0.02	0.06	mg/L	03/02/22 16:07	EPA 200.7	SUB	Ua, C1a
Arsenic, Total	0.00076 J	0.0005	0.0015	mg/L	03/09/22 15:05	EPA 200.8	SUB	Ja, C1a
Subcontracted General Chemistry								
Chromium VI	<0.00025		0.00025	mg/l	02/28/22 17:21	EPA 218.6 Rev 3.3	SUB	C1

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Reported:
Project Manager: Carol Paul
Number of Containers:
03/21/22 12:56

Client Sample ID: **Backwash Influent**
Date/Time Sampled: 02/23/22 10:00

Laboratory Sample ID: **AWB4823-02 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
GENERAL MICROBIOLOGY - DUBOIS								
Fecal Coliform	2.0000		1.0000	MPN/100 ml	02/23/22 15:40	Colilert-18	peg-D	

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
03/21/22 12:56

Client Sample ID: **Backwash Influent**

Date/Time Sampled: 02/23/22 08:15

Laboratory Sample ID: **AWB4823-03 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Cyanide (total)	<0.0100		0.0100	mg/l	03/05/22 15:56	SM 4500 CN C+E-11	djm	
Oil & Grease	<4.90		4.90	mg/l	03/01/22 10:20	EPA 1664B	evk	
Field Sampled Parameters								
pH- Field @ 5.6°C	7.41			pH Units	02/23/22 08:15	SM20-4500H + B FIELD	CLNT	
Residual Chlorine - Total	0.99		0.05	mg/l	02/23/22 08:15	SM 4500 Cl-G-11	CLNT	
Temperature	5.60		0.100	degrees C	02/23/22 08:15	SM 2550B-11	CLNT	

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Wet Chemistry								
Phenolics	<0.002	0.002	0.005	mg/L	03/02/22 16:03	EPA 420.4	SUB	Ua, C1a

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	03/21/22 12:56

Notes

AA	The seed correction factor was 0.53 mg/L which was less than the QC limits of 0.6-1.0 mg/L.
C1	This Sample was subcontracted to Laboratory ID# 06-00003
C1a	This Sample was subcontracted to Laboratory ID# 22-293
D4	This result is an estimated value because the sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2mg/L.
F	The Laboratory Control Sample (LCS) analyzed with this preparation batch recovered above the acceptance range for the noted analyte.
J	Detected between the Method Detection Limit (MDL) and the Reporting Limit (RL); therefore, the result is an estimated value.
Ja	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
T	Result was over the calibration range, but within the linear dynamic range of the instrument for the noted analyte.
U	Analysis has been reported to the Method Detection Limit (MDL). All reported result values that are less than the Reporting Limit (RL) are considered estimated values.
Ua	Indicates that the analyte was Not Detected (ND)

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	03/21/22 12:56

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

\+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
D: Indicates analysis performed by Fairway Laboratories, Inc., 40 Hoover Ave., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
E: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
P: Indicates analysis performed by Fairway Laboratories, Inc., 89 Kristi Rd., Pennsdale, PA 17756. PA DEP Chapter 252 certification: PA 41-04684.
W: Indicates analysis performed by Fairway Laboratories, Inc., 1980 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

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44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	03/21/22 12:56

Definitions Continued:

[CALC]	Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.
ND	Non Detect. The noted analyte was not detected in the sample.

(-) Method Revision Indicator - West Virginia Samples

EPA 8270D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8270E.
EPA 8260B - : Indicates that samples collected in West Virginia are analyzed by Method SW 8260D.
EPA 8015D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8015C.
EPA 1010 - : Indicates that samples collected in West Virginia are analyzed by Method SW 1010B.
EPA 6010B - : Indicates that samples collected in West Virginia are analyzed by Method SW 6010D.

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	03/21/22 12:56

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

CONFIDENTIALITY Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

CONTRACTS All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

PAYMENT/BILLING Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

SAMPLE COLLECTION AND SUBMISSION Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

SUBCONTRACTING Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

RETURN OF RESULTS Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

SAMPLE DISPOSAL Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

HAZARD COMMUNICATION The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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FAIRWAY LABORATORIES

40 Hoover Ave. Dubois, PA 15801
p: (814) 371-6030 f: (814) 375-0823
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AWB4823

2 of 2

EA

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☒

TURN AROUND TIME
☐ NORMAL
☒ RUSH
DATE REQUIRED ___/___/_____

SAMPLER INITIALS: JWP & Rich

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# AWB4823

PAGE 1 OF 2

ON ICE (Y) N

TEMP #1
GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	NPDES INDUSTRY GROUPS I-II	BOD	COD, Ammoina, Phosphorus, TKN, NO3+NO2	Hexavalent Chromium by 218.6	Sulfate, Fluoride, MBAS	TSS, TDS, Color, Bromide, Chloride	Sulfide	TOC	Total Ag, Al, As, Ba, Be, B, Cd, Cr, Co, Cu, Fe	Hardness, Hg, Mn, Mo, Ni, Pb, Sb, Se, Tl, Zn	Dissolved Iron	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value			COC ID# FRACTION
Backwash Influent	W		X	2-22-22	0900	2-23-22	0900		X										1	500mL Poly NP	3.7	<2	NP		01
										X									1	250mL Poly H2SO4		<2	NP		
											X								1	150mL Poly		<2	NP		
											X								1	250mL Poly NP		<2	NP		
												X	X						3	1L Poly NP		<2	NP		
														X					1	1L Poly ZnAce + NaOH		<2	NP		
															X				1	125mL Amber H2SO4		<2	NP		
																X	X	X	2	250mL Poly HNO3		<2	NP		
																						<2	NP		
																						<2	NP		

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
JWP Stuart	2-23-22	10	Chad Holena	2-23-22	10:00
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holena	2-23-22	14:50
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES
email copy to mark

CR6 FILTERED IN FIELD
DISS FE FILTERED & PRESERVED IN FIELD

FAIRWAY LABORATORIES

FAIRWAY LABORATORIES

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p: (814) 371-6030 f: (814) 375-0823

WWW.FAIRWAYLABORATORIES.COM

LAB USE ONLY DO NOT WRITE IN THIS AREA

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☒

TURN AROUND TIME
☐ NORMAL
☒ RUSH
DATE REQUIRED ___/___/_____

SAMPLER INITIALS
JW & Rich

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

ANALYSES REQUESTED
INCLUDE ONE CONTAINER TYPE PER ROW

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# AWB4823

PAGE 2 OF 2

ON ICE (Y) N

TEMP ~~#1~~
GUN ID Cowboy
FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	Fecal	Oil & Grease	Total Cyanide	Phenolics	Total Residual Chlorine, pH ~~field~~	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value			COC ID# FRACTION
Fecal	W	X		NA	NA	2-23-22	10	X					1	120mL Bacti Na2S2O3	3.7	<2	NP		02
Bac Wash Influent	W	X		NA	NA	2-23-22	0815		X				2	1L Amber HCl	3.7	<2	NP		03
										X			1	250mL NaOH		<2	NP	>12	
											X		1	1L Amber H2SO4		<2	NP		
												X	1	250mL Poly NP		<2	(NP)		
field pH	~~0.99~~			≥.41		2-23-22	0815									<2	NP		
field DO						2-23-22	0815									<2	NP		
field Total Chlorn	0.99			0.99		2-23-22	0815									<2	NP		
Temperature field	5.6°C			5.6°C		2-23-22	0815									<2	NP		
																<2	NP		
																<2	NP		

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
2-23-22 JW Stroud			Chad Holera	2-23-22	10:00
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holera	2-23-22	14:50
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES
email copy to mark mwiddersheim@entecheng.com

FLI SAMPLE RECEIPT PROTOCOL

WORK ORDER: AWB4823

CLIENT: Greenville Water Authority – Permit Renewal

DATE SAMPLED: 2-23-22 DATE RECEIVED: 2-23-22 TIME RECEIVED: 14:50

FAIRWAY LABORATORIES

1. CHECK ALL THAT APPLY: PA ☑ WV ☐ MD ☐ P W S ☐ NPDES/COMPLIANCE ☑ DAIRY ☐ RUSH ☐

2. WERE ANY OF THE SAMPLE CONTAINERS DAMAGED/LEAKING? (ARE CUSTODY SEALS BROKEN?) YES ☐ NO ☑

IF YES, EXPLAIN: _____

3. NUMBER OF CONTAINERS RECEIVED: 16

4. WERE THE SAMPLES RECEIVED ON ICE/OTHER ACCEPTABLE REFRIGERANT? YES ☑ NO ☐

IF NO, EXPLAIN: _____

5. RECEIVING TEMP: 3.7 °C TEMP CONTROL(S) PRESENT YES ☐ NO ☐ BOTTLE(S) TEMPED: 16

6. WERE THE SAMPLES PROPERLY PRESERVED? YES ☑ NO ☐

IF NO, EXPLAIN: _____

7. WERE THE SAMPLES COLLECTED IN THE CORRECT CONTAINERS? YES ☑ NO ☐

IF NO, EXPLAIN: _____

8. IS THERE HEADSPACE PRESENT FOR VOLATILES/ODOR SAMPLES? YES ☐ NO ☐ N/A ☑

9. WAS THE COC FILLED OUT PROPERLY? YES ☑ NO ☐

IF NO, EXPLAIN: _____

10. DID THE SAMPLE LABEL(S) CONTAIN ADEQUATE INFO? (CLIENT/DATE/TIME/PRESERVATIVE) YES ☑ NO ☐

IF NO, EXPLAIN: _____

11. WERE ANY OF THE SAMPLES RECEIVED OUTSIDE OF HOLDING TIME? YES ☐ NO ☑

IF YES, EXPLAIN: _____

12. DO THE SAMPLES REQUIRE ANALYSES THAT HAVE A SHORT HOLDING TIME? YES ☑ NO ☐

IF YES, WHAT ANALYSES? BOD, Cr_6, MBAS, Color, Fecal **PLEASE NOTIFY LABORATORY ANALYSTS!**

13. IS SUBCONTRACTING REQUIRED? YES ☑ NO ☒ JSA 2/24/22

IF YES, WHAT ANALYSES? Cr6, Fe, Cyanide, Phenol

14. WAS THE CLIENT CONTACTED? IF YES, FILL OUT THE FOLLOWING:

FLI EMPLOYEE INITIALS: CLIENT SPOKEN TO: DATE/TIME:

OUTCOME:

SIGNATURE: Chad Holen

L60.30.A r3 Sample Receipt Form

For FLI Use Only

2019 Ninth Avenue
PO Box 1925
Altoona, PA 16603
(814) 946-4306

NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

FAIRWAY LABORATORIES
www.fairwaylaboratories.com

Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

2

Reported:
04/15/22 12:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
Blowdown Influent Comp	AWC0720-01	Water	Composite	03/02/22 09:00	03/02/22 15:50
Blowdown Influent Grab	AWC0720-02	Water	Grab	03/02/22 09:00	03/02/22 15:50
Blowdown Influent Grab	AWC0720-03	Water	Grab	03/02/22 10:00	03/02/22 15:50

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

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Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/15/22 12:25

Client Sample ID: **Blowdown Influent Comp**

Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0720-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
GENERAL CHEMISTRY - DUBOIS								
Biochemical Oxygen Demand	6.42		3.00	mg/l	03/03/22 11:05	SM(22) 5210 B-2001	bek-D	AA, D4
Total Suspended Solids	31.0		2.50	mg/l	03/04/22 14:30	SM(22) 2540 D-1997	kjm-D	
Calculated Analytes								
Hardness	63.4		2.07	mg equiv. CaCO3/L	03/07/22 18:22	CALC	seg	
Conventional Chemistry Parameters by SM/EPA Methods								
Bromide	<0.036	0.036	0.200	mg/l	03/04/22 17:24	EPA 300.0/2.1	bdw	U
Chloride	28.6		1.00	mg/l	03/04/22 17:24	EPA 300.0/2.1	bdw	
Chemical Oxygen Demand	20.5		15.0	mg/l	03/10/22 14:19	HACH 8000	djm	
True Color, Filtered	5.00		5.00	Color Units	03/04/22 08:20	SM 2120 B-11	vdg	H1
Fluoride	1.07	0.050	1.00	mg/l	03/04/22 17:24	EPA 300.0/2.1	bdw	
+ Methylene Blue Active Substances	<0.0250		0.0250	mg/l	03/04/22 08:54	SM 5540 C-11	djm	H
Phosphorus	0.0700	0.0358	0.0500	mg/l	03/04/22 13:05	EPA 365.3	sac	
Total Dissolved Solids	132		20.0	mg/l	03/04/22 16:08	SM 2540C-11	ark	
Sulfate as SO4	16.6		1.00	mg/l	03/04/22 17:24	EPA 300.0/2.1	bdw	
Sulfide	<0.0500		0.0500	mg/l	03/08/22 11:49	SM 4500 S2 D	nlk	

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Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Reported:
Project Manager: Carol Paul
Number of Containers:
04/15/22 12:25

Client Sample ID: **Blowdown Influent Comp**
Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0720-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Total Kjeldahl Nitrogen	1.130		0.5000	mg/l	03/15/22 08:25	SM 4500NorgC-11/ASTMD6919-09	MMD	
Total Organic Carbon	3.94		0.500	mg/l	03/10/22 12:30	SM 5310 C-11	bdw	
Nitrate-Nitrite (as N)	1.121 J	0.09859	2.400	mg/l	03/09/22 18:45	EPA 300.0/2.1	bdw	C
Metals by EPA 245.1								
Mercury	<0.000200		0.000200	mg/l	03/04/22 11:41	EPA 245.1/3.0	smh	
Metals by Prep Method EPA 200.8								
Silver	<0.274	0.274	0.500	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	U
Aluminum	26.4		20.0	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	
Barium	13.6		2.50	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	
Beryllium	<0.135	0.135	0.500	ug/l	03/16/22 20:15	EPA 200.8/Rev. 5.4	TJO	F, U
Cadmium	0.043 J	0.025	0.500	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	
Cobalt	0.108 J	0.024	0.400	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	
Copper	2.31 J	0.442	2.50	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	

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44 Clinton Street
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Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/15/22 12:25

Client Sample ID: **Blowdown Influent Comp**

Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0720-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Metals by Prep Method EPA 200.8								
Manganese	142		0.500	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	R
Molybdenum	0.279		0.100	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	
Nickel	1.51		0.500	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	
Lead	<0.100		0.100	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	
Antimony	<0.200		0.200	ug/l	03/16/22 20:15	EPA 200.8/Rev. 5.4	TJO	
Selenium	<0.335	0.335	2.50	ug/l	03/16/22 20:15	EPA 200.8/Rev. 5.4	TJO	F, U
Thallium	<0.100		0.100	ug/l	03/15/22 17:18	EPA 200.8/Rev. 5.4	TJO	
Zinc	27.7	0.708	2.50	ug/l	03/16/22 20:15	EPA 200.8/Rev. 5.4	TJO	F
Metals by Prep Method EPA 200.2								
Boron	<0.100		0.100	mg/l	03/07/22 18:25	EPA 200.7/4.4	seg	
Calcium	18.9		0.500	mg/l	03/07/22 18:22	EPA 200.7/4.4	seg	
Chromium	<0.00199	0.00199	0.00500	mg/l	03/07/22 18:25	EPA 200.7/4.4	seg	U
Magnesium	3.92		0.200	mg/l	03/07/22 18:22	EPA 200.7/4.4	seg	
Physical Parameters by APHA/ASTM/EPA Methods								

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44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/15/22 12:25

Client Sample ID: **Blowdown Influent Comp**

Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0720-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Physical Parameters by APHA/ASTM/EPA Methods								
Ammonia as N	<0.04750	0.04750	0.1000	mg/l	03/12/22 00:15	ASTM D6919-09	MMD	U

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Metals								
Iron, Total	0.19	0.01	0.03	mg/L	04/14/22 13:10	EPA 200.7	sub	C1a
Iron, Dissolved	<0.02	0.020	0.06	mg/L	04/12/22 19:26	EPA 200.7	sub	Ua, C1a
Arsenic, Total	0.00052 J	0.0005	0.0015	mg/L	04/13/22 16:45	EPA 200.8	sub	Ja, C1a
Subcontracted General Chemistry								
Chromium VI	<0.00025		0.00025	mg/l	03/16/22 14:47	EPA 218.6 Rev 3.3	sub	C1

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Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/15/22 12:25

Client Sample ID: **Blowdown Influent Grab**

Date/Time Sampled: 03/02/22 09:00

Laboratory Sample ID: **AWC0720-02 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
FIELD CHEMISTRY - DUBOIS								
Chlorine, Total Residual	<0.200		0.200	mg/l	03/02/22 09:00	SM(22) 4500-Cl G-2000	CLNT	
Oxygen, Dissolved	13.2		0.500	mg/l	03/02/22 09:00	EPA 360.1	CLNT	
pH Field @ 4.1°C	7.39			pH Units	03/02/22 09:00	SM(22) 4500-H+ B-2000	CLNT	
Temperature	4.10		0.100	°C	03/02/22 09:00	SM 2550 B-2000	CLNT	
Conventional Chemistry Parameters by SM/EPA Methods								
Cyanide (total)	<0.0100		0.0100	mg/l	03/12/22 12:25	SM 4500 CN C+E-11	djm	
Oil & Grease	<1.69	1.69	4.90	mg/l	03/09/22 09:30	EPA 1664B	evk	U

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Wet Chemistry								
Phenolics	0.008	0.002	0.005	mg/L	03/11/22 12:53	EPA 420.4	sub	C1a

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/15/22 12:25

Client Sample ID: **Blowdown Influent Grab**

Date/Time Sampled: 03/02/22 10:00

Laboratory Sample ID: **AWC0720-03 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
GENERAL MICROBIOLOGY - DUBOIS								
Fecal Coliform	152.30		1.0000	MPN/100 ml	03/02/22 16:15	Colilert-18	peg-D	

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44 Clinton Street
Greenville, PA 16125

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Reported:
Project Manager: Carol Paul
Number of Containers:
04/15/22 12:25

Notes

AA	Seed correction factor was 0.57 mg/L which was less than the QC limits of 0.6-1.0 mg/L.
C	Nitrate + Nitrite analysis performed from a sulfuric acid preserved bottle.
C1	This Sample was subcontracted to Laboratory ID# 06-00003
C1a	This Sample was subcontracted to Laboratory ID# 22-293
D4	This result is an estimated value because the sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2mg/L.
F	The Laboratory Control Sample (LCS) analyzed with this preparation batch recovered above the acceptance range for the noted analyte.
H	The spike recovery was above the acceptance range for the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) sample analyzed with the preparation batch.
H1	The pH of the sample at the time of color analysis: 7.52.
J	Detected between the Method Detection Limit (MDL) and the Reporting Limit (RL); therefore, the result is an estimated value.
Ja	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
R	The result was above the calibration range for the noted analyte; therefore it is an estimated value.
U	Analysis has been reported to the Method Detection Limit (MDL). All reported result values that are less than the Reporting Limit (RL) are considered estimated values.
Ua	Indicates that the analyte was Not Detected (ND)

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	04/15/22 12:25

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

\+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
D: Indicates analysis performed by Fairway Laboratories, Inc., 40 Hoover Ave., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
E: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
P: Indicates analysis performed by Fairway Laboratories, Inc., 89 Kristi Rd., Pennsdale, PA 17756. PA DEP Chapter 252 certification: PA 41-04684.
W: Indicates analysis performed by Fairway Laboratories, Inc., 1980 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	04/15/22 12:25

Definitions Continued:

[CALC]	Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.
ND	Non Detect. The noted analyte was not detected in the sample.

(-) Method Revision Indicator - West Virginia Samples

EPA 8270D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8270E.
EPA 8260B - : Indicates that samples collected in West Virginia are analyzed by Method SW 8260D.
EPA 8015D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8015C.
EPA 1010 - : Indicates that samples collected in West Virginia are analyzed by Method SW 1010B.
EPA 6010B - : Indicates that samples collected in West Virginia are analyzed by Method SW 6010D.

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	04/15/22 12:25

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

CONFIDENTIALITY Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

CONTRACTS All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

PAYMENT/BILLING Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

SAMPLE COLLECTION AND SUBMISSION Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

SUBCONTRACTING Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

RETURN OF RESULTS Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

SAMPLE DISPOSAL Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

HAZARD COMMUNICATION The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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FAIRWAY LABORATORIES

40 Hoover Ave. Dubois, PA 15801
p: (814) 371-6030 f: (814) 375-0823
WWW.FAIRWAYLABORATORIES.COM

AWC0720

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☑

TURN AROUND TIME
☐ NORMAL
☑ RUSH
DATE REQUIRED ___/___/_____

SAMPLER INITIALS: Jeff & Rich

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# AWC0720

PAGE 1 OF 2

ON ICE (Y) N

TEMP ~~#1~~

GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	NPDES INDUSTRY GROUPS I-II	BOD	COD, Ammoina, Phosphorus, TKN, NO3+NO2	Hexavalent Chromium by 218.6	Sulfate, Fluoride, MBAS	TSS, TDS, Color, Bromide, Chloride	Sulfide	TOC	Total Ag, Al, As, Ba, Be, B, Cd, Cr, Co, Cu, Fe	Hardness, Hg, Mn, Mo, Ni, Pb, Sb, Se, Tl, Zn	Dissolved Iron VACCUM	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value		COC ID# FRACTION
Blowdown Influent	W		X	3-1-22	0900	3-2-22	0900		X	X	X	X	X	X	X	X	X	X	1	500mL Poly NP	1.0 Q	<2	NP	01
																			1	250mL Poly H2SO4		<2	NP	
																			1	150mL Poly		<2	NP	
																			1	250mL Poly NP		<2	NP	
																			3	1L Poly NP		<2	NP	
																			1	1L Poly ZnAce + NaOH		<2	NP	
																			1	125mL Amber H2SO4		<2	NP	
																			2	250mL Poly HNO3		<2	NP	
																						<2	NP	
																						<2	NP	

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Jeff Stand	3-2-2022	1015	Chad Holen	3-2-22	10:15
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holen 290	3-2-22	15:50
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES
Add mark email

CR6 FILTERED IN FIELD

DISS FE FILTERED & PRESERVED IN FIELD

FAIRWAY LABORATORIES

40 Hoover Ave. Dubois, PA 15801
p: (814) 371-6030 f: (814) 375-0823
WWW.FAIRWAYLABORATORIES.COM

LAB USE ONLY DO NOT WRITE IN THIS AREA

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☒

TURN AROUND TIME
☐ NORMAL
☒ RUSH
DATE REQUIRED ___/___/_____

SAMPLER INITIALS: JJP & Rich

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

ANALYSES REQUESTED
INCLUDE ONE CONTAINER TYPE PER ROW

COOLER ID

COMPLETE UPON LAB RECEIPT
COC ID# Cont, AWC0720
PAGE 2 OF 2
ON ICE (Y) N
TEMP #1
GUN ID Cowboy
FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	Fecal	Oil & Grease	Total Cyanide	Phenolics	Total Residual Chlorine, pH	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value			COC ID# FRACTION
Fecal	W	X		NA	NA	3-2-22	10:00	X					1	120mL Bacti Na2S2O3	1.0	<2	NP		03
Blowdown Influent	W	X		NA	NA	3-2-22	09:00		X				2	1L Amber HCl	1.0	<2	NP		02
										X			1	250mL NaOH		<2	NP	>12	
											X		1	1L Amber H2SO4		<2	NP		
												X	1	250mL Poly NP		<2	(NP)		
																<2	NP		
- pH 7.39																<2	NP		
DO 13.24																<2	NP		
Temp 4.1 °C																<2	NP		
Turbidity 0.																<2	NP		

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
JJP	3-2-2022	10:15	Chad Holsa	3-2-22	10:15
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holsa 290	3-2-22	15:50
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES
Add Mar M email

FLI SAMPLE RECEIPT PROTOCOL

WORK ORDER: AWC0720

CLIENT: Greenville Water Authority — Permit Renewal

DATE SAMPLED: 3-2-22 DATE RECEIVED: 3-2-22 TIME RECEIVED: 15:50

FAIRWAY LABORATORIES

1. CHECK ALL THAT APPLY: PA ☑ WV ☐ MD ☐ P W S ☐ NPDES/COMPLIANCE ☑ DAIRY ☐ RUSH ☐
2. WERE ANY OF THE SAMPLE CONTAINERS DAMAGED/LEAKING? (ARE CUSTODY SEALS BROKEN?) YES ☐ NO ☑

IF YES, EXPLAIN: _____

3. NUMBER OF CONTAINERS RECEIVED: 16
4. WERE THE SAMPLES RECEIVED ON ICE/OTHER ACCEPTABLE REFRIGERANT? YES ☑ NO ☐

IF NO, EXPLAIN: _____

5. RECEIVING TEMP: 1.0 °C TEMP CONTROL(S) PRESENT YES ☐ NO ☐ BOTTLE(S) TEMPED: 16
6. WERE THE SAMPLES PROPERLY PRESERVED? YES ☑ NO ☐

IF NO, EXPLAIN: _____

7. WERE THE SAMPLES COLLECTED IN THE CORRECT CONTAINERS? YES ☑ NO ☐

IF NO, EXPLAIN: _____

8. IS THERE HEADSPACE PRESENT FOR VOLATILES/ODOR SAMPLES? YES ☐ NO ☐ N/A ☑
9. WAS THE COC FILLED OUT PROPERLY? YES ☑ NO ☐

IF NO, EXPLAIN: _____

10. DID THE SAMPLE LABEL(S) CONTAIN ADEQUATE INFO? (CLIENT/DATE/TIME/PRESERVATIVE) YES ☑ NO ☐

IF NO, EXPLAIN: _____

11. WERE ANY OF THE SAMPLES RECEIVED OUTSIDE OF HOLDING TIME? YES ☐ NO ☑

IF YES, EXPLAIN: _____

12. DO THE SAMPLES REQUIRE ANALYSES THAT HAVE A SHORT HOLDING TIME? YES ☑ NO ☐

IF YES, WHAT ANALYSES? BOD, Cr_6, MBAS, Color, Fecal **PLEASE NOTIFY LABORATORY ANALYSTS!**

13. IS SUBCONTRACTING REQUIRED? YES ☐ NO ☑

IF YES, WHAT ANALYSES? _____

14. WAS THE CLIENT CONTACTED? IF YES, FILL OUT THE FOLLOWING:

FLI EMPLOYEE INITIALS: CLIENT SPOKEN TO: DATE/TIME:

OUTCOME:

SIGNATURE: Chad Holevar

L60.30.A r3 Sample Receipt Form

For FLI Use Only

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PO Box 1925
Altoona, PA 16603
(814) 946-4306

NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

www.fairwaylaboratories.com

Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

3

Reported:
04/29/22 14:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
Influent Belt Filter Press Comp	AWC3745-01	Water	Composite	03/16/22 09:00	03/16/22 14:40
Influent Belt Filter Press Grab	AWC3745-02	Water	Grab	03/16/22 09:00	03/16/22 14:40

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/29/22 14:49

Client Sample ID: **Influent Belt Filter Press Comp**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3745-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
GENERAL CHEMISTRY								
Total Dissolved Solids (Residue, Filterable)	140		10.0	mg/l	03/21/22 15:00	SM(22) 2540 C-1997	kjm-D	
GENERAL CHEMISTRY - DUBOIS								
Biochemical Oxygen Demand	<2.40		2.40	mg/l	03/17/22 13:40	SM(22) 5210 B-2001	bek-D	D4
Total Suspended Solids	90.0		2.50	mg/l	03/21/22 16:30	SM(22) 2540 D-1997	kjm-D	
Calculated Analytes								
Hardness	71.8	0.0657	2.07	mg equiv. CaCO3/L	03/24/22 02:54	CALC	seg	
Conventional Chemistry Parameters by SM/EPA Methods								
Bromide	<0.072	0.072	0.400	mg/l	03/18/22 20:22	EPA 300.0/2.1	bdw	U
Chloride	32.4		2.00	mg/l	03/18/22 20:22	EPA 300.0/2.1	bdw	
Chemical Oxygen Demand	15.9		15.0	mg/l	03/28/22 13:56	HACH 8000	dmm	
Fluoride	1.39 J	0.099	2.00	mg/l	03/18/22 20:22	EPA 300.0/2.1	bdw	
+ Methylene Blue Active Substances	<0.0250		0.0250	mg/l	03/18/22 08:57	SM 5540 C-11	djm	
Phosphorus	0.184	0.00717	0.0100	mg/l	03/21/22 13:54	EPA 365.3	sac	
Sulfate as SO4	16.6		2.00	mg/l	03/18/22 20:22	EPA 300.0/2.1	bdw	
Sulfide	<0.0500		0.0500	mg/l	03/22/22 14:45	SM 4500 S2 D	nlk	F

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44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/29/22 14:49

Client Sample ID: **Influent Belt Filter Press Comp**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3745-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
Total Kjeldahl Nitrogen	<1.000		1.000	mg/l	03/30/22 01:09	SM 4500NorgC-11/ASTMD6919-09	MMD	
Total Organic Carbon	4.77		0.500	mg/l	03/24/22 18:21	SM 5310 C-11	bdw	
Nitrate-Nitrite (as N)	1.091 J	0.09859	2.400	mg/l	03/22/22 17:31	EPA 300.0/2.1	bdw	C
Metals by EPA 245.1								
Mercury	<0.000200		0.000200	mg/l	03/22/22 12:20	EPA 245.1/3.0	smh	
Metals by Prep Method EPA 200.8								
Silver	<1.37	1.37	2.50	ug/l	04/15/22 13:31	EPA 200.8/Rev. 5.4	TJO	U
Aluminum	12000		100	ug/l	03/25/22 02:20	EPA 200.8/Rev. 5.4	TJO	T
Barium	74.7		12.5	ug/l	03/30/22 13:14	EPA 200.8/Rev. 5.4	TJO	M, Y
Beryllium	<0.676	0.676	2.50	ug/l	03/30/22 13:14	EPA 200.8/Rev. 5.4	TJO	U
Cadmium	<0.123	0.123	2.50	ug/l	03/25/22 02:20	EPA 200.8/Rev. 5.4	TJO	U
Cobalt	0.442 J	0.119	2.00	ug/l	03/25/22 02:20	EPA 200.8/Rev. 5.4	TJO	
Copper	6.19 J	2.21	12.5	ug/l	03/30/22 13:14	EPA 200.8/Rev. 5.4	TJO	

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44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/29/22 14:49

Client Sample ID: **Influent Belt Filter Press Comp**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3745-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Metals by Prep Method EPA 200.8								
Manganese	979		12.5	ug/l	03/30/22 13:21	EPA 200.8/Rev. 5.4	TJO	T
Molybdenum	<0.500		0.500	ug/l	03/25/22 02:20	EPA 200.8/Rev. 5.4	TJO	
Nickel	<2.50		2.50	ug/l	03/25/22 02:20	EPA 200.8/Rev. 5.4	TJO	F
Lead	2.75		0.500	ug/l	03/30/22 13:14	EPA 200.8/Rev. 5.4	TJO	
Antimony	<1.00		1.00	ug/l	03/30/22 13:14	EPA 200.8/Rev. 5.4	TJO	
Selenium	<1.67	1.67	12.5	ug/l	03/25/22 02:20	EPA 200.8/Rev. 5.4	TJO	U
Thallium	<0.500		0.500	ug/l	03/30/22 13:14	EPA 200.8/Rev. 5.4	TJO	
Zinc	14.2	3.54	12.5	ug/l	03/30/22 13:14	EPA 200.8/Rev. 5.4	TJO	
Metals by Prep Method EPA 200.2								
Boron	<0.100		0.100	mg/l	03/24/22 02:56	EPA 200.7/4.4	seg	
Chromium	<0.00199	0.00199	0.00500	mg/l	03/24/22 02:56	EPA 200.7/4.4	seg	U
Physical Parameters by APHA/ASTM/EPA Methods								
Ammonia as N	0.06500 J	0.04750	0.1000	mg/l	04/01/22 22:53	ASTM D6919-09	mlf	

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/29/22 14:49

Client Sample ID: **Influent Belt Filter Press Comp**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3745-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Metals								
Iron, Total	0.86	0.01	0.03	mg/L	04/28/22 15:54	EPA 200.7	sub	C1a
Iron, Dissolved	<0.02	0.02	0.06	mg/L	04/27/22 16:21	EPA 200.7	sub	Ua, C1a
Arsenic, Total	0.0014 J	0.0005	0.0015	mg/L	04/28/22 13:30	EPA 200.8	sub	Ja, C1a
Subcontracted General Chemistry								
Chromium VI	<0.00004	0.00004	0.00025	mg/l	03/24/22 17:33	EPA 218.6 Rev 3.3	sub	C1

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Carol Paul

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/29/22 14:49

Client Sample ID: **Influent Belt Filter Press Grab**

Date/Time Sampled: 03/16/22 09:00

Laboratory Sample ID: **AWC3745-02 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
FIELD CHEMISTRY - DUBOIS								
Chlorine, Total Residual	0.450		0.200	mg/l	03/16/22 09:00	SM(22) 4500-Cl G-2000	CLNT	
Oxygen, Dissolved	12.3		0.500	mg/l	03/16/22 09:00	EPA 360.1	CLNT	
pH Field @ 7.1°C	7.18			pH Units	03/16/22 09:00	SM(22) 4500-H+ B-2000	CLNT	
Temperature	7.10		0.100	°C	03/16/22 09:00	SM 2550 B-2000	CLNT	
Conventional Chemistry Parameters by SM/EPA Methods								
Cyanide (total)	<0.0100		0.0100	mg/l	03/26/22 11:29	SM 4500 CN C+E-11	djm	
Oil & Grease	<1.69	1.69	4.90	mg/l	03/24/22 11:05	EPA 1664B	evk	U
GENERAL MICROBIOLOGY - DUBOIS								
Fecal Coliform	<1.0000		1.0000	MPN/100 ml	03/16/22 15:10	Colilert-18	peg-D	

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Subcontracted Wet Chemistry								
Phenolics	0.004 J	0.004	0.005	mg/L	04/08/22 11:35	EPA 420.4	sub	Ja, C1a

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Reported:
Project Manager: Carol Paul
Number of Containers:
04/29/22 14:49

Notes

C	Nitrate + Nitrite analysis performed from a sulfuric acid preserved bottle.
C1	This Sample was subcontracted to Laboratory ID# 06-00003
C1a	This Sample was subcontracted to Laboratory ID# 22-293
D4	This result is an estimated value because the sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2mg/L.
F	The Laboratory Control Sample (LCS) analyzed with this preparation batch recovered above the acceptance range for the noted analyte.
J	Detected between the Method Detection Limit (MDL) and the Reporting Limit (RL); therefore, the result is an estimated value.
Ja	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
M	The Internal Standard (IS) recovery for the noted sample was above the acceptance range.
T	Result was over the calibration range, but within the linear dynamic range of the instrument for the noted analyte.
U	Analysis has been reported to the Method Detection Limit (MDL). All reported result values that are less than the Reporting Limit (RL) are considered estimated values.
Ua	Indicates that the analyte was Not Detected (ND)
Y	It is the opinion of the laboratory that the result may be biased due to possible matrix interference.

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	04/29/22 14:49

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

\+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
D: Indicates analysis performed by Fairway Laboratories, Inc., 40 Hoover Ave., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
E: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
P: Indicates analysis performed by Fairway Laboratories, Inc., 89 Kristi Rd., Pennsdale, PA 17756. PA DEP Chapter 252 certification: PA 41-04684.
W: Indicates analysis performed by Fairway Laboratories, Inc., 1980 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

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Greenville Water Authority		Project:	NPDES Permit Renewal
44 Clinton Street		Project Number:	[none]
Greenville, PA 16125		Collector:	Client
Project Manager:	Carol Paul	Number of Containers:	**Reported:** 04/29/22 14:49

Definitions Continued:

[CALC]	Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.
ND	Non Detect. The noted analyte was not detected in the sample.

(-) Method Revision Indicator - West Virginia Samples

EPA 8270D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8270E.
EPA 8260B - : Indicates that samples collected in West Virginia are analyzed by Method SW 8260D.
EPA 8015D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8015C.
EPA 1010 - : Indicates that samples collected in West Virginia are analyzed by Method SW 1010B.
EPA 6010B - : Indicates that samples collected in West Virginia are analyzed by Method SW 6010D.

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2019 Ninth Avenue
PO Box 1925
Altoona, PA 16603
(814) 946-4306

NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

www.fairwaylaboratories.com

Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Carol Paul	Number of Containers:	04/29/22 14:49

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

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WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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FAIRWAY LABORATORIES

40 Hoover Ave. Dubois, PA 15801

p: (814) 371-6030 f: (814) 375-0823

WWW.FAIRWAYLABORATORIES.COM

AWC3745

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☐

TURN AROUND TIME
☐ NORMAL
~~☒~~ RUSH
DATE REQUIRED 3/30/22

SAMPLER INITIALS: ZHA & Rich

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

ANALYSES REQUESTED

INCLUDE ONE CONTAINER TYPE PER ROW

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# AWC3745

PAGE 1 OF 2

ON ICE (Y) N

TEMP #1

GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	NPDES INDUSTRY GROUPS I-II	BOD	COD, Ammoina, Phosphorus, TKN, NO3+NO2	Hexavalent Chromium by 218.6/7196	Sulfate, Fluoride, MBAS 15-11	TSS, TDS, Color, Bromide, Chloride	Sulfide 2ml	TOC	Total Ag, Al, As, Ba, Be, B, Cd, Cr, Co, Cu, Fe	Hardness, Hg, Mn, Mo, Ni, Pb, Sb, Se, Tl, Zn	Dissolved Iron	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value			COC ID# FRACTION
Influent ~~Grab~~ Composite Belt Filter Press	W		X	3-15-22	0900	3-16-22	0900		X										1	500mL Poly NP	1.3	<2	(NP)		01
										X									1	250mL Poly H2SO4		(<2)	NP		
											X								1	150mL Poly		<2	NP		
											X								1	250mL Poly NP		<2	(NP)		
												X	X						3	1L Poly NP		<2	(NP)		
														X					1	1L Poly ZnAce + NaOH		<2	NP	29	
															X				1	125mL Amber H2SO4		<2	NP		
																X	X	X	2	250mL Poly HNO3		(<2)	NP		
																						<2	NP		
																						<2	NP		

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
3-15-22	1U 3-15-22	1U	Chad Holen	3-16-22	10:15
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holen 290	3-16-22	14:40
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES

CR6 FILTERED IN FIELD

DISS FE FILTERED & PRESERVED IN FIELD

FAIRWAY LABORATORIES

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p: (814) 371-6030 f: (814) 375-0823
WWW.FAIRWAYLABORATORIES.COM

LAB USE ONLY DO NOT WRITE IN THIS AREA

CLIENT	Greenville Water Authority
ADDRESS	44 Clinton St. Greenville, PA 16125
PROJECT	NPDES Permit Renewal
CONTACT	Carol Paul
PHONE	724-588-4340
EMAIL	carol.paul@gmwa.info

PWS ID

CHECK IF PADEP REPORTABLE ☐

CHECK TO INCLUDE FIELD RESULTS ON FINAL REPORT ☒

TURN AROUND TIME
☐ NORMAL
☒ RUSH
DATE REQUIRED 3/30/22

SAMPLER INITIALS: JHA & Rich

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT/SAMPLER

COOLER ID

COMPLETE UPON LAB RECEIPT

COC ID# Cont. AWC3745

PAGE 2 OF 2

ON ICE (Y) N

TEMP #1

GUN ID Cowboy

FOR WV SAMPLES, EACH BOTTLE MUST HAVE TEMP RECORDED AT TIME OF RECEIPT

SAMPLE DESCRIPTION/LOCATION	MATRIX	GRAB	COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END OR GRAB DATE	COMPOSITE END OR GRAB TIME	Fecal	Oil & Grease	Total Cyanide	Phenolics	Total Residual Chlorine, pH	NUMBER OF BOTTLES	CONTAINER TYPE / PRESERVATIVE	TEMP °C	Indicate pH value			COC ID# FRACTION
Fecal	W	X		NA	NA			X					1	120mL Bacti Na2S2O3	1.3	<2	NP		
Influent Grab Belt filter Press	W	X		NA	NA	3-16-22	0900		X				2	1L Amber HCl	1.3	<2	NP		02
										X			1	250mL NaOH		<2	NP	7/2	
											X		1	1L Amber H2SO4		<2	NP		
												X	1	250mL Poly NP		<2	(NP)		
																<2	NP		
pH 7.18																<2	NP		
Temperature 7.1°C																<2	NP		
T. Chlorine 0.45																<2	NP		
DO 12.30																<2	NP		

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
3-15-22	10 3-15-22	10	Chad Holera	3-16-22	10:15
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
			Chad Holera 290	3-16-22	14:40
RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME

ADDITIONAL NOTES

FLI SAMPLE RECEIPT PROTOCOL

WORK ORDER: AWC3745

CLIENT: Greenville — Permit Renewal

DATE SAMPLED: 3-16-22 DATE RECEIVED: 3-16-22 TIME RECEIVED: 14:40

FAIRWAY LABORATORIES

1. CHECK ALL THAT APPLY: PA ☑ WV ☐ MD ☐ P W S ☐ NPDES/COMPLIANCE ☑ DAIRY ☐ RUSH ☐

2. WERE ANY OF THE SAMPLE CONTAINERS DAMAGED/LEAKING? (ARE CUSTODY SEALS BROKEN?) YES ☐ NO ☑

IF YES, EXPLAIN: _____

3. NUMBER OF CONTAINERS RECEIVED: 16

4. WERE THE SAMPLES RECEIVED ON ICE/OTHER ACCEPTABLE REFRIGERANT? YES ☑ NO ☐

IF NO, EXPLAIN: _____

5. RECEIVING TEMP: 1.3 °C TEMP CONTROL(S) PRESENT YES ☐ NO ☐ BOTTLE(S) TEMPED: 16

6. WERE THE SAMPLES PROPERLY PRESERVED? YES ☑ NO ☐

IF NO, EXPLAIN: _____

7. WERE THE SAMPLES COLLECTED IN THE CORRECT CONTAINERS? YES ☑ NO ☐

IF NO, EXPLAIN: _____

8. IS THERE HEADSPACE PRESENT FOR VOLATILES/ODOR SAMPLES? YES ☐ NO ☐ N/A ☑

9. WAS THE COC FILLED OUT PROPERLY? YES ☑ NO ☐

IF NO, EXPLAIN: _____

10. DID THE SAMPLE LABEL(S) CONTAIN ADEQUATE INFO? (CLIENT/DATE/TIME/PRESERVATIVE) YES ☑ NO ☐

IF NO, EXPLAIN: _____

11. WERE ANY OF THE SAMPLES RECEIVED OUTSIDE OF HOLDING TIME? YES ☐ NO ☑

IF YES, EXPLAIN: _____

12. DO THE SAMPLES REQUIRE ANALYSES THAT HAVE A SHORT HOLDING TIME? YES ☑ NO ☐

IF YES, WHAT ANALYSES? BOD, C_{16}, MBAS, Fecal, Color **PLEASE NOTIFY LABORATORY ANALYSTS!**

13. IS SUBCONTRACTING REQUIRED? YES ☐ NO ☑

IF YES, WHAT ANALYSES? _____

14. WAS THE CLIENT CONTACTED? IF YES, FILL OUT THE FOLLOWING:

FLI EMPLOYEE INITIALS: _____ CLIENT SPOKEN TO: _____ DATE/TIME: _____

OUTCOME: _____

SIGNATURE: Chad Halen

For FLI Use Only

2019 Ninth Avenue
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NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Jessica Kent

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/26/22 14:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
Influent Belt Filter Press	AWD4237-01	Water	Composite	04/20/22 09:00	04/20/22 15:20
Effluent Belt Filter Press	AWD4237-02	Water	Composite	04/20/22 09:00	04/20/22 15:20

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Jessica Kent

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

3

Reported:
04/26/22 14:57

Client Sample ID: **Influent Belt Filter Press**

Date/Time Sampled: 04/20/22 09:00

Laboratory Sample ID: **AWD4237-01 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
True Color, Filtered	7.00		5.00	Color Units	04/21/22 15:18	SM 2120 B-11	sac	H1

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Greenville Water Authority
44 Clinton Street
Greenville, PA 16125

Project Manager: Jessica Kent

Project: NPDES Permit Renewal
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
04/26/22 14:57

Client Sample ID: **Effluent Belt Filter Press**

Date/Time Sampled: 04/20/22 09:00

Laboratory Sample ID: **AWD4237-02 (Water/Composite)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Conventional Chemistry Parameters by SM/EPA Methods								
True Color, Filtered	33.0		5.00	Color Units	04/21/22 15:18	SM 2120 B-11	sac	H1a

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Greenville Water Authority		Project:	NPDES Permit Renewal
44 Clinton Street		Project Number:	[none]
Greenville, PA 16125		Collector:	Client
Project Manager:	Jessica Kent	Number of Containers:	
			Reported:
			04/26/22 14:57

Notes

H1	The pH of the sample at the time of color analysis: 7.70.
H1a	The pH of the sample at the time of color analysis: 7.83.

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Greenville Water Authority		Project: NPDES Permit Renewal	
44 Clinton Street		Project Number: [none]	
Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Jessica Kent	Number of Containers:	04/26/22 14:57

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

\+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
D: Indicates analysis performed by Fairway Laboratories, Inc., 40 Hoover Ave., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
E: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
P: Indicates analysis performed by Fairway Laboratories, Inc., 89 Kristi Rd., Pennsdale, PA 17756. PA DEP Chapter 252 certification: PA 41-04684.
W: Indicates analysis performed by Fairway Laboratories, Inc., 1980 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

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44 Clinton Street		Project Number:	[none]
Greenville, PA 16125		Collector:	Client
Project Manager:	Jessica Kent	Number of Containers:	**Reported:** 04/26/22 14:57

Definitions Continued:

[CALC]	Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.
ND	Non Detect. The noted analyte was not detected in the sample.

(-) Method Revision Indicator - West Virginia Samples

EPA 8270D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8270E.
EPA 8260B - : Indicates that samples collected in West Virginia are analyzed by Method SW 8260D.
EPA 8015D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8015C.
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Greenville, PA 16125		Collector: Client	**Reported:**
Project Manager:	Jessica Kent	Number of Containers:	04/26/22 14:57

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LITIGATION All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

Fairway Laboratories, Inc.

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CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Please print. See back of COC for instructions/terms and conditions.

FAIRWAY LA

AWD4237

Client Page # 1 of 2

Client Name: Greenville Water Authority
Address: 44 Clinton St.
Greenville, PA 16125
Contact: Jeff Staul
Phone #: 724-813-4888 cell
~~Fax #~~: Plant 724-588-5530
Project Name: NPDES Permit Renewal
Quote/PO #: Color

Received on ice? (Y) N
Sample Temp: 3.0 #4

Reportable to PADEP? Yes ☐
PWSID #

TAT: Normal ☐ Rush ☒
Rush TAT subject to pre-approval and surcharge.
Date Required: 04/22/22

Sample Description/Location	GRAB	Composite	Composite Start	GRAB -or- Composite End	Matrix: Solid	Matrix: Water	Matrix: Other	# of Containers	Analyses Requested: Color	Bottle Type/Comments
			Military or AM/PM required							
			Start Date / Start Time	End Date / End Time						
Belt Filter Press Influent		X	4-19 7PM	4-20 9AM				1		01

LAB USE ONLY
Work Order # AWD4237
Attach #
FLI Page # ____ of ____
Tracking #

Sampled by: (Signature) Jeff Staul			Received by:	Date 4-20-22	Time 1230
Relinquished by: Jeff Staul	Date 4-20-22	Time 1030	Received by:	Date 4-20-22	Time 1500
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

Remarks

By relinquishing my sample to Fairway Laboratories, Inc., I hereby agree to the terms and conditions printed on the reverse.

White Original - FLI File Canary - FLI Copy Pink - Customer Receipt Copy

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Please print. See back of COC for instructions/terms and conditions.

FAIRWAY LABORATORIES
Environmental Laboratory

2019 9th Ave.
P.O. Box 1925
Altoona, PA 16602
Phone: (814) 946-4306
Fax: (814) 946-8791

Client Name: Greenville Water Authority
Address: 44 Clinton St.
Greenville PA 16125
Contact: Jeff Staul
Phone #: 724-813-4888 Cell
~~Fax #:~~ 724-588-5530 Plant
Project Name: NPDES Permit Renewal
Quote/PO #: Color

Received on ice? (Y) N
Sample Temp: 3.0 °C

Reportable to PADEP? Yes ☐
PWSID #

TAT: Normal ☐ Rush ☐
Rush TAT subject to pre-approval and surcharge.
Date Required: ___/___/___

LAB USE ONLY
Work Order # Cont. AWO4237
Attach #

FLI Page # ___ of ___
Tracking #

Sample Description/Location	GRAB	Composite	Composite Start	GRAB -or- Composite End	Matrix: Solid	Matrix: Water	Matrix: Other	# of Containers	Analyses Requested: Color	Bottle Type/Comments
			Military or AM/PM required							
			Start Date / Start Time	End Date / End Time						
Belt Filter Press Effluent		X	4-19 >PM	4-20 9AM				1		02

	Date	Time
Sampled by: (Signature)		
Relinquished by:	4-20-22	1230
Relinquished by:		
Relinquished by:		

	Date	Time
Received by:	4-20-22	1230
Received by:	4-20-22	1520
Received by:		
Received by:		

Remarks

By relinquishing my sample to Fairway Laboratories, Inc., I hereby agree to the terms and conditions printed on the reverse.

White Original - FLI File Canary - FLI Copy Pink - Customer Receipt Copy

FLI SAMPLE RECEIPT PROTOCOL

WORK ORDER: AWD 4237

CLIENT: Greenville

DATE SAMPLED: 4·20·22 DATE RECEIVED: 4·20·22 TIME RECEIVED: 1520

FAIRWAY LABORATORIES

1. CHECK ALL THAT APPLY: PA ☐ WV ☐ MD ☐ P W S ☐ NPDES/COMPLIANCE ☑ DAIRY ☐ RUSH ☑

2. WERE ANY OF THE SAMPLE CONTAINERS DAMAGED/LEAKING? (ARE CUSTODY SEALS BROKEN?) YES ☐ NO ☑

IF YES, EXPLAIN: _____

3. NUMBER OF CONTAINERS RECEIVED: 2

4. WERE THE SAMPLES RECEIVED ON ICE/OTHER ACCEPTABLE REFRIGERANT? YES ☑ NO ☐

IF NO, EXPLAIN: _____

5. RECEIVING TEMP: 3.0 °C TEMP CONTROL(S) PRESENT YES ☐ NO ☐ BOTTLE(S) TEMPED: 2

6. WERE THE SAMPLES PROPERLY PRESERVED? YES ☑ NO ☐

IF NO, EXPLAIN: _____

7. WERE THE SAMPLES COLLECTED IN THE CORRECT CONTAINERS? YES ☑ NO ☐

IF NO, EXPLAIN: _____

8. IS THERE HEADSPACE PRESENT FOR VOLATILES/ODOR SAMPLES? YES ☐ NO ☐ N/A ☑

9. WAS THE COC FILLED OUT PROPERLY? YES ☑ NO ☐

IF NO, EXPLAIN: _____

10. DID THE SAMPLE LABEL(S) CONTAIN ADEQUATE INFO? (CLIENT/DATE/TIME/PRESERVATIVE) YES ☑ NO ☐

IF NO, EXPLAIN: _____

11. WERE ANY OF THE SAMPLES RECEIVED OUTSIDE OF HOLDING TIME? YES ☐ NO ☑

IF YES, EXPLAIN: _____

12. DO THE SAMPLES REQUIRE ANALYSES THAT HAVE A SHORT HOLDING TIME? YES ☑ NO ☐

IF YES, WHAT ANALYSES? Color **PLEASE NOTIFY LABORATORY ANALYSTS!**

13. IS SUBCONTRACTING REQUIRED? YES ☐ NO ☑

IF YES, WHAT ANALYSES? _____

14. WAS THE CLIENT CONTACTED? IF YES, FILL OUT THE FOLLOWING:

FLI EMPLOYEE INITIALS: _____ CLIENT SPOKEN TO: _____ DATE/TIME: _____

OUTCOME: _____

SIGNATURE: _____

For FLI Use Only

9 Dewatered Sludge Analysis

2019 Ninth Avenue
PO Box 1925
Altoona, PA 16603
(814) 946-4306

NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

www.fairwaylaboratories.com

Greenville Water Authority
44 Clinton Street
Greenville PA, 16125
Project Manager: Carol Paul

Project: Form 43
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
12/16/21 10:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
Treatment Plant Sludge	1L01172-01	Solid	Grab	12/01/21 09:00	12/01/21 14:45

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler
Laboratory Director

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44 Clinton Street
Greenville PA, 16125
Project Manager: Carol Paul

Project: Form 43
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
12/16/21 10:22

Client Sample ID: **Treatment Plant Sludge**

Date/Time Sampled: 12/01/21 09:00

Laboratory Sample ID: **1L01172-01 (Solid/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Analyses to be performed immediately upon sampling. See Definition indicated by: #								
# pH @ 22.1°C	7.83			pH Units	12/03/21 16:30	SW846-9045 D	jal	
ASTM Extraction Analyses by ASTM D3987								
Ammonia as N	0.2610		0.1000	mg/l	12/07/21 23:42	ASTM D6919-09	MMD	
ASTM Final pH @ 18.7°C	9.38			pH Units	12/07/21 07:37	ASTM D3987	vdg	
Chemical Oxygen Demand	42.7		15.0	mg/l	12/07/21 15:10	EPA 410.4	djm	
Oil & Grease	<6.60		6.60	mg/l	12/10/21 10:15	EPA 1664B	evk	
Total Solids	86.0		20.0	mg/l	12/07/21 15:50	SM 2540B-11	ark	
Conventional Chemistry Parameters by SM/EPA Methods								
Oil & Grease	<4260		4260	mg/kg dry	12/04/21 07:20	SW846 9071B	evk	K
% Solids	11.6		0.100	%	12/03/21 15:00	SM 2540 G-11	ark	
Total Volatile Solids	28.4		0.100	%	12/03/21 15:00	SM 2540 G-11	ark	
Physical Parameters by APHA/ASTM/EPA Methods								
Ignitability - Burn Rate	<2.20		2.20	mm/sec	12/06/21 18:45	EPA 1030	cmv	G6
Free Liquid	<0.100		0.100	mL/g/5 min.	12/07/21 15:53	EPA 9095B	vdg	
Polychlorinated Biphenyls by EPA Extraction Method 3541								

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Project: Form 43
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
12/16/21 10:22

Client Sample ID: **Treatment Plant Sludge**

Date/Time Sampled: 12/01/21 09:00

Laboratory Sample ID: **1L01172-01 (Solid/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
Polychlorinated Biphenyls by EPA Extraction Method 3541								
PCB-1016	<0.084		0.084	mg/kg dry	12/03/21 17:35	EPA 8082A	jjf	
PCB-1221	<0.084		0.084	mg/kg dry	12/03/21 17:35	EPA 8082A	jjf	
PCB-1232	<0.084		0.084	mg/kg dry	12/03/21 17:35	EPA 8082A	jjf	
PCB-1242	<0.084		0.084	mg/kg dry	12/03/21 17:35	EPA 8082A	jjf	
PCB-1248	<0.084		0.084	mg/kg dry	12/03/21 17:35	EPA 8082A	jjf	
PCB-1254	<0.084		0.084	mg/kg dry	12/03/21 17:35	EPA 8082A	jjf	
PCB-1260	<0.084		0.084	mg/kg dry	12/03/21 17:35	EPA 8082A	jjf	
Surrogate: Tetrachloro-meta-xylene		*73.6 %*	*38.1-152*		*12/03/21 17:35*	*EPA 8082A*	jjf	
Surrogate: Decachlorobiphenyl		*120 %*	*21.7-147*		*12/03/21 17:35*	*EPA 8082A*	jjf	
Reactive Cyanide by Preparation Method EPA 7.3.3.2								
Reactive Cyanide	<8.39		8.39	mg/kg dry	12/03/21 12:15	EPA 7.3.3.2(CN)/9014	ajs	
Reactive Sulfide by Preparation Method EPA 7.3.4.2								
Reactive Sulfide	<172		172	mg/kg dry	12/06/21 14:42	EPA 7.3.4.2/9034	ajs	
TCLP Extracted Analyses by EPA 1311								
Mercury	<0.00200		0.00200	mg/l	12/08/21 13:46	EPA 7471B	smh	
TCLP Extraction by EPA 1311								

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44 Clinton Street
Greenville PA, 16125
Project Manager: Carol Paul

Project: Form 43
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
12/16/21 10:22

Client Sample ID: **Treatment Plant Sludge**

Date/Time Sampled: 12/01/21 09:00

Laboratory Sample ID: **1L01172-01 (Solid/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
TCLP Extraction by EPA 1311								
# pH @ 19°C	5.19			pH Units	12/07/21 07:37	EPA 1311	vdg	
TCLP Herbicides by EPA Methods 1311/8151A								
2,4-D	<1.00		1.00	ug/l	12/13/21 18:31	EPA 8151A	jjf	
2,4,5-TP (Silvex)	<1.00		1.00	ug/l	12/13/21 18:31	EPA 8151A	jjf	D
Surrogate: 2,4-DCAA		*47.8 %*	*10-157*		*12/13/21 18:31*	*EPA 8151A*	jjf	
TCLP Metals extracted by EPA 1311/Preparation Method 3010A								
Silver	<0.0200		0.0200	mg/l	12/10/21 15:13	EPA 6010B/2.0	seg	
Arsenic	<0.0400		0.0400	mg/l	12/10/21 15:14	EPA 6010B/2.0	seg	
Barium	0.547		0.500	mg/l	12/10/21 15:12	EPA 6010B/2.0	seg	
Cadmium	<0.0200		0.0200	mg/l	12/10/21 15:14	EPA 6010B/2.0	seg	
Chromium	0.0255		0.0250	mg/l	12/10/21 15:14	EPA 6010B/2.0	seg	
Copper	<0.0500		0.0500	mg/l	12/10/21 15:14	EPA 6010B/2.0	seg	
Nickel	<0.250		0.250	mg/l	12/10/21 15:14	EPA 6010B/2.0	seg	
Lead	<0.0400		0.0400	mg/l	12/10/21 15:14	EPA 6010B/2.0	seg	

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Greenville PA, 16125
Project Manager: Carol Paul

Project: Form 43
Project Number: [none]
Collector: Client
Number of Containers:

Reported: 12/16/21 10:22

Client Sample ID: **Treatment Plant Sludge**

Date/Time Sampled: 12/01/21 09:00

Laboratory Sample ID: **1L01172-01 (Solid/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
TCLP Metals extracted by EPA 1311/Preparation Method 3010A								
Selenium	<0.100		0.100	mg/l	12/10/21 15:14	EPA 6010B/2.0	seg	
Zinc	<0.100		0.100	mg/l	12/10/21 15:14	EPA 6010B/2.0	seg	
TCLP Pesticides by EPA Method 1311/Extraction Method 3510C/								
gamma-BHC (Lindane)	<0.100		0.100	ug/l	12/13/21 18:30	EPA 8081B	jjf	D, G
Chlordane (tech)	<5.00		5.00	ug/l	12/13/21 18:30	EPA 8081B	jjf	D
Endrin	<0.100		0.100	ug/l	12/13/21 18:30	EPA 8081B	jjf	D, G
Heptachlor	<0.100		0.100	ug/l	12/13/21 18:30	EPA 8081B	jjf	D
Heptachlor epoxide	<0.100		0.100	ug/l	12/13/21 18:30	EPA 8081B	jjf	D, G
Methoxychlor	<0.100		0.100	ug/l	12/13/21 18:30	EPA 8081B	jjf	D
Toxaphene	<5.00		5.00	ug/l	12/13/21 18:30	EPA 8081B	jjf	D
Surrogate: Tetrachloro-meta-xylene		*42.6 %*	*17.9-100*		*12/13/21 18:30*	*EPA 8081B*	jjf	G
Surrogate: Decachlorobiphenyl		*34.1 %*	*12.7-97*		*12/13/21 18:30*	*EPA 8081B*	jjf	G
TCLP Semivolatile Organic Compounds by EPA 1311/Extraction Method 3510C								
Pyridine	<100		100	ug/l	12/10/21 19:09	EPA 8270D	jjf	
1,4-Dichlorobenzene	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	
2,4-Dinitrotoluene	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	
3 & 4-Methylphenol	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	

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Greenville Water Authority
44 Clinton Street
Greenville PA, 16125
Project Manager: Carol Paul

Project: Form 43
Project Number: [none]
Collector: Client
Number of Containers:

Reported: 12/16/21 10:22

Client Sample ID: **Treatment Plant Sludge**

Date/Time Sampled: 12/01/21 09:00

Laboratory Sample ID: **1L01172-01 (Solid/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
TCLP Semivolatile Organic Compounds by EPA 1311/Extraction Method 3510C								
Hexachlorobenzene	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	
Hexachlorobutadiene	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	
Hexachloroethane	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	
2-Methylphenol	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	
Nitrobenzene	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	
Pentachlorophenol	<250		250	ug/l	12/10/21 19:09	EPA 8270D	jjf	
2,4,5-Trichlorophenol	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	
2,4,6-Trichlorophenol	<50.0		50.0	ug/l	12/10/21 19:09	EPA 8270D	jjf	
Surrogate: 2-Fluorophenol		*25.8 %*	*20.9-55.4*		*12/10/21 19:09*	*EPA 8270D*	jjf	
Surrogate: Phenol-d6		*18.0 %*	*13.6-38.6*		*12/10/21 19:09*	*EPA 8270D*	jjf	
Surrogate: Nitrobenzene-d5		*48.5 %*	*15.2-95.2*		*12/10/21 19:09*	*EPA 8270D*	jjf	
Surrogate: 2-Fluorobiphenyl		*51.0 %*	*17.8-95*		*12/10/21 19:09*	*EPA 8270D*	jjf	
Surrogate: 2,4,6-Tribromophenol		*60.8 %*	*30.9-114*		*12/10/21 19:09*	*EPA 8270D*	jjf	
Surrogate: Terphenyl-d14		*57.4 %*	*48.3-130*		*12/10/21 19:09*	*EPA 8270D*	jjf	
TCLP Volatile Organic Compounds by EPA Method 1311/8260B								
Benzene	<50.0		50.0	ug/l	12/07/21 19:20	EPA 8260B	JML	I
2-Butanone	<500		500	ug/l	12/07/21 19:20	EPA 8260B	JML	I
Carbon tetrachloride	<50.0		50.0	ug/l	12/07/21 19:20	EPA 8260B	JML	I
Chlorobenzene	<50.0		50.0	ug/l	12/07/21 19:20	EPA 8260B	JML	I

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Project: Form 43
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
12/16/21 10:22

Client Sample ID: **Treatment Plant Sludge**

Date/Time Sampled: 12/01/21 09:00

Laboratory Sample ID: **1L01172-01 (Solid/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Analytical Method	* Analyst	Note
TCLP Volatile Organic Compounds by EPA Method 1311/8260B								
Chloroform	<50.0		50.0	ug/l	12/07/21 19:20	EPA 8260B	JML	I
1,2-Dichloroethane	<50.0		50.0	ug/l	12/07/21 19:20	EPA 8260B	JML	I
1,1-Dichloroethene	<50.0		50.0	ug/l	12/07/21 19:20	EPA 8260B	JML	I
Tetrachloroethene	<50.0		50.0	ug/l	12/07/21 19:20	EPA 8260B	JML	I
Trichloroethene	<50.0		50.0	ug/l	12/07/21 19:20	EPA 8260B	JML	I
Vinyl chloride	<50.0		50.0	ug/l	12/07/21 19:20	EPA 8260B	JML	I
Surrogate: 4-Bromofluorobenzene		*96.2 %*	*70-130*		*12/07/21 19:20*	*EPA 8260B*	JML	
Surrogate: 1,2-Dichloroethane-d4		*98.4 %*	*70-130*		*12/07/21 19:20*	*EPA 8260B*	JML	
Surrogate: Fluorobenzene		*101 %*	*70-130*		*12/07/21 19:20*	*EPA 8260B*	JML	

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Greenville Water Authority	Project:	Form 43	
44 Clinton Street	Project Number:	[none]	**Reported:**
Greenville PA, 16125	Collector:	Client	12/16/21 10:22
Project Manager: Carol Paul	Number of Containers:		

Notes

D	A Continuing Calibration Verification (CCV) analyzed with the analytical batch recovered above the acceptance range for the noted analyte.
G	The Laboratory Control Sample (LCS) analyzed with this preparation batch recovered below the acceptance range for the noted analyte.
G6	According to EPA Method 1030/40 CFR 261.21, this sample did not have a burning rate greater than 2.2mm/second and is therefore not considered to have a positive result for ignitability.
I	The spike recovery was below the acceptance range for the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) sample analyzed with the preparation batch.
K	The RPD result exceeded the quality control limits for the duplicate, Laboratory Control Sample Duplicate (LCSD), or Matrix Spike Duplicate (MSD) sample analyzed with the preparation batch.

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Greenville Water Authority
44 Clinton Street
Greenville PA, 16125
Project Manager: Carol Paul

Project: Form 43
Project Number: [none]
Collector: Client
Number of Containers:

Reported:
12/16/21 10:22

Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

\+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

* **Analysis location indicator:**
D: Indicates analysis performed by Fairway Laboratories, Inc., 110 McCracken Run Rd., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.
E: Indicates analysis performed by Fairway Laboratories, Inc., 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.
P: Indicates analysis performed by Fairway Laboratories, Inc., 89 Kristi Rd., Pennsdale, PA 17756. PA DEP Chapter 252 certification: PA 41-04684.
W: Indicates analysis performed by Fairway Laboratories, Inc., 1980 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

[CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.

ND Non Detect. The noted analyte was not detected in the sample.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

2019 Ninth Avenue
PO Box 1925
Altoona, PA 16603
(814) 946-4306

NELAP: PA 07-062, VA 460212
State Certifications: MD 275, WV 364

www.fairwaylaboratories.com

Greenville Water Authority	Project:	Form 43	
44 Clinton Street	Project Number:	[none]	**Reported:**
Greenville PA, 16125	Collector:	Client	12/16/21 10:22
Project Manager: Carol Paul	Number of Containers:		

Terms & Conditions

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

CHAIN OF CUSTODY Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

CONFIDENTIALITY Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

CONTRACTS All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

PAYMENT/BILLING Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

SAMPLE COLLECTION AND SUBMISSION Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

SUBCONTRACTING Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

RETURN OF RESULTS Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

SAMPLE DISPOSAL Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

HAZARD COMMUNICATION The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

WARRANTY AND LIMITATION OF LIABILITY For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

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Fairway Laboratories, Inc.

Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Please print. See back of COC for instructions/terms and conditions.

FAIRWAY LABORATORIES
Environmental Laboratory

2019 9th Ave.
P.O. Box 1925
Altoona, PA 16602
Phone: (814) 946-4306
Fax: (814) 946-8791

Client Page # _____ of _____

Client Name: Greenville Water Authority
Address: 44 Clinton St
Greenville PA 16125
Contact: Carol Paul
Phone #: 724 588-4340
Fax #: _____
Project Name: Sludge Form 43
Quote/PO #: _____

Received on ice? Y (N)
Sample Temp: 1.9

Reportable to PADEP? NO Yes ❑
PWSID # _____

TAT: Normal ☑ Rush ❑
Rush TAT subject to pre-approval and surcharge.
Date Required: ____/____/____

LAB USE ONLY
Work Order # 1L01172
Attach # _____
FLI Page # _____ of _____
Tracking # _____

Sample Description/Location	GRAB	Composite	Composite Start: Start Date	Composite Start: Start Time	GRAB -or- Composite End: End Date	GRAB -or- Composite End: End Time	Matrix: Solid	Matrix: Water	Matrix: Other ____	# of Containers	Analyses Requested: Form 43	Bottle Type/Comments
Treatment Plant Sludge	✓				12/1/21	09:00	X			4	X	01
												clear

Military or AM/PM required

Sampled by: (Signature) [signature] 12-1-21

Relinquished by:	Date	Time
Relinquished by:	Date	Time
Relinquished by:	Date	Time

Received by:	Date	Time
Chad Holera	12-1-21	10:00
Received by: Chad Holera	12-1-21	14:45
Received by:	Date	Time
Received by:	Date	Time

Remarks

By relinquishing my sample to Fairway Laboratories, Inc., I hereby agree to the terms and conditions printed on the reverse.

White Original - FLI File Canary - FLI Copy Pink - Customer Receipt Copy

FLI SAMPLE RECEIPT PROTOCOL

WORK ORDER:

CLIENT: Greenville Water Authority – Sludge Form 43

DATE SAMPLED: DATE RECEIVED: TIME RECEIVED:

FAIRWAY LABORATORIES

1. CHECK ALL THAT APPLY: PA ☑ WV ☐ MD ☐ P W S ☐ NPDES/COMPLIANCE ☑ DAIRY ☐ RUSH ☐

2. WERE ANY OF THE SAMPLE CONTAINERS DAMAGED/LEAKING? (ARE CUSTODY SEALS BROKEN?) YES ☐ NO ☑

IF YES, EXPLAIN: _____

3. NUMBER OF CONTAINERS RECEIVED: 4

4. WERE THE SAMPLES RECEIVED ON ICE/OTHER ACCEPTABLE REFRIGERANT? YES ☑ NO ☐

IF NO, EXPLAIN: _____

5. RECEIVING TEMP: 1.9 °C TEMP CONTROL(S) PRESENT YES ☐ NO ☐ BOTTLE(S) TEMPED: 4

6. WERE THE SAMPLES PROPERLY PRESERVED? YES ☑ NO ☐

IF NO, EXPLAIN: _____

7. WERE THE SAMPLES COLLECTED IN THE CORRECT CONTAINERS? YES ☑ NO ☐

IF NO, EXPLAIN: _____

8. IS THERE HEADSPACE PRESENT FOR VOLATILES/ODOR SAMPLES? YES ☐ NO ☐ N/A ☑

9. WAS THE COC FILLED OUT PROPERLY? YES ☑ NO ☐

IF NO, EXPLAIN: _____

10. DID THE SAMPLE LABEL(S) CONTAIN ADEQUATE INFO? (CLIENT/DATE/TIME/PRESERVATIVE) YES ☑ NO ☐

IF NO, EXPLAIN: _____

11. WERE ANY OF THE SAMPLES RECEIVED OUTSIDE OF HOLDING TIME? YES ☐ NO ☑

IF YES, EXPLAIN: _____

12. DO THE SAMPLES REQUIRE ANALYSES THAT HAVE A SHORT HOLDING TIME? YES ☐ NO ☑

IF YES, WHAT ANALYSES? _____ **PLEASE NOTIFY LABORATORY ANALYSTS!**

13. IS SUBCONTRACTING REQUIRED? YES ☐ NO ☑

IF YES, WHAT ANALYSES? _____

14. WAS THE CLIENT CONTACTED? IF YES, FILL OUT THE FOLLOWING:

FLI EMPLOYEE INITIALS: CLIENT SPOKEN TO: DATE/TIME:

OUTCOME:

SIGNATURE: Chad Holora

L60.30.A r3 Sample Receipt Form

For FLI Use Only

10 PPC Plan

PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN

Prepared for:

GREENVILLE WATER AUTHORITY
45 SOUTH WATER STREET
GREENVILLE, PENNSYLVANIA 16125
Project #: 4631.04

Prepared by:

ENTECH ENGINEERING INC.
500 NORTH CENTRE STREET
POTTSVILLE, PENNSYLVANIA 17901
(610) 373-6667

October 2017

PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN
Greenville Municipal Water Authority

TABLE OF CONTENTS

Page

1.0 INTRODUCTION 4

2.0 DESCRIPTION OF FACILITY 4

2.1 General Description 4
2.2 Existing Emergency Response Plans 5
2.3 Material and Waste Inventory 5
2.4 Pollution Incident History 6
2.5 Implementation Schedule 6

3.0 PLAN IMPEMENTATION 7

3.1 Organizational Structure of Facility 7
3.2 List of Emergency Coordinators 7
3.3 Duties and Responsibilities of the Coordinator during an Emergency 8
3.4 Chain of Command 10

4.0 SPILL LEAK PREVENTION AND RESPONSE 11

4.1 Pre-Release Planning 11
4.2 Material Compatibility 11
4.3 Inspection and Monitoring 12
4.4 Preventative Maintenance 13
4.5 Housekeeping 13
4.6 Security 13
4.7 External Factors Planning 14
4.8 Employee Training Program 14

5.0 COUNTERMEASURES 15

5.1 Countermeasures to be Undertaken by Facility 15
5.2 Countermeasures to be Undertaken by Contractors 15
5.3 Internal and External Communications or Alarm Systems 15
5.4 Evacuation Plan for Installation Personnel 16
5.5 Emergency Equipment 17

6.0 EMERGENCY SPILL CONTROL NETWORK 17

6.3 Arrangements with Local Emergency Response Agencies 17
6.2 Notification Lists 18
6.3 Downstream Notification Requirement 19

7.0 SIGNATORY REQUIREMENTS 19

8.0 ANNUAL PLAN REVIEW 20

APPENDICIES

Appendix 1	**Site Location Map**
Appendix 2	**Plant Layout**
Appendix 3	**Employee Training Information**
Appendix 4	**Emergency Contacts**
Appendix 5	**Safety Data Sheets (SDS)**

PREPAREDNESS, PREVENTION AND CONTINGENCY PLAN
Greenville Water Authority

1.0 INTRODUCTION

The Preparedness, Prevention, and Contingency Plan (PPC Plan) is for Greenville Municipal Water Authority (GMWA) located at 45 South Water Street, Greenville, Mercer County, Pennsylvania. The plan covers all applicable areas of the facility and was developed to meet the requirements of the Guidelines for the Development and Implementation of the Environmental Emergency Response Plans of the Pennsylvania Department of Environmental Protection (PADEP).

2.0 DESCRIPTION OF FACILITY

2.1 General Description

The existing facility is located at the following Latitude/Longitude 41.4023/ -80.3906.

The GWMA maintains a 2.0 million gallon per day (MGD) conventional treatment plant with five storage tanks that hold approximately 3.0 million gallons of water. The distribution system consists of 28.26 miles of main line in the Greenville Borough and 12.04 miles in Hempfield Township and West Salem Township. The Authority serves a population of approximately 8,600 consumers through 3,175 service connections.

The Greenville Water Authority obtains raw water from the Shenango River, located within the Borough of Greenville, Mercer County. The treatment plant was constructed in 1990. Since that time minor chemical feed alterations have occurred due to regulation changes required by the Environmental Protection Agency and the PA Department of Environmental Protection. The water produced serves the City of Greenville and portions of Hempfield Township and West Salem Township. The treatment plant produces approximately 900,000 gallons of water per day.

A U.S.G.S. map illustrating the general facility location is presented in **Appendix 1**, “Site Location Map” and a detailed drawing of the facility is presented in **Appendix 2**, “Plant Layout.”

2.2 Existing Emergency Response Plans

This plan conforms to various state and federal pollution incident prevention and emergency response programs. The plan is in compliance with the additional requirements for facilities under the NPDES Discharge Requirements for Industrial Dischargers. In the event of an emergency, the Emergency Coordinator will follow all of the applicable steps designated in their duties, which can be found in **Section 3.3 Duties of the Emergency Coordinator**.

2.3 Material and Waste Inventory

The following table summarizes the materials stored at the facility in quantities greater than 55 gallons:

Materials

Chemical Name	Total Quantity
USALCO DelPAC	6,600 gal
AQUA MAG® Blended Phosphate	55 gal
AS-1430 PW (Polymer)	55 gal
Potassium Permanganate	331 lbs
Chlorine (Liquefied Gas)	1,350 lbs
Hydrofluosilicic Acid Solution	165 gal
Caustic Soda 50% (Sodium Hydroxide)	330 gal
Ammonium Hydroxide or liquid ammonium sulfate	110 gal

Replaced SternPAC from Kemira, March 2022.

Safety Data Sheets (SDS) book can be found in the entryway of the treatment plant.
Copies of the SDS can be found in **Appendix 5**.

Miscellaneous Chemicals

Chemical Name	Amount
SuperFloc	5 gal

These chemicals are relatively mild and stored in small quantities that they do not pose a significant potential for spill or discharge.

2.4 Pollution Incident History

There have been no reportable spills in the last 5 years.

2.5 Implementation Schedule

The plan is complete as submitted. The plan will be updated when changes in operation or personnel occur which require modification, or if requested by PADEP.

3.0 PLAN IMPLEMENTATION

3.1 Organizational Structure of Facility

The Emergency Coordinator is responsible for implementing and maintaining the PPC Plan. For the majority of emergency situations including fires, spills, and mechanical emergencies, the Emergency Coordinator is the primary contact. The duties of the Emergency Coordinator include:

- Maintain a materials and waste inventory for the purpose of identifying all material and wastes handled by the facility;
- Provide a risk assessment in order to properly identify all potential spill sources within the facility;
- Establish spill-reporting procedures;
- Establish a visual inspection program involving indoor material handling facilities;
- Regularly review past incidents and spills and develop countermeasures to avoid future occurrences;
- Coordinate the implementation of the goals of the PPC Plan,
- Coordinate the activities for spill clean up;
- Notification to authorities in the event of an emergency or spill;
- Establish training and educational programs for installation personnel;
- Periodically review and evaluate the PPC Plan;
- Institute appropriate changes at regular intervals;
- Review all new construction and process changes relative to this plan, and
- Evaluate the effectiveness of the overall PPC Plan and make recommendations on related matters.

3.2 List of Emergency Coordinators

The Emergency Coordinator is thoroughly familiar with all aspects of the PPC Plan, all operations and activities, the characteristics of all materials handled, and the location of documents relating to hazardous materials. In addition, this individual has the authority to commit the resources necessary to carry out the PPC Plan.

In the event that an employee is met with an emergency situation (i.e., spill or fire), the employee must immediately respond by contacting the appropriate outside emergency response unit such as ambulance or fire department first and then contacting the Emergency Coordinator. The list of emergency coordinators, together with notification procedures, shall be posted in conspicuous locations throughout the facility. If the Primary Emergency Coordinator cannot be reached, than the Secondary Emergency Coordinator should be contacted, and so on.

Emergency Coordinators

	Name	**Title**	**Telephone**
PRIMARY Emergency Coordinator	Jeff Staul	Treatment Plant Foreman	Work: (724) 588-5530 Cell: (724) 813-4888
SECOND Emergency Coordinator	Carol Paul	Authority Manager	Work: (724) 588-4340 Cell: (724) 456-1937
THIRD Emergency Coordinator	On Call		Work: (724) 589-1070

3.3 Duties and Responsibilities of the Coordinator during an Emergency

Whenever there is an emission, discharge, fire, explosion, or other similar emergency at the facility, the Emergency Coordinator must immediately identify the character, source, amount and extent of emitted or discharged materials. This may be done by observation or review of records, and if necessary, by chemical analysis.

Concurrently, the Emergency Coordinator must assess possible hazards to human health or the environment that may result from the emission, discharge, fire, or explosion. This assessment must consider both direct and indirect effects of the emergency.

If the Emergency Coordinator determines that the facility has had an emission, discharge, fire, or explosion which would threaten human health or the environment, he must ***immediately notify*** the applicable local authorities including:

- Pennsylvania DEP – Northwest Regional Office (Meadville) at (814) 332-6945 or (800) 373-3398;
- Mercer County Emergency Management Agency at (724) 662-6100;
- National Response Center at (800) 424-8802;
- Pennsylvania Emergency Management Agency at (610) 562-3003.

The following information must be reported:

1. Name of person reporting the incident;
2. Name and location of the installation: **Greenville Municipal Water Authority, 45 South Water Street, Greenville, PA 16125.**
3. Phone number where the person reporting the spill can be reached;
4. Date, time, and location of the incident;
5. A brief description of the incident; nature of materials or wastes involved, extent of any injuries and possible hazards to human health or the environment;
6. The estimated quantity of the materials of wastes spilled; and
7. The extent of contamination of land, water, or air, if known.

In the event of an oil discharge, the Emergency Coordinator is responsible for all reporting and documentation procedures. Spills ultimately reaching navigable waters in harmful quantities are required to be reported to the National Response Center immediately. Harmful quantities as defined by federal regulations in 40 CFR 110.3 are as follows:

1. Discharges that violate applicable water quality standards, or

2. Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

Under Pennsylvania code, PA DEP 25 PA Code 245.1 a reportable release is defined as "A quantity or an unknown quantity of regulated substance released to or posing an immediate threat to surface water, groundwater, bedrock, soil or sediment. The term does not include the following, if the owner or operator has control over the release, the release is completely contained and, within 24 hours of the release, the total volume of the release is recovered or removed in the corrective action: (i) A release to the interstitial space of a double-walled aboveground or underground storage tank. (ii) A release of less than 25 gallons to a containment area, structure or facility around an aboveground storage tank. (iii) A release of less than 5 gallons to a synthetic surface, such as asphalt or concrete, which prevents migration of the regulated substance to surface water, groundwater, bedrock, soil or sediment. (iv) A release of less than 1 gallon to surface soils.

During an emergency, the Emergency Coordinator must take all reasonable measures necessary to ensure that fire, explosion, emission, or discharge does not occur, reoccur, or spread to other materials or wastes at the facility. These measures shall include where applicable, stopping processes and operations, collection and containing released materials or wastes, and removing or isolating containers.

If the facility stops operations in response to a fire, explosion, emission, or discharge, the Emergency Coordinator must ensure that adequate monitoring

is conducted for leaks, overflows, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

Immediately after an emergency, the Emergency Coordinator, with DEP approval, must provide for the treatment, storage, and/or disposal of residues, contaminated soil, etc. as a result of the emergency.

The Emergency Coordinator must ensure that in the affected areas of the facility, no material or waste incompatible with the emitted or discharged residues is processed, stored, treated, or disposed of until cleanup procedures are completed. Additionally, all emergency equipment listed in the plan must be cleaned and fit for its intended use before operations resume.

Within 14 calendar days after the reportable incident, the installation must submit a written report on the incident to the DEP. The report must include the following:

1. Name, address, and telephone number of the individual filing the report;
2. Name, address, and telephone number of the installation
3. Date, time, and location of the incident;
4. A brief description of the circumstances causing the incident;
5. Description and estimated quantity by weight or volume of materials or wastes involved;
6. An assessment of any contamination of land, water, or air that has occurred due to the incident;
7. Estimated quantity and disposition of recovered material or wastes that resulted from the incident; and,
8. A description of what actions the installation intends to take to prevent similar occurrence in the future.

3.4 Chain of Command

In the event of an emergency such as a fire, the employee discovering the emergency will immediately notify the appropriate local emergency response department. The employee will then contact the Emergency Coordinator. If the Primary Emergency Coordinator cannot be reached, the Secondary Emergency Coordinator is contacted, and so on. See **Section 3.2 List of Emergency Coordinators.**

4.0 SPILL LEAK PREVENTION AND RESPONSE

4.1 Pre-Release Planning

Containment and/or diversionary structures are used at the facility to prevent a release of chemicals (including oil) from reaching navigable waters, unless determined to be impractical. Containment employed at the facility includes a combination of structures (dikes, containment pallets, valves, sorbent rolls, bucket with lids, etc...), drainage systems, and land based spill response to prevent contaminants from reaching stormwater and/or navigable waters.

All oils are stored on or in secondary containment. Fifty five gallon drums are placed on spill pallets, the 6,400 gallon Aluminum Chloride tank and 200 gallon/day tank are within secondary containment. See Below.

The chlorine gas is stored in its own room with proper ventilation and monitoring. During the recovery process of chemicals the facility places a magnetic drain mat over the catch basins below grade of the dock. This mat prevents any material from reaching the stormwater conveyance system.

Where no secondary containment structures are provided, the facility will rely on this Contingency Plan to establish procedures and guidance for the prevention, detection and response to spill/releases of oils. In the event that chemicals would be found leaking or spilled and the employees cannot control the leak/spill, an outside contractor would be called in to control and remediate the leak/spill (the clean-up contractor is listed in **Section 6.2 Notification Lists** and **Appendix 4 Emergency Contacts.**

4.2 Material Compatibility

As part of normal, standard plant engineering practices at the facility, all materials of construction for tanks, pipes, and other structural components are evaluated for the compatibility with the environment in which the materials are to function. This includes an evaluation of the suitability of the materials to withstand exposure to liquids and vapors at various operating temperatures. Additionally, consideration is given to possible reactions between various chemicals that could cause a fire, explosion, harmful reaction, or unusual corrosion if they were accidentally or intentionally mixed. All containers are inspected prior to introduction to the work area. Employees are directed in the safe handling of materials and wastes present in the work place during employee training program.

4.3 Inspection and Monitoring

A weekly visual inspection program assesses the integrity of equipment, storage areas and other construction elements capable of directly or indirectly leading to discharges of pollutants into receiving waters. Such an inspection shall consist of, but is not limited to the following:

- Above ground storage tanks,
- Effectiveness of housekeeping,
- Chemical storage areas,
- Stormwater collection systems,
- Material or waste conveyance systems for leaks, spills, or overflows,

Based on the results of the inspections, potential pollutant sources identified and control measures will be implemented within 15 days of inspection. The revisions will provide for the implementation of any changes to the PPC plan in a timely manner, but in no case later than 90 days after the inspection.

4.4 Preventative Maintenance

The preventative maintenance program includes, but is not limited to, the following items:

- Fire Extinguisher inspections; yearly
- First Aid Supply inspections; monthly
- Adjustment, repair, or replacement of parts,
- Periodic inspections of equipment and systems, including emergency response equipment and self-contained breathing Apparatus,
- Record keeping of preventative maintenance activities, inspection and test results, repairs, replacements, and adjustments to the applicable equipment and systems,
- Frequent inspections of all storm water catch basins,
- Cleaning of the storm water conveyance system as needed, and
- Prohibition of storage of all uncovered material at all times in areas exposed to storm water.
- Rubber Matting is placed over storm drains when receiving chemicals.

4.5 Housekeeping

The plant has instituted a routine housekeeping program to reduce the possibility of accidental spills and safety hazards to plant personnel. This housekeeping program includes the following:

- No chemicals are stored outside of the plant,
- Neat and orderly storage of materials in specified areas inside the plant,
- Prompt removal of any small spillage,
- Regular refuse pick-up and disposal,
- Materials are clearly marked as to their contents, and
- Employees are regularly advised of the benefits of good housekeeping, particularly regarding safety in the work-place.

4.6 Security

Security procedures are employed at the plant to prevent accidental or intentional entry. Some of these security measures include:

- Lighted exteriors specifically near loading docks and doors,
- Locked entrance doors,
- Locked barbwire fencing surrounds the entire facility,
- Escorted visitor access only,
- Restricted areas within facility including the chemical storage, and

- Surveillance video recording of the facility.

4.7 External Factors Planning

The Greenville Fire Department is located at 111 East Ave in Greenville, Pennsylvania and can be reached at 724-588-3111 or in the event of an emergency by calling 911. The Fire Department is located approximately 1 mile from the facility. The Hempfield Volunteer Fire Company is located at 20 S Route 4031 in Greenville, Pennsylvania and can be reached at 724-588-6001 in the event that Greenville Fire Department cannot be reached or if additional services are needed.

For medical emergencies, UPMC Horizon- Greenville is located at 110 N. Main Street in Greenville, Pennsylvania and can be reached at 724-588-2100 or by calling 911. The Hospital is approximately 1.3 miles from the site.

Power outages could affect the facility operations. Penn Power (First Energy) supplies the facility with electricity.

Severe weather could also affect facility operations. The only variable that could directly affect a release of contamination into the stormwater system is a substantial rain event that causes flooding. If the area should become flooded from such a storm, appropriate actions would be taken to contain any chemical runoff from the site.

4.8 Employee Training Program

Hazardous substance awareness training takes place at the facility. All personnel are trained on the job in material handling safety and spill control procedures relative to their duties as well other employee training programs. The employee training programs are performed at the facility to educate employees about the materials with which they are working, safety and health hazards, the practices of preventing spills, and the procedures for responding properly and rapidly to spills. The employee training consists of the following items:

- A detailed description of each material and its varied nomenclature;
- A complete explanation of the health hazards related to each material;
- A complete explanation of safety procedures for each material concerning toxicity, flammability, storage, and handling;
- A detailed explanation of the facility practices for preventing spills;
- Information regarding good housekeeping procedures;
- Instruction of procedures and rapid response to spills, particularly regarding available equipment and procedures to confine and control the spread of the spill;

- Instruction on using, inspecting, repairing, and replacing emergency and monitoring systems; and
- Information regarding response to fire and explosions, as well as site evacuation procedures and the shut down of operations.

Employee training is to be conducted upon hire of all new employees and annually thereafter. A record of employee attendance will be included in personnel files. **Appendix 3** contains an outline of **Employee Training Information.**

5.0 COUNTERMEASURES

5.1 Countermeasures to be Undertaken by Facility

The response strategy for the facility includes allowing personnel to respond to minor spills or leaks. Minor discharges are ones where the quantity of chemical discharged are small and can be easily stopped and controlled within the facility and are not likely to seep into groundwater or reach surface water.

Major discharges will necessitate the assistance of outside contractors or other responders to prevent imminent impact to navigable waters. Major discharges include discharges that can not be controlled by facility personnel or that have impacted groundwater or surface water.

5.2 Countermeasures to be Undertaken by Contractors

In the event of a chemical release that could not be handled by trained employees, the employees are to contact the current supplier of the chemical released.

If additional emergency response capabilities are needed, the facility can contact McCutcheon Enterprises,Inc. located in Apollo, Pennsylvania and can be reached at 724-568-6323.

Various spill response equipment is available for the containment and cessation of spills including: pumps, booms, and absorbents.

5.3 Internal and External Communications or Alarm Systems

The employees at the facility are equipped with cell phones that can be used to communicate emergency instructions. Communication with off-site response workers can be done via cell phone.

5.4 Evacuation Plan for Installation Personnel

The Greenville Municipal Water Authority has established a comprehensive evacuation and assembly plan. This plan will be followed if an evacuation is required.

5.5 Emergency Equipment

Facility personnel have been instructed in the operation and maintenance of oil pollution prevention equipment and pollution control laws and regulations. Spill control equipment is located inside the facility at various locations. Spill control equipment includes the following items:

- Absorbent pads,
- Booms,
- Granular absorbent,
- Tools,
- Empty drums,
- Buckets with lids,
- Brooms,
- Squeeges,
- Shovels,
- Pumps,
- Fans can be used to evacuate dust or fumes
- First aid supplies are maintained within the plant, and
- Fire Extinguishers are located throughout the facility. The type and capabilities of each are identified on their respective label. All fire extinguishers are inspected monthly.

Spill kits are located near chemical storage locations.

6.0 EMERGENCY SPILL CONTROL NETWORK

6.1 Arrangements with Local Emergency Response Agencies

The Greenville Fire Department is located at 111 East Ave in Greenville, Pennsylvania and can be reached at 724-588-3111 or in the event of an emergency by calling 911. The Fire Department is located approximately 1 mile from the facility. The Hempfield Volunteer Fire Company is located at 20 S Route 4031 in Greenville, Pennsylvania and can be reached at 724-588-6001 in the event that Greenville Fire Department cannot be reached or if additional services are needed.

For medical emergencies, UPMC Horizon- Greenville is located at 110 N. Main Street in Greenville, Pennsylvania and can be reached at 724-588-2100 or by calling 911. The Hospital is approximately 1.3 miles from the site.

West Salem Police Department is located at 125 Main Street, Greenville, Pennsylvania. The police department can be reached at 724-588-4190 or in the event of an emergency at 911.

The Emergency Coordinator will ensure that the above listed agencies are familiar with the facility, the property and dangers associated with any hazardous materials handled, placed where personnel would normally be working, entrances to the facility, routes through the facility, and evacuation routes from the facility. The above listed agencies also have access to the specific facility information from the Mercer County Emergency Response Agency.

6.2 Notification Lists

The employee discovering an emergency shall immediately notify the primary emergency coordinator. In the event that the Primary Emergency Coordinator cannot be contactor, the Secondary Emergency Coordinator is to be contacted, and so forth. Once the Emergency Coordinator has knowledge of an incident, the Coordinator is to make the proper notifications. In the event that a release is considered to be harmful to the public health or welfare of the United States, they shall immediately notify the National Response Center (NRC). If reporting to the NRC is not practicable, reports may be made to the appropriate regional EPA office. Phone numbers regarding the reporting of a spill to the proper agencies and the facility's emergency coordinators are listed below.

Emergency Coordinators

	Name	**Title**	**Telephone**
PRIMARY Emergency Coordinator	Jeff Staul	Treatment Plant Foreman	Work: (724) 588-5530 Cell: (724) 813-4888
SECOND Emergency Coordinator	Carol Paul	Authority Manager	Work: (724) 588-4340 Cell: (724) 456-1937
SECOND Emergency Coordinator	On Call		Work: (724) 589-1070

Regulatory Agencies

National Response Center	(800) 424-8802
EPA Regional Response Center (24 Hour)	(215) 814-5000
PA Department of Environmental Protection (24 Hour)	(877) 333-1904
Northwest Regional Office (24 Hour)	(814)332-6945 or (800) 373-3398
Statewide Emergency Response (24 Hour)	(800) 541-2050 or (717) 787-4343

PA Fish and Boat Commission:	(717) 705-7800
Mercer County Emergency Management Agency:	(724) 622-6100
Pennsylvania Department of Health Services:	(877) 724-3258
Pennsylvania Emergency Management Agency:	(800) 424-7362

Emergency Response Contractor

McCutcheon Enterprise, Inc.	(724) 568-6323
Emergency Response-24 hr	(724) 568-3623 Ext.0

Emergency Response

State Police, Fire, Ambulance	911

A copy of the emergency contact list can also be found in **Appendix 5.**

6.3 Downstream Notification Requirement

Downstream notification is not required because the facility contains <21,000 gallons of regulated substances.

7.0 SIGNATORY REQUIREMENTS

The following signature authorizes that PPC Plan for Greenville Water Authority located at 44 Clinton Street, Greenville, Mercer County, Pennsylvania.

Authorized Facility Representative:

Name: Carol Paul
Title: Authority Manager

Signature: _____
Date: _____

8.0 ANNUAL PLAN REVIEW

The PPC plan must be reviewed annually and a log kept of the review. Any major findings or changes will require the plan to be revised.

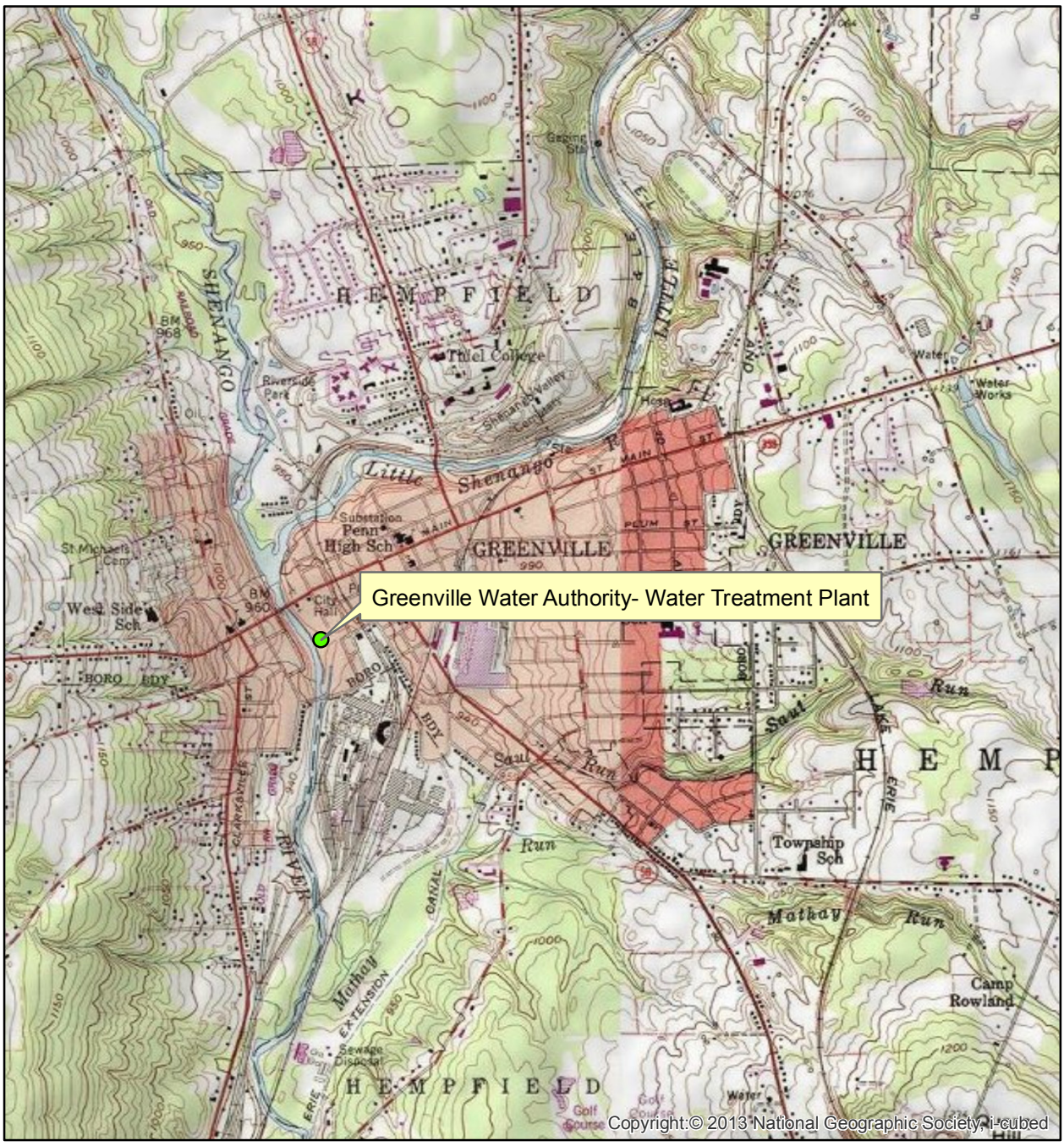
Name of Reviewer	Date of Review	Purpose of Review	Revisions Made – List Details if any	Signature

** NOTE: Plan should be reviewed by either the Primary or Alternate Facility Emergency Coordinator

APPENDIX 1

Site Location Map

Site Location Map



N

0 0.25 0.5 1 Miles

Site Location

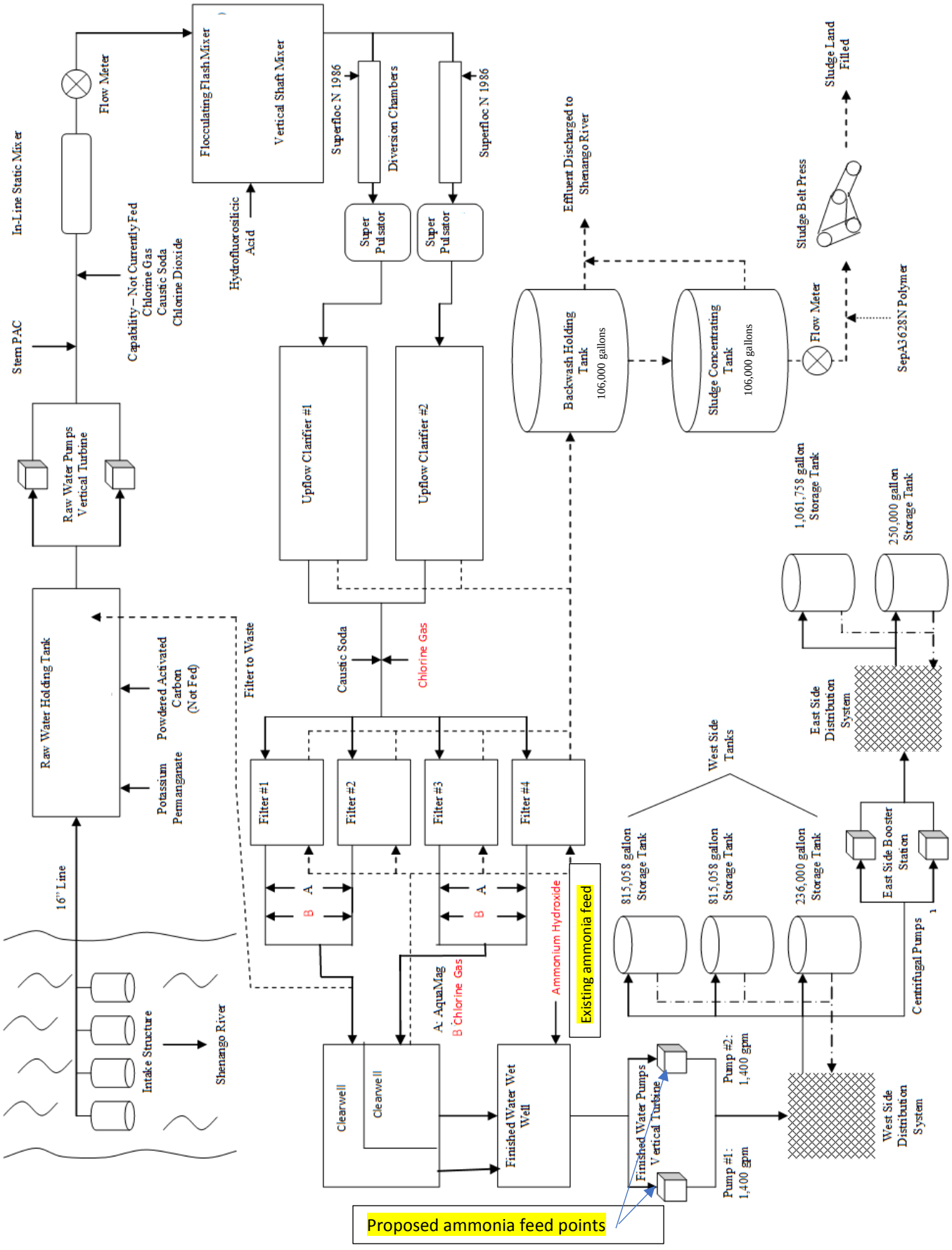
Greenville Water Authority- Water Treatment Plant
45 South Water Street
Greenville, PA 16125

Source: National Geographic Society,i-cuded,ERSI,USGS,PASDA

APPENDIX 2

Plant Layout

Greenville Water Authority – Water Treatment Plant Schematic



APPENDIX 3

Employee Training Information

EMPLOYEE TRAINING PROGRAM OUTLINE

GENERAL:

- Review PPC Plan

MATERIALS:

- Review materials onsite
- Review MSDS for materials
- Review Safety and Health Hazards associated with materials
- Right to Know Information

LABORATORY SAFETY / SPILL PREVENTION:

- Proper chemical storage, use, and disposal
- HAZCOM
- First Aid kit and fire extinguisher use and locations

SPILL CLEAN-UP:

- Identify spill and conditions
- Review of spill response equipment
- Get help if necessary
- Seal off area and alert others
- Identify hazards
- Prepare plan of action
- Acquire necessary equipment and materials
- Contain the spill
    - Stop spill or leak
    - Build barrier to stop spread or divert flow
- Clean up

EMPLOYEE TRAINING LOG

Instructor:_____

I certify, I have been present at this PPC training session and understand the written PPC program as it relates to the work I am performing. I also understand the role, which I am to perform in case of an emergency.

Date	Employee (print name)	Employee (signature)

Note: New employees shall receive initial training in the contents and implementation of this PPC plan upon start of their employment. All employees shall receive annual refresher training in the contents and implementation of this PPC plan.

APPENDIX 4

Emergency Contacts

EMERGENCY CONTACTS

Once the Emergency Coordinator or subsequent coordinators have knowledge of any discharge of that may be considered harmful to the public health or welfare of the United States, they shall immediately notify the National Response Center (NRC). If reporting to the NRC is not practicable, reports may be made to the appropriate regional EPA office. Phone numbers regarding the reporting of a spill to the proper agencies and the facility's emergency coordinators are listed below.

Emergency Coordinators

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Regulatory Agencies

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EPA Regional Response Center (24 Hour)	(215) 814-5000
PA Department of Environmental Protection (24 Hour)	(877) 333-1904
Northeast Regional Office (24 Hour)	(814) 332-6945 or (800) 373-3398
Statewide Emergency Response (24 Hour)	(800) 541-2050 or (717) 787-4343
PA Fish and Boat Commission:	(717) 705-7800
Mercer County Emergency Management Agency:	(724) 622-6100
Pennsylvania Department of Health Services:	(877) 724-3258
Pennsylvania Emergency Management Agency:	(800) 424-7362

Emergency Response Contractor

McCutcheon Enterprise, Inc.	(724) 568-6323
Emergency Response-24 hr	(724) 568-3623 Ext.0

Emergency Response

State Police, Fire, Ambulance	911

APPENDIX 5

Safety Data Sheets (SDS)

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: **AS-1430PW**

Synonyms/ Use: Anionic polymer emulsion

NSF Certified to NSF/ANSI 60 — Certified to a Maximum Use for Potable Water of 1 mg/L

Manufacturer/Supplier: Applied Specialties, Inc.
33555 Pin Oak Parkway
Avon Lake, OH 44012

Customer Information Number: 440-933-9442

For Chemical Emergency Spills, Leaks, Fire, Exposure or Accident, **call Chemtrec: (800) 424-9300** day or night

2. HAZARDOUS IDENTIFICATION

Signal Word: n/a

Pictograms: n/a

Hazard Statements: May be harmful in contact with skin. May be harmful if swallowed.

Precautionary Statements:

Prevention	Do not breathe mist or vapors.	(P260)
	Wash hands thoroughly after handling.	(P264)
	Do not eat, drink or smoke when using this product.	(P270)
	Use only outdoors or in a well-ventilated area.	(P271)
	Wear protective gloves and eye/ face protection.	(P280)

Carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen

Reproductive toxicity: No reproductive effects reported

Teratogenicity: No teratogenic effects reported

Genotoxicty: No mutagenic effects reported

Aquatic toxicity: Not determined

3. CHEMICAL COMPOSITION

COMPONENT	CAS NUMBER	WT %
Petroleum distillate, hydrotreated light	64742-47-8	10 – 30
Oxyalkylated alcohol	84133-50-6	1 – 5

Chemical identity of some ingredients may be withheld as confidential as permitted by 29 CFR 1910.1200 and various State right to know laws.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational Exposure Limits: hydrotreated light distillate ACGIH TLV: 200 mg/m^3

Exposure Guidelines: Work in well ventilated areas. Do not breathe mist or vapors. Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice.

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to reduce airborne levels below established guidelines. Use local exhaust ventilation in areas where these levels may be exceeded.

Personal Protection:

Respirator:	Wear a NIOSH/MSHA approved or equivalent vapor/particulate respirator as necessary.
Eye Protection:	Tight fitting safety goggles and face shield
Gloves:	Chemical resistant gloves and check with glove manufacturers' recommendations, consider all work functions when selecting the best glove.
Clothing:	Impermeable protective clothing as necessary to minimize contact.
Other:	Eye wash and safety showers should be in immediate work area; practice good industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Opaque, white to cream colored liquid
Odor	Hydrocarbon
Viscosity	400 – 1,200 mPas
Freeze Point	-20°C
Boiling Point	98°C
Flash Point	>93°C
Bulk Density	~1.05 g/mL
Product pH	~8
Solubility in Water	emulsifiable

10. STABILITY AND REACTIVITY

Stability:	The product is stable under normal temperatures and pressures
Hazardous Reactions:	No hazardous reactions when stored and handled according to instructions.
Incompatibilities:	Addition of water results in geiling, strong oxidizers.
Materials to avoid:	Avoid extreme temperatures; Avoid all sources of ignition, heat, spark, open flame.
Hazardous Decomposition Products:	Carbon oxides, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Oral:	LD50	Rat	>5,000 mg/Kg
Irritation/ corrosion:	Eye	Rabbit	non-irritant
Aspiration hazard:	no aspiration hazard expected.		

RCRA STATUS
It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA

NTP, IARC, OSHA, & ACGIH STATUS
None of the components in this product at concentrations greater than 0.1% are listed

DOT REPORTABLE QUANTITY (RQ) (49 CFR, Subchapter C, Section 172.101, Appendix A)

Component	CAS Number	Concentration	RQ
No components listed			

STATE REGULATIONS:

PENNSYLVANIA, NEW JERSEY, and MASSACHUSETTS RIGHT-TO-KNOW INFORMATION

Component	CAS Number	
Petroleum distillate, hydrotreated light	64742-47-8	10 – 30
Oxyalkylated alcohol	84133-50-6	1 – 5

CALIFORNIA PROPOSITION 65:
THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR REPRODUCTIVE HARM.

16. OTHER INFORMATION

Precautionary Statements for response, storage, and disposal:

This information is given without any warranty or representation and is presented in good faith and believed to be accurate. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation and verification. Before using any product, read its label carefully and completely.

Revision 5/ supersedes 6/19/12/ mtl

Revisions: format, all sections

Univar USA Inc Safety Data Sheet

GREENVILLE MUNICIPAL
WATER PLANT
45 SOUTH WATER STREET
GREENVILLE
PA 16125

SDS No:	
Version No:	010 01/29/15
Order No:	PT737319

3075 Highland Pkwy, Ste 200, Downers Grove, IL 60515
(425) 889 3400

Emergency Assistance

For emergency assistance involving chemicals call
Chemtrec - (800) 424-9300

SAFETY DATA SHEET

1. Identification

Product identifier **CAIROX® potassium permanganate**

Other means of identification

SDS number -

Recommended use Potassium Permanganate is an oxidant recommended for applications that require a strong oxidant.

Recommended restrictions Use in accordance with supplier's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer/Supplier CARUS CORPORATION

Address 315 Fifth Street,
Peru, IL 61354, USA

Telephone 815 223-1500 - All other non-emergency inquiries about the product should be directed to the company

E-mail salesmkt@caruscorporation.com

Website www.caruscorporation.com

Contact person Dr. Chithambarathanu Pillai

Emergency Telephone For Hazardous Materials [or Dangerous Goods] Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC at
CHEMTREC®, USA: 001 (800) 424-9300
CHEMTREC®, Mexico (Toll-Free - must be dialed from within country): 01-800-681-9531
CHEMTREC®, Other countries: 001 (703) 527-3887

2. Hazard(s) identification

Physical hazards	Oxidizing solids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 1 (Respiratory System)
	Specific target organ toxicity, repeated exposure	Category 1 (Respiratory System, Central Nervous System)

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May intensify fire; oxidizer. Harmful if swallowed. Causes severe skin burns and eye damage. Causes damage to organs (Respiratory System). Causes damage to organs (Respiratory System, Central Nervous System) through prolonged or repeated exposure.

Precautionary statement

Prevention Keep away from heat. Keep/Store away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe dust. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product.

Response In case of fire: Use water for extinction. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. If exposed: Call a poison center/doctor.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)	Not classified	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

Supplemental information

Hazard symbol

Hazard statement Very toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Avoid release to the environment.

Response Collect spillage.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Potassium permanganate		7722-64-7	> 97.5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Get medical attention immediately.

Skin contact Take off immediately all contaminated clothing. Immediately flush skin with plenty of water. Get medical attention immediately. Wash contaminated clothing before reuse.

Contact with skin may leave a brown stain of insoluble manganese dioxide. This can be easily removed by washing with a mixture of equal volume of household vinegar and 3% hydrogen peroxide, followed by washing with soap and water.

Eye contact Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids wide apart. Continue rinsing. Get medical attention immediately.

Ingestion Immediately rinse mouth and drink plenty of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention immediately.

Most important symptoms/effects, acute and delayed Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Decomposition products are alkaline. Brown stain is insoluble manganese dioxide.

General information In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. For personal protection, see Section 8 of the SDS. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Flood with water from a distance, water spray or fog.

Unsuitable extinguishing media The following extinguishing media are ineffective: Dry chemical. Foam. Carbon dioxide (CO2). Halogenated materials.

Specific hazards arising from the chemical May intensify fire; oxidizer. May ignite combustibles (wood, paper, oil, clothing, etc.). Contact with incompatible materials or heat (135 °C / 275 °F) could result in violent exothermic chemical reaction. Oxidizing agent, may cause spontaneous ignition of combustible materials. By heating and fire, corrosive vapors/gases may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/instructions	Move containers from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Dike fire control water for later disposal. Water runoff can cause environmental damage.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep upwind. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	Keep combustibles (wood, paper, oil, etc.) away from spilled material. Should not be released into the environment. This product is miscible in water. Stop leak if possible without any risk. Dike the spilled material, where this is possible. Clean up spills immediately by sweeping or shoveling up the material. Do not return spilled material to the original container; transfer to a clean metal or plastic drum. To clean up potassium permanganate solutions, follow either of the following two options: Option # 1: Dilute to approximately 6% with water, and then reduce with sodium thiosulfate, a bisulfite or ferrous salt solution. The bisulfite or ferrous salt may require some dilute sulfuric acid (10% w/w) to promote reduction. Neutralize with sodium carbonate to neutral pH, if acid was used. Decant or filter and deposit sludge in approved landfill. Where permitted, the sludge may be drained into sewer with large quantities of water. Option # 2: Absorb with inert media like diatomaceous earth or inert floor dry, collect into a drum and dispose of properly. Do not use saw dust or other incompatible media. Disposal of all materials shall be in full and strict compliance with all federal, state, and local regulations pertaining to permanganates. To clean contaminated floors, flush with abundant quantities of water into sewer, if permitted by federal, state, and local regulations. If not, collect water and treat as described above. Never return spills in original containers for re-use. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Do not allow to enter drains, sewers or watercourses. Contact local authorities in case of spillage to drain/aquatic environment.

7. Handling and storage

Precautions for safe handling	Take any precaution to avoid mixing with combustibles. Do not get this material in your eyes, on your skin, or on your clothing. Do not breathe dust or mist or vapor of the solution. Use personal protection as recommended in Section 8 of the SDS. If clothing becomes contaminated, remove and wash off immediately. When using, do not eat, drink or smoke. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid release to the environment.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep container tightly closed and in a well-ventilated place. Store in a cool, dry place. Store away from incompatible materials (See Section 10). Store in accordance with NFPA 430 requirements for Class II oxidizers.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Potassium permanganate (CAS 7722-64-7)	Ceiling	5 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Potassium permanganate (CAS 7722-64-7)	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Potassium permanganate (CAS 7722-64-7)	TWA	1 mg/m3	Fume.

US NIOSH Pocket Guide to Chemical Hazards: Short Term Exposure Limit (STEL)

Components	Type	Value	Form
Potassium permanganate (CAS 7722-64-7)	STEL	3 mg/m3	Fume.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Follow standard monitoring procedures.
Appropriate engineering controls	Provide adequate general and local exhaust ventilation. An eye wash and safety shower must be available in the immediate work area.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles). Wear face shield if there is risk of splashes.
Skin protection	
Hand protection	Wear chemical-resistant, impervious gloves. Use protective gloves made of: Rubber or plastic. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate chemical resistant clothing. Rubber or plastic apron.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. Measurement Element: Manganese (Mn) 10 mg/m3 Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100 or P100. Any supplied-air respirator. 25 mg/m3 Any supplied-air respirator operated in a continuous-flow mode. Any powered, air-purifying respirator with a high-efficiency particulate filter. 50 mg/m3 Any air-purifying, full-face piece respirator equipped with an N100, R100, or P100 filter. Any supplied-air respirator with a tight-fitting face piece that is operated in a continuous-flow mode. Any powered, air-purifying respirator with a tight-fitting face piece and a high-efficiency particulate filter. Any self-contained breathing apparatus with a full face piece. Any supplied-air respirator with a full face piece. 500 mg/m3 Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode. Emergency or planned entry into unknown concentrations or IDLH conditions - Any self-contained breathing apparatus that has a full face piece and is operated in a pressure-demand or other positive-pressure mode. Escape Any air-purifying, full-face piece respirator equipped with an N100, R100, or P100 filter. Any appropriate escape-type, self-contained breathing apparatus.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Dark purple solid with metallic luster.
Physical state	Solid.
Form	Solid.
Color	Dark purple.
Odor	Odorless.
Odor threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Starts to decompose with evolution of oxygen (O2) at temperatures above 150 °C. Once initiated, the decomposition is exothermic and self sustaining.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non flammable.

Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.7 (20 °C) (Water = 1)
Solubility(ies)	6 % (20 °C) 20 % (65 °C)
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Other information	
Explosive properties	Not explosive. Can explode in contact with sulfuric acid, peroxides and metal powders.
Molecular weight	158.03
Oxidizing properties	Strong oxidizing agent.

10. Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Contact with combustible material may cause fire. Can explode in contact with sulfuric acid, peroxides and metal powders. Starts to decompose with evolution of oxygen (O2) at temperatures above 150 °C. Once initiated, the decomposition is exothermic and self sustaining.
Conditions to avoid	Contact with incompatible materials or heat (135 °C / 275 °F) could result in violent exothermic chemical reaction.
Incompatible materials	Acids. Peroxides. Reducing agents. Combustible material. Metal powders. Contact with hydrochloric acid liberates chlorine gas.
Hazardous decomposition products	By heating and fire, corrosive vapors/gases may be formed.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Harmful if swallowed.
Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics	Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components	Species	Test Results
Potassium permanganate (CAS 7722-64-7)		
Acute		
Dermal		
LD50	Rat	2000 mg/kg
Oral		
LD50	Rat	2000 mg/kg

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/eye irritation	Causes serious eye damage.

Respiratory sensitization	Not classified.
Skin sensitization	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	Causes damage to organs (respiratory system).
Specific target organ toxicity - repeated exposure	Causes damage to organs (respiratory system, central nervous system) through prolonged or repeated exposure.
Aspiration hazard	Not classified.
Chronic effects	May cause damage to respiratory system. Prolonged exposure, usually over many years, to manganese oxide fume/dust can lead to chronic manganese poisoning, chiefly affecting the central nervous system.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Potassium permanganate (CAS 7722-64-7)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	2.7 mg/l, 96 hours, static
			2.3 mg/l, 96 hours, flow through
			2.3 mg/l, 96 hours
			1.8 - 5.6 mg/l
		Carp (Cyprinus carpio)	3.16 - 3.77 mg/l, 96 hours
			2.97 - 3.11 mg/l, 96 hours
		Goldfish (Carassius auratus)	3.3 - 3.93 mg/l, 96 hours, static
		Milkfish, salmon-herring (Chanos chanos)	> 1.4 mg/l, 96 hours
		Rainbow trout (Oncorhynchus mykiss)	1.8 mg/l, 96 hours
			1.08 - 1.38 mg/l, 96 hours
			0.77 - 1.27 mg/l, 96 hours
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.275 - 0.339 mg/l, 96 hours

Persistence and degradability	Expected to be readily converted by oxidizable materials to insoluble manganese oxide.
Bioaccumulative potential	Potential to bioaccumulate is low.
Mobility in soil	The product is miscible with water. May spread in water systems.
Other adverse effects	None known.

13. Disposal considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazardous waste code	D001: Ignitable waste The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Do not allow this material to drain into sewers/water supplies.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Rinse container at least three times to an absence of pink color before disposing. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1490
UN proper shipping name	Potassium permanganate
Transport hazard class(es)	5.1
Subsidiary class(es)	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes

Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB8, IP2, IP4, T3, TP33
Packaging exceptions	152
Packaging non bulk	212
Packaging bulk	240

IATA

UN number	UN1490
UN proper shipping name	Potassium permanganate
Transport hazard class(es)	5.1
Subsidiary class(es)	-
Packaging group	II
Environmental hazards	Yes
Labels required	5.1
ERG Code	5L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN1490
UN proper shipping name	POTASSIUM PERMANGANATE
Transport hazard class(es)	5.1
Subsidiary class(es)	-
Packaging group	II
Environmental hazards	
Marine pollutant	Yes
Labels required	5.1
EmS	F-H, S-Q
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

Drug Enforcement Administration (DEA) (21 CFR 1310.02 (b) 8: List II chemical.

Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (6 CFR 27, Appendix A): Listed.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Potassium permanganate	7722-64-7	> 97.5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Potassium permanganate (CAS 7722-64-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130) Hazardous substance

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Potassium permanganate (CAS 7722-64-7) 6579

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Potassium permanganate (CAS 7722-64-7) 15 % wt

DEA Exempt Chemical Mixtures Code Number

Potassium permanganate (CAS 7722-64-7) 6579

Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

California OSH Hazardous Substance List: Listed.

US. Massachusetts RTK - Substance List

Potassium permanganate (CAS 7722-64-7)

US. New Jersey Worker and Community Right-to-Know Act

Potassium permanganate (CAS 7722-64-7) 500 lbs

US. Pennsylvania RTK - Hazardous Substances

Potassium permanganate (CAS 7722-64-7)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 27-November-2013

Revision date -

Version # 01

NFPA Ratings

List of abbreviations

GHS: Globally Harmonized System of Classification and Labeling of hazardous properties of Chemicals.
TWA: Time weighted average.
LD50: Lethal Dose, 50%.
LC50: Lethal Concentration, 50%.
IMDG: International Maritime Dangerous Goods.
IATA: International Air Transport Association.
MARPOL: International Convention for the Prevention of Pollution from Ships.

References

HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

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This SDS contains revisions in the following section(s):

This safety data sheet contains revisions in the following section(s):

Univar USA Inc Safety Data Sheet

For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

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Distributed By:
SAL Chemical
304-748-8200

Airgas

Material Safety Data Sheet # 4002 Last Revision 05/20/09

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

CHEMICAL NAME: Ammonium Hydroxide **TRADE NAMES / SYNONYMS:** Aqua Ammonia, Ammonium Hydroxide

MANUFACTURER AND/OR DISTRIBUTOR:
Airgas Specialty Products
2530 Sever Road, 300
Lawrenceville GA 30043 USA

EMERGENCY TELEPHONE NUMBERS:
Transportation (CHEMTREC): 1-800-424-9300
Environmental/Health/Safety (24-hr): 1-800-528-4963
Customer Service (Toll Free): 1-800-295-2225

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL	FORMULA	% BY WEIGHT	CAS	OSHA PEL	NIOSH REL / ACGIH TLV		IDLH
				25 ppm (California only)			
Ammonia	NH_3	20-30	7664-41-7	50 ppm (TWA)	25 ppm (TWA)	35 ppm (STEL)	300ppm
Water	H_2O	70-80	7732-18-5	None	None	None	
Aqua Ammonia	NH_4OH	100	1336-21-6	-----	-----	-----	

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: 1. Colorless liquid with a pungent odor. 2. Avoid contact with liquid and vapor. 3. Not flammable. 4. Mixes with water. 5. Harmful to aquatic life in very low concentrations. 6. Stop discharge if possible.

POTENTIAL HEALTH EFFECT

ROUTES OF ENTRY: Inhalation, Skin Contact, Eye Contact, Ingestion **TARGET ORGANS:** Eyes, skin and respiratory system. **EYE CONTACT:** May be severely irritating upon liquid exposure, with irritation from fumes. **SKIN CONTACT:** High concentrations can cause severe irritation and burns. **INHALATION:** The gas can be suffocating and is irritating to the mucous membranes and lung tissue. **INGESTION:** Can cause vomiting, nausea and corrosive burns to the esophagus and stomach. The exact nature and intensity of toxic effects following ingestion of varying amounts of strong aqua ammonia solution (ex. 20-30%) is unpredictable. The most accepted view is that any amount from one teaspoon or greater can be dangerous if ingested.

SECTION 4: FIRST AID MEASURES

EYE CONTACT: Flush with large amounts of water for at least 15 minutes then immediately seek medical aid.
SKIN CONTACT: Immediately flush with large quantities of water for at least 15 minutes while removing clothing. Seek immediate medical aid.
INHALATION: Remove from exposure. If breathing has stopped or is difficult, administer artificial respiration or oxygen as needed. Seek immediate medical aid.
INGESTION: Do not induce vomiting. Have victim drink large quantities of water if conscious. Immediately seek medical aid. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT(method used): Not Applicable **FLAMMABLE LIMITS:** 16-25% NH_3 in air (for labeling purposes, not DOT flammable gas). **EXTINGUISHING MEDIA:** Water fog or spray for escaping ammonia gas.
SPECIAL FIRE FIGHTING PROCEDURES: The mixture will not burn but escaping gas can burn in the range of 16-25% NH_3 in air. Wear full protective clothing and self-contained breathing apparatus in the pressure demand mode.
NFPA HAZARD CLASSIFICATION (Aqua): Health: 2 **Flammability:** 1 **Reactivity:** 0 (least-0 ---- 4-highest)

SECTION 6: ACCIDENTAL RELEASE MEASURES

In US, federal regulations require that a release of 1,000 lb. or more of ammonium hydroxide must be reported immediately to the National Response Center at (800) 424-8802, the SERC and the LEPC. In California, ALL releases must be reported to CUPA, state and local agencies. Additional state and local regulations may apply. **SUGGESTED LOCAL ACTION:** Releases will liberate irritating vapors. Spilled liquids should be contained and not washed into sewers or ground water. Prevent large quantities from contact with vegetation or waterways. Ammonium hydroxide is a regulated material and reporting of any release may be required. Any release of this material during the course of loading, transporting, unloading or temporary storage must be reported to the U.S. DOT as required by 49 CFR 171.15 and 171.16.

SECTION 7: HANDLING AND STORAGE

Store in ventilated containers or pressure vessels away from heat. Open containers cautiously in case of pressure build up. Zinc, copper and copper alloys such as brass are rapidly corroded by ammonium hydroxide.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Respiratory protection approved by NIOSH / MSHA for ammonia must be used when exposure limits are exceeded. Whether chemical canister respirator or self-contained breathing apparatus is sufficient for effective respiratory protection depends on the type and magnitude of exposure.
SKIN PROTECTION: Rubber gloves and rubber or other types of approved protective clothing should be used to prevent skin contact. A face shield should be used for increased protection from contact with liquid or vapor.
EYE PROTECTION: Chemical splash goggles, approved for use with ammonia, must be worn to prevent eye contact with liquid or vapor. A face shield should be used for increased protection from contact with liquid.
VENTILATION: Local positive pressure and/or exhaust ventilation should be used to reduce vapor concentrations in confined spaces. Ammonia vapor, being lighter than air, can be expected to dissipate to the upper atmosphere. Ammonia concentrations may also be reduced by the use of an appropriate absorbent or reactant material.

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MSDS 4002 Revision 05/20/09

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 83°F (30% Sol'n.)
SOLUBILITY IN WATER: Complete
MELTING POINT: Approx -98°F (30% Sol'n.)
PERCENT VOLATILE BY VOLUME: 100%
VAPOR PRESSURE: 720 mm Hg @ 80°F(30% Sol'n.)
SPECIFIC GRAVITY: 0.8974 @ 60°F (29.4% Sol'n., water=1)
VAPOR DENSITY: 0.60 @ 32°F (Air=1)
pH: Approx. 11.6 for 1 N Sol'n. in water
APPEARANCE: Colorless, pungent liquid

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Material generally considered stable. Heating above ambient temperature the vapor pressure of ammonia to increase rapidly.
INCOMPATIBILITY (materials to avoid): Strong acids. Aqua ammonia reacts with bromine, chlorine, mercury, silver, silver solder, and hypochlorite (bleach) to form explosive compounds. Avoid use of metals containing copper or zinc.
HAZARDOUS DECOMPOSITION PRODUCTS: Heating and contact of vapors with very hot surfaces may form hydrogen. The decomposition temperature may be lowered to 575°F by contact with certain metals such as nickel.
HAZARDOUS POLYMERIZATION: Will not occur **CONDITIONS TO AVOID:** Not applicable

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICITY BY INGESTION: Grade 3; Oral Rat, LD_{50} = 350 mg/kg. Ammonia is a strong alkali and readily damages all body tissues. Ammonia is not a cumulative metabolic poison.

SECTION 12: ECOLOGICAL INFORMATION

AQUATIC TOXICITY: 6.25 ppm 24hr/Trout/Lethal/Freshwater; 15ppm 48hr/Sunfish/TLm/Tap Water
WATERFOWL TOXICITY: Data not available **BIOCHEMICAL OXYGEN DEMAND:** Data not available
FOOD CHAIN CONCENTRATION POTENTIAL: None

SECTION 13: DISPOSAL CONSIDERATIONS

Consult local, state or federal regulatory agencies for acceptable disposal procedures and disposal locations. Disposal in streams or sewers is generally contrary to federal, state, and local regulations. For Hazardous Waste Regulations call (800) 424-9346, the RCRA Hotline.

SECTION 14: TRANSPORT INFORMATION

Proper shipping name: Ammonium Hydroxide
DOT Hazard Class: 8
Identification Number: UN2672
Packing Group: III

SECTION 15: REGULATORY INFORMATION

NOTICE: This product is subject to the reporting requirements of SARA (1986, Section 313 of Title III) and 40 CFR Part 370.
CERCLA/SUPERFUND, 40 CFR 117.302: Unpermitted releases of 1,000 lb. or more of ammonium hydroxide in any 24-hour period must be reported immediately to the NRC at 1-800-424-8802, the SERC, and the LEPC. Written follow-up is required to SERC & LEPC.
OSHA HAZARD COMMUNICATION RULE, 20 CFR 1910.1200: Aqua ammonia is a hazardous chemical.
TOXIC SUBSTANCE CONTROL ACT: This material is listed in the TSCA Inventory.
EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (SARA, TITLE III): Section 302 Extremely Hazardous Substance: Yes; Section 311/312 Hazardous Categories: Immediate (Acute) Health Hazards; Section 313 Toxic Chemical: Yes (as ammonia): **WHMIS:** One percent (1%) as ammonia. **CALIFORNIA PROPOSITION 65:** Reproductive: No Carcinogen: No
OSHA PROCESS SAFETY MANAGEMENT, 29 CFR 1910.119: This product is subject to the Process Safety Management requirements of 29 CFR 1910.119 if maintained on-site in concentrations above than 44% in quantities of 15,000 lb. or greater.
EPA CHEMICAL ACCIDENTAL RELEASE PREVENTION, 40 CFR PART 68: If maintained on-site quantities of contained ammonia are greater than 20,000 lbs, this product is subject to Risk Management Plan requirements of 40 CFR Part 68. Maintained on-site quantities of contained ammonia less than 20,000 lbs. are NOT subject to RMP requirements of 40 CFR Part 68.
DRINKING WATER: Maximum use dosage in potable water is 10mg/l.

SECTION 16: OTHER INFORMATION

REASON FOR REVISION: 1. Addition of new Toll Free Customer Service Number in Section 1. 2. Revision to concentration range in section 2. 3. Revision to proper DOT Shipping Name. 4. Revision to EPCRA Section 302 information in Section 15; 6. Revised LEL and UEL. 7. Company Name Change. 8. Revised LEL and UEL. 9. Company Address Changed.
MSDS PREPARED BY: Airgas Specialty Products

This information is taken from sources or based upon data believed to be reliable, however, Airgas Specialty Products makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

Univar USA Inc Safety Data Sheet

GREENVILLE MUNICIPAL
WATER PLANT
45 SOUTH WATER STREET
GREENVILLE
PA 16125

SDS No:	
Version No:	005 06/06/17
Order No:	PT741883

3075 Highland Pkwy, Ste 200, Downers Grove, IL 60515
(425) 889 3400

Emergency Assistance

For emergency assistance involving chemicals call
Chemtrec - (800) 424-9300

Univar
3075 Highland Pkwy STE 200
Downers Grove, IL 60515
425-889-3400

SAFETY DATA SHEET

1. Identification

Product identifier: - CAUSTIC SODA 50%

Other means of identification

Synonyms:	Sodium Hydroxide
CAS NUMBERS:	1310-73-2
SDS number:	000100000088

Recommended use and restriction on use

Recommended use: Reserved for industrial and professional use.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Univar

3075 Highland Pkwy STE 200

Downers Grove, IL 60515

425-889-3400

Emergency telephone number:For emergency assistance involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard Classification

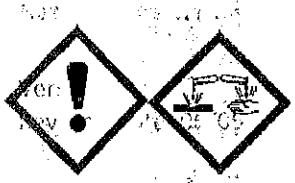
Health Hazards

Acute toxicity (Oral)	Category 4
Skin Corrosion/Irritation	Category 1A
Serious Eye Damage/Eye Irritation	Category 1
Environmental Hazards Acute hazards to the aquatic environment	Category 3

Label Elements

Hazard Symbol

Version: 1.0
Revision Date: 06/06/2017



Signal Word	Danger
Hazard Statement	Corrosive. Harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary Statements	
Prevention	Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product.
Response	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.
Storage	Store in a closed container. Keep container tightly closed. Store in a well-ventilated place. Store in a dry place. Store locked up.

Version: 1.0
Revision Date: 06/06/2017

Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification	None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium hydroxide		1310-73-2	>=48 - <=52%
Water		7732-18-5	>=48 - <=52%
Sodium Chloride		7647-14-5	>=0 - <=5%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition Comments: The components are not hazardous or are below required disclosure limits.

4. First-aid measures

General information: CAUTION! First aid personnel must be aware of own risk during rescue!

Ingestion: Do NOT induce vomiting. Never give liquid to an unconscious person. Get medical attention immediately.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Perform artificial respiration if breathing has stopped. Get medical attention immediately.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

Version: 1.0
Revision Date: 06/06/2017

5. Fire-fighting measures

General Fire Hazards:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Use: Powder. In case of fire in the surroundings: all extinguishing agents allowed.
Unsuitable extinguishing media:	Avoid water in straight hose stream; will scatter and spread fire.
Specific hazards arising from the chemical:	Fire or excessive heat may produce hazardous decomposition products. Heat may cause the containers to explode.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Avoid breathing fire vapors. Avoid water in straight hose stream; will scatter and spread fire. Move container from fire area if it can be done without risk.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Keep unauthorized personnel away.
Methods and material for containment and cleaning up:	Do not touch or walk through spilled material. Absorb spillage with non-combustible, absorbent material. Dike for later disposal.

7. Handling and storage

Precautions for safe handling:	Use personal protective equipment as required. Use only with adequate ventilation. Container must be kept tightly closed.
Conditions for safe storage, including any incompatibilities:	Keep container tightly closed. Store in appropriate chemical storage area. Keep in a cool, well-ventilated place. Store in corrosive resistant container with a resistant inner liner.

Version: 1.0
Revision Date: 06/06/2017

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Sodium hydroxide	Ceiling	2 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Sodium hydroxide - Particulate.	ST ESL	20 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	2 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
Sodium hydroxide	Ceiling	2 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	Ceiling	2 mg/m3	US. ACGIH Threshold Limit Values (03 2016)
	Ceil_Time	2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
	Ceiling	2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate Engineering Controls: Adequate ventilation should be provided so that exposure limits are not exceeded. Eye washes and showers for emergency use.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Practice good housekeeping.

Eye/face protection: Use personal protective equipment as required. Wear goggles/face shield.

Skin Protection

Hand Protection: Chemical resistant gloves.

Other: Chemical resistant clothing

Version: 1.0
Revision Date: 06/06/2017

Respiratory Protection:	In case of inadequate ventilation use suitable respirator.
Hygiene measures:	When using do not eat, drink or smoke. Wash thoroughly after handling. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. Physical and chemical properties

Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	No data available.
pH:	14
Melting point/freezing point:	12 °C 54 °F
Initial boiling point and boiling range:	105 - 140 °C
Flash Point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	1.333 hPa
Vapor density:	No data available.
Relative density:	1.5258
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.

Version: 1.0
Revision Date: 06/06/2017

Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: This product may generate hydrogen gas. Keep away from ignition source. Empty container after use should be stored in separate area, and be disposed after degassing completely.
Conditions to avoid: No data available.
Incompatible Materials: Avoid contact with acids and oxidizing substances.
Hazardous Decomposition Products: This product may generate hydrogen gas. Keep away from ignition source. Empty container after use should be stored in separate area, and be disposed after degassing completely.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics
Ingestion: No data available.
Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Information on toxicological effects
Acute toxicity (list all possible routes of exposure)
Oral
Product: ATEmix (): 3,000 mg/kg
Dermal
Product: Not classified for acute toxicity based on available data.
Inhalation
Product: No data available.
Specified substance(s):
Sodium Chloride LC50 (Rat,): > 42 mg/l 2 = reliable with restrictions LC50 (Rat, 1 h): > 42 mg/l 2 = reliable with restrictions
Repeated dose toxicity
Product: No data available.
Skin Corrosion/Irritation
Product: Causes skin burns.
Serious Eye Damage/Eye Irritation
Product: Causes serious eye damage. Causes severe eye burns.

Version: 1.0
Revision Date: 06/06/2017

Respiratory or Skin Sensitization
Product: No data available.

Carcinogenicity
Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
No carcinogenic components identified

Germ Cell Mutagenicity
In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:
Acute hazards to the aquatic environment:
Fish
Product: LC50 (Bluegill Sunfish, 48 h): 1,294.6 mg/l

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
Sodium hydroxide EC50 (Water flea (Ceriodaphnia dubia), 48 h): 34.59 - 47.13 mg/l
Intoxication LC50 (Cockle (Cerastoderma edule), 48 h): 330 - 1,000 mg/l
Mortality LC50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 33 - 100 mg/l Mortality

Sodium Chloride	LC50 (Tubificid worm, Oligochaete (Limnodrilus hoffmeisteri), 261 h): 5,800 mg/l Mortality LC50 (Water flea (Ceriodaphnia dubia), 7 d): < 330 mg/l Mortality LC50 (Pond snail, pneumonate snail (Physa heterostropha), 24 h): > 5,600 mg/l Mortality EC50 (Tubificid worm (Tubifex tubifex), 24 h): 1,250 mg/l Intoxication LC50 (Pond snail, pneumonate snail (Physa heterostropha), 96 h): 4,100 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

Sodium hydroxide	No data available.
Water	No data available.
Sodium Chloride	No data available.

Known or predicted distribution to environmental compartments

Sodium hydroxide	No data available.
Sodium Chloride	No data available.

13. Disposal considerations

General Information:	Dispose of waste and residues in accordance with local authority requirements.
Disposal Instructions:	Discharge, treatment, or disposal may be subject to national, state, or local laws.
Contaminated Packaging:	Since emptied containers retain product residue, follow label warnings

Version: 1.0
Revision Date: 06/06/2017

even after container is emptied.

14. Transport information

DOT

UN Number:	UN 1824
UN Proper Shipping Name:	Sodium hydroxide solution
Transport Hazard Class(es)	
Class:	8
Label(s):	8
Packing Group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	–

IMDG

UN Number:	UN 1824
UN Proper Shipping Name:	SODIUM HYDROXIDE SOLUTION
Transport Hazard Class(es)	
Class:	8
Label(s):	8
EmS No.:	F-A, S-B
Packing Group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	–

IATA

UN Number:	UN 1824
Proper Shipping Name:	Sodium hydroxide solution
Transport Hazard Class(es):	
Class:	8
Label(s):	8
Packing Group:	II
Environmental Hazards	Not regulated.
Special precautions for user:	–
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

15. Regulatory information

Version: 1.0
Revision Date: 06/06/2017

US Federal RegulationsUS. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Sodium hydroxide Reportable quantity: 1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

☐ Acute (Immediate) ☐ Chronic (Delayed) ☐ Fire ☐ Reactive ☐ Pressure Generating

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	RQ
Sodium hydroxide	1000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Sodium hydroxide	500 lbs
Water	500 lbs
Sodium Chloride	500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Sodium hydroxide Reportable quantity: 1000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Sodium hydroxide Listed

US. Massachusetts RTK - Substance List

Sodium hydroxide Listed

US. Pennsylvania RTK - Hazardous Substances

Sodium hydroxide Listed

US. Rhode Island RTK

Sodium hydroxide Listed

Version: 1.0
Revision Date: 06/06/2017

Inventory Status:EINECS, ELINCS or NLP:	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Mexico INSQ:	On or in compliance with the inventory
Ontario Inventory:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	Not in compliance with the inventory.

16.Other information, including date of preparation or last revision

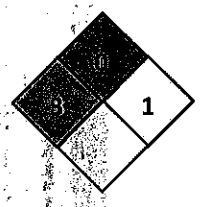
HMIS Hazard ID

Health	*	3
Flammability		0
		1
PERSONAL PROTECTION		B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Flammability
Health
Reactivity
Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date:	06/06/2017
Revision Date:	No data available.
Version #:	1.0
Further Information:	No data available.

Version: 1.0
Revision Date: 06/06/2017

Univar USA Inc Safety Data Sheet

For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

Notice

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Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Univar makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Univar's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process

Univar USA Inc Safety Data Sheet

GREENVILLE MUNICIPAL
WATER PLANT
45 SOUTH WATER STREET
GREENVILLE
PA 16125

SDS No:
Version No: 004 04/03/17
Order No: PT741883

3075 Highland Pkwy, Ste 200, Downers Grove, IL 60515
(425) 889 3400

Emergency Assistance

For emergency assistance involving chemicals call
Chemtrec - (800) 424-9300

Univar
3075 Highland Pkwy STE 200
Downers Grove, IL 60515
425-889-3400

SAFETY DATA SHEET

1. Identification

Product Identifier: - HYDROFLUOSILICIC ACID SOLUTION

Other means of identification

Synonyms:	Fluorosilicic Acid, HFS, Hydrofluorosilicic Acid
CAS NUMBERS:	16961-83-4
SDS number:	000100000681

Recommended use and restriction on use

Recommended use: Reserved for industrial and professional use.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Univar

3075 Highland Pkwy STE 200

Downers Grove, IL 60515

425-889-3400

Emergency telephone number:For emergency assistance Involving chemicals

Call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Oral)	Category 4
Skin Corrosion/Irritation	Category 1A
Serious Eye Damage/Eye Irritation	Category 1
Environmental Hazards Acute hazards to the aquatic environment	Category 3
Chronic hazards to the aquatic environment	Category 3

Label Elements

Version: 1.1
Revision Date: 04/03/2017

Hazard Symbol

Signal Word	Danger
Hazard Statement	Harmful if swallowed. Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.
Precautionary Statements	
Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust or mists. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.
Response	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.

Version: 1.1
Revision Date: 04/03/2017

Storage	Store locked up.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification	None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Silicate(2-), hexafluoro-, hydrogen (1:2)		16961-83-4	20 - 30%
Water		7732-18-5	60 - 70%
Hydrofluoric acid		7664-39-3	<1%
Hydrochloric acid		7647-01-0	<1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition Comments: The components are not hazardous or are below required disclosure limits.

4. First-aid measures

General information:	Get medical advice/attention.
Ingestion:	Rinse mouth thoroughly. Do NOT induce vomiting. Never give liquid to an unconscious person. Get medical attention immediately.
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. Perform artificial respiration if breathing has stopped.
Skin Contact:	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention.
Eye contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No unusual fire or explosion hazards noted.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning up: Absorb spillage with non-combustible, absorbent material.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

Environmental Precautions: Do not contaminate water sources or sewer. Avoid release to the environment.

Version: 1.1
Revision Date: 04/03/2017

7. Handling and storage

Precautions for safe handling: Avoid breathing mists or vapors. Do not get in eyes, on skin, on clothing. Use only with adequate ventilation. Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities: Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Silicate(2-), hexafluoro-, hydrogen (1:2) - as F	TWA	2.5 mg/m3	US. ACGIH Threshold Limit Values (03 2013)
	REL	2.5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	2.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	2.5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Silicate(2-), hexafluoro-, hydrogen (1:2) - Dust.	TWA	2.5 mg/m3	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
Silicate(2-), hexafluoro-, hydrogen (1:2) - as F	TWA	2.5 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Silicate(2-), hexafluoro-, hydrogen (1:2)	ST ESL	17 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL	21 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL	22 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	8.1 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)

Version: 1.1
Revision Date: 04/03/2017

	AN ESL	8.7 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	0.71 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	0.75 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	11 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	0.87 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	0.91 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	9.9 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL	18 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL	2.8 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL	3.4 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	0.7 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	0.57 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
Silicate(2-), hexafluoro-, hydrogen (1:2) - as F	TWA PEL	2.5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)

Version: 1.1
Revision Date: 04/03/2017

Hydrofluoric acid - as F	TWA	0.5 ppm	US. ACGIH Threshold Limit Values (03 2013)
	Ceiling	2 ppm	US. ACGIH Threshold Limit Values (03 2013)
Hydrofluoric acid	REL	3 ppm 2.5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	Ceil_Time	6 ppm 5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Hydrofluoric acid - as F	PEL	2.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	3 ppm	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	6 ppm	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
Hydrofluoric acid	TWA	3 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
Hydrofluoric acid - as F	STEL	6 ppm	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	3 ppm	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Hydrofluoric acid	ST ESL	22 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	8.7 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	11 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	0.91 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	ST ESL	18 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	0.75 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)

Version: 1.1
Revision Date: 04/03/2017

		ST ESL	3 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
		ST ESL	3.7 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
		AN ESL	0.6 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
		AN ESL	0.73 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	Hydrofluoric acid - as F	TWA PEL	0.4 ppm 0.33 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
		STEL	1 ppm 0.83 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	Hydrochloric acid	Ceiling	5 ppm 7 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
		AN ESL	8.4 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
		ST ESL	190 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
		AN ESL	5.7 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
		ST ESL	130 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
		Ceiling	5 ppm 7 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
		Ceiling	2 ppm	US. ACGIH Threshold Limit Values (03 2013)
		Ceil_Time	5 ppm 7 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)

Version: 1.1
Revision Date: 04/03/2017

	Ceiling	5 ppm 7 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	Ceiling	5 ppm 7 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Silicate(2-), hexafluoro-, hydrogen (1:2) (Fluoride: Sampling time: Prior to shift.)	2 mg/l (Urine)	ACGIH BEL (03 2013)
Silicate(2-), hexafluoro-, hydrogen (1:2) (Fluoride: Sampling time: End of shift.)	3 mg/l (Urine)	ACGIH BEL (03 2013)
Hydrofluoric acid (Fluoride: Sampling time: Prior to shift.)	2 mg/l (Urine)	ACGIH BEL (03 2013)
Hydrofluoric acid (Fluoride: Sampling time: End of shift.)	3 mg/l (Urine)	ACGIH BEL (03 2013)

Appropriate Engineering Controls Adequate ventilation should be provided so that exposure limits are not exceeded.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Eye/face protection: Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection

Hand Protection: Chemical resistant gloves

Other: Chemical resistant clothing

Version: 1.1
Revision Date: 04/03/2017

Respiratory Protection:	In case of inadequate ventilation use suitable respirator.
Hygiene measures:	Do not eat, drink or smoke when using the product. Wash hands after handling. Do not get in eyes. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Physical state:	liquid
Form:	liquid
Color:	Water white to straw
Odor:	Pungent
Odor threshold:	No data available.
pH:	1 - 2
Melting point/freezing point:	-20 °C
Initial boiling point and boiling range:	136 - 163 °C
Flash Point:	Does not flash
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	1,997 kPa (25 °C)
Vapor density:	No data available.
Relative density:	1.2 (25 °C)
Solubility(ies)	
Solubility in water:	Miscible with water.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.

Version: 1.1
Revision Date: 04/03/2017

Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: Stable
Conditions to avoid: Avoid heat or contamination.
Incompatible Materials: Metals. Strong acids. Alkalies.
Hazardous Decomposition Products: May attack light-alloy metals and liberate hydrogen gas.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics
Ingestion: No data available.
Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Information on toxicological effects
Acute toxicity (list all possible routes of exposure)
Oral
Product: ATEmix (): 444.33 mg/kg
Dermal
Product: Not classified for acute toxicity based on available data.
Inhalation
Product: No data available.
Specified substance(s):
Hydrofluoric acid LC50 (Monkey, 1 h): 1,780 mg/l
Specified substance(s):
Hydrochloric acid LC50 (Rat,): 8.3 mg/l (, No) 2 = reliable with restrictions LC50 (Rat,): 45.6 mg/l (, No) 2 = reliable with restrictions
Repeated dose toxicity
Product: No data available.
Skin Corrosion/Irritation
Product: No data available.
Serious Eye Damage/Eye Irritation
Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

General information: Contains a substance which causes risk of hazardous effects to the environment.

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC50 (Lepomis macrochirus, 96 h): 50 mg/l

Aquatic invertebrates

Product: EC50 (Daphnia magna, 48 h): 270 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic invertebrates

Product: No data available.

12.2 Toxicity to Aquatic Plants

Version: 1.1
Revision Date: 04/03/2017

UNIVAR®

Product:	No data available.

Persistence and Degradability

Biodegradation

Product:	Expected to be readily biodegradable.

BOD/COD Ratio

Product:	No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product:	The product is not bioaccumulating.

Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.
Mobility in Soil:	No data available.

Known or predicted distribution to environmental compartments

Hexafluorosilicic acid	No data available.
Water	No data available.
Hydrogen fluoride	No data available.
Hydrogen chloride	No data available.

Known or predicted distribution to environmental compartments

Hexafluorosilicic acid	No data available.
Hydrogen fluoride	No data available.
Hydrogen chloride	No data available.

13. Disposal considerations

Disposal instructions:	Discharge, treatment, or disposal may be subject to national, state, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.
Contaminated Packaging:	Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN Number:	UN 1778
UN Proper Shipping Name:	FLUOROSILICIC ACID
Transport Hazard Class(es)	
Class:	8
Label(s):	8
Packing Group:	II
Marine Pollutant:	Not regulated.

Version: 1.1
Revision Date: 04/03/2017

Special precautions for user:	–

IMDG

UN Number:	UN 1778
UN Proper Shipping Name:	FLUOROSILICIC ACID
Transport Hazard Class(es)	
Class:	8
Label(s):	8
EmS No.:	F-A, S-B
Packing Group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	–

IATA

UN Number:	UN 1778
Proper Shipping Name:	FLUOROSILICIC ACID
Transport Hazard Class(es):	
Class:	8
Label(s):	8
Packing Group:	II
Environmental Hazards	Not regulated.
Special precautions for user:	–
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

15. Regulatory information

Version: 1.1
Revision Date: 04/03/2017

US Federal RegulationsUS. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Hydrofluoric acid Reportable quantity: 100 lbs.
Hydrochloric acid Reportable quantity: 5000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

[X] Acute (Immediate) [ ] Chronic (Delayed) [ ] Fire [ ] Reactive [ ] Pressure Generating

SARA 302 Extremely Hazardous Substance

Chemical Identity	RQ	Threshold Planning Quantity
Hydrofluoric acid	100 lbs.	100 lbs.
Hydrochloric acid	5000 lbs.	500 lbs.

SARA 304 Emergency Release Notification

Chemical Identity	RQ
Hydrofluoric acid	100 lbs.
Hydrochloric acid	5000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Hydrofluoric acid	100lbs
Hydrochloric acid	500lbs
Water	500 lbs
Silicate(2-), hexafluoro-, hydrogen (1:2)	500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Hydrofluoric acid Reportable quantity: 100 lbs.
Hydrochloric acid Reportable quantity: 5000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Hydrofluoric acid Threshold quantity: 1000 lbs
Hydrochloric acid Threshold quantity: 15000 lbs

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

Version: 1.1
Revision Date: 04/03/2017

US. New Jersey Worker and Community Right-to-Know Act

Silicate(2-), hexafluoro-, hydrogen (1:2)	Listed

US. Massachusetts RTK - Substance List

Silicate(2-), hexafluoro-, hydrogen (1:2)	Listed
Hydrofluoric acid	Listed
Hydrochloric acid	Listed

US. Pennsylvania RTK - Hazardous Substances

Silicate(2-), hexafluoro-, hydrogen (1:2)	Listed

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Version: 1.1
Revision Date: 04/03/2017

Inventory Status: Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	Not in compliance with the inventory.
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Mexico INSQ:	Not in compliance with the inventory.
Ontario Inventory:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory

16.Other information, including date of preparation or last revision

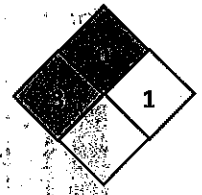
HMIS Hazard ID

Health	3
Flammability	0
	0
PERSONAL PROTECTION	B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Flammability
Health
Reactivity
Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 04/03/2017
Revision Date: No data available.
Version #: 1.1
Further Information: No data available.

Version: 1.1
Revision Date: 04/03/2017

Univar USA Inc Safety Data Sheet

For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

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Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Univar makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Univar's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process

Univar USA Inc Safety Data Sheet

GREENVILLE MUNICIPAL
WATER PLANT
45 SOUTH WATER STREET
GREENVILLE
PA 16125

SDS No:	
Version No:	003 08/20/15
Order No:	PT723164

3075 Highland Pkwy, Ste 200, Downers Grove, IL 60515
(425) 889 3400

Emergency Assistance

For emergency assistance involving chemicals call
Chemtrec - (800) 424-9300

SAFETY DATA SHEET

1. Identification

Product identifier **AQUA MAG® Blended Phosphate**

Other means of identification

SDS number -

Recommended use AQUA MAG® blended phosphate is the premier corrosion inhibitor and sequesterant for use in potable and industrial water systems.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Company name CARUS CORPORATION

Address 315 Fifth Street,
Peru, IL 61354, USA

Telephone 815 223-1500 - All other non-emergency inquiries about the product should be directed to the company

E-mail salesmkt@caruscorporation.com

Website www.caruscorporation.com

Contact person Dr. Chithambarathanu Pillai

Emergency Telephone For Hazardous Materials [or Dangerous Goods] Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC at
CHEMTREC®, USA: 001 (800) 424-9300
CHEMTREC®, Mexico (Toll-Free - must be dialed from within country): 01-800-681-9531
CHEMTREC®, Other countries: 001 (703) 527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Diphosphoric acid, disodium salt	7758-16-9	1 - 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling	Avoid inhalation and contact with skin and eyes. Wear appropriate personal protective equipment (See Section 8). Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	General ventilation normally adequate.
Individual protection measures, such as personal protective equipment	
Eye/face protection	If contact is likely, safety glasses with side shields are recommended.
Skin protection	
Hand protection	For prolonged or repeated skin contact use suitable protective gloves.
Other	Wear suitable protective clothing.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Colorless solution.
Physical state	Liquid.
Form	Liquid.
Color	Colorless.
Odor	None.

Odor threshold	Not available.
pH	1% solution = 6.0±0.5
Melting point/freezing point	< 32 °F (< 0 °C)
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.37±0.03 at 25°C
Solubility(ies)	
Solubility (water)	Completely soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization will not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids. Strong bases.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May cause discomfort if swallowed.
Inhalation	In high concentrations, vapors may be irritating to the respiratory system.
Skin contact	Prolonged or repeated skin contact may cause irritation.
Eye contact	May cause eye irritation on direct contact.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity	May cause discomfort if swallowed.
Skin corrosion/irritation	Prolonged contact may cause dryness of the skin.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	No data available.
Skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	No data available.

Specific target organ toxicity - single exposure No data available.

Specific target organ toxicity - repeated exposure No data available.

Aspiration hazard Not classified.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Diphosphoric acid, disodium salt (CAS 7758-16-9)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	840 mg/l, 96 hours

Persistence and degradability The product is not expected to be readily biodegradable.

Bioaccumulative potential No data available for this product.

Mobility in soil Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Not listed.

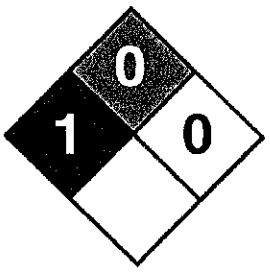
International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 27-March-2014
Revision date -
Version # 01
NFPA Ratings



References HSDB® - Hazardous Substances Data Bank

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Univar USA Inc Safety Data Sheet

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Univar USA Inc Safety Data Sheet

GREENVILLE MUNICIPAL
WATER PLANT
45 SOUTH WATER STREET
GREENVILLE
PA 16125

SDS No:	CDS2166
Version No:	001 07/18/13
Order No:	PT685354

3075 Highland Pkwy, Ste 200, Downers Grove, IL 60515
(425) 889 3400

Emergency Assistance

For emergency assistance involving chemicals call
Chemtrec - (800) 424-9300

COMPANY IDENTITY: Univar
PRODUCT IDENTITY: CHLORINE, LIQUIFIED GAS

SDS DATE: 07/17/2013
ORIGINAL: 07/17/2013

SAFETY DATA SHEET

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System.
THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)
IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: CHLORINE, LIQUIFIED GAS
SDS NUMBER: CDS-2166
COMPANY IDENTITY: Univar
COMPANY ADDRESS: 17425 NE Union Hill Road
COMPANY CITY: Redmond, WA 98052
COMPANY PHONE: 1-425-889-3400
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (CANADA)

SECTION 2. HAZARDS IDENTIFICATION

DANGER!!

HAZARD STATEMENTS:
H100s = General, H200s = Physical, H300s = Health, H400s = Environmental

H271	May cause fire or explosion; strong oxidizer.
H280	Contains gas under pressure; may explode if heated.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.

PRECAUTIONARY STATEMENTS:
P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal

P221	Take any precaution to avoid mixing with combustibles.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do - Continue rinsing.
P309+311	If exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
P403	Store in a well-ventilated place.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT %
Chlorine	7782-50-5	-	99.5-100

TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

COMPANY IDENTITY: Univar SDS DATE: 07/17/2013
PRODUCT IDENTITY: CHLORINE, LIQUIFIED GAS ORIGINAL: 07/17/2013

SECTION 4. FIRST AID MEASURES

GENERAL ADVICE:
First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

EYE CONTACT:
If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

SKIN CONTACT:
If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

INHALATION:
After high vapor exposure, remove to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention. In case of inhalation of decomposition products in a fire, symptoms may be delayed.The exposed person may need to be kept under medical surveillance for 48 hours.

SWALLOWING:
If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

NOTES TO PHYSICIAN:
There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of label and SDS to physician or health professional with victim.

SECTION 5. FIRE FIGHTING MEASURES

FIRE & EXPLOSION PREVENTIVE MEASURES
Isolate from combustibles, most metals, extreme heat.

EXTINGUISHING MEDIA
In case of fire in surroundings, use appropriate extinguishing media.

SPECIAL FIRE FIGHTING PROCEDURES
Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used.
Do not enter confined fire-space without full bunker gear.
(Helmet with face shield, bunker coats, gloves & rubber boots).
Use NIOSH approved positive-pressure self-contained breathing apparatus.

COMPANY IDENTITY: Univar SDS DATE: 07/17/2013
PRODUCT IDENTITY: CHLORINE, LIQUIFIED GAS ORIGINAL: 07/17/2013

SECTION 5. FIRE FIGHTING MEASURES (CONTINUED)

UNUSUAL EXPLOSION AND FIRE PROCEDURES

Noncombustible.
Reacts with most metals producing hydrogen which is extremely flammable & may explode.
Isolate from combustibles. Closed containers may explode if exposed to extreme heat.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:
Evacuate unprotected personnel upwind or crosswind for at least 100 feet (800 feet for large spills) out of danger area. If a chlorine container is leaking, try to position it so that gas rather than liquid leaks. Apply emergency kit device if possible. For other than minor leaks, immediately implement predetermined emergency plan. Do not apply water directly to a leak. Chlorine reacts with water to form corrosive, acidic, solution (hydrochloric acid). Call supplier, CHLOREP team, or CHEMTREC when help is needed. Releases should be reported, if required, to appropriate agencies.

PERSONAL PROTECTIVE EQUIPMENT
The proper personal protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves (triple-gloves (rubber gloves and nitrile gloves, over latex gloves), goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

ENVIRONMENTAL PRECAUTIONS:
Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAINMENT AND CLEAN-UP MEASURES:
Absorb spilled liquid with polypads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

SECTION 7. HANDLING AND STORAGE

HANDLING
Use only with adequate ventilation. Avoid breathing of vapor or spray mist.
Do not get in eyes, on skin or clothing. Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. NEVER pour water into this substance.

STORAGE
OXIDIZER! Keep separated from strong bases, combustible & reducing substances, metals.
Keep cool. Keep dry. Keep inside a well-ventilated room. Do not store above 49 C/120 F.
Keep container tightly closed & upright when not in use to prevent leakage.
Reacts with most metals producing hydrogen which is extremely flammable & may explode.
Wear full face shield, gloves & full protective clothing when opening or handling.
When empty, drain completely, replace bungs securely.

COMPANY IDENTITY: Univar SDS DATE: 07/17/2013
PRODUCT IDENTITY: CHLORINE, LIQUIFIED GAS ORIGINAL: 07/17/2013

SECTION 7. HANDLING AND STORAGE (CONTINUED)

NONBULK: CONTAINERS:
Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers should be handled with care. Never store food, feed, or drinking water in containers which held this product.

BULK CONTAINERS:
All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

TANK CAR SHIPMENTS:
Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendation and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment.). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be level, brakes must be set or wheels must be locked or blocked prior to loading or unloading. Tank car (for loading) or storage tanks (for unloading) must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified (if required) prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car or vessel.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:
Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Collect all rinsates and dispose of according to applicable Federal, State, Provincial, or local procedures.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Chlorine gas	7782-50-5	-	0.5 ppm	0.5 ppm

MATERIAL	CAS#	EINECS#	CEILING	STEL(OSHA/ACGIH)	HAP
Chlorine gas	7782-50-5	-	1 ppm/3 mg/m3	1 ppm	Yes

Each component showing `Yes' under "HAP" is an EPA Hazardous Air Pollutant.

RESPIRATORY EXPOSURE CONTROLS
Seek professional advice prior to respirator selection and use.
Maintain airborne contaminant concentrations below exposure limits given above. If respiratory protection is needed, use only protection authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS
Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face piece Self-Contained Breathing Apparatus with an auxilliary positive pressure Self-Contained Breathing Apparatus.

COMPANY IDENTITY: Univar SDS DATE: 07/17/2013
PRODUCT IDENTITY: CHLORINE, LIQUIFIED GAS ORIGINAL: 07/17/2013

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

VENTILATION
LOCAL EXHAUST: Necessary MECHANICAL (GENERAL): Necessary
SPECIAL: None OTHER: None
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

EYE PROTECTION:
Splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

HAND PROTECTION:
Wear appropriate impervious gloves for routine industrial use. Use impervious gloves for spill response, as stated in Section 6 of this SDS (Accidental Release Measures).
NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

BODY PROTECTION:
Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

WORK & HYGIENIC PRACTICES:
Provide readily accessible eye wash stations & safety showers. Wash at end of each shift & before eating, smoking or using the toilet. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

STATE:	Compressed Liquified Gas
APPEARANCE:	Gas: Green to Yellow Liquid: Amber
ODOR:	Sharp, Pungent
ODOR THRESHOLD:	Not Available
pH (Neutrality):	0.0
MELTING POINT/FREEZING POINT:	-101 C / -150 F
BOILING RANGE (IBP,50%,Dry Point):	-34 C / -29 F
FLASH POINT (TEST METHOD):	Not Applicable
EVAPORATION RATE (n-BUTYL ACETATE=1):	Not Applicable
FLAMMABILITY CLASSIFICATION:	Non-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Applicable
Not Available	
VAPOR PRESSURE (mm of Hg)@25 C	5830 mm
VAPOR DENSITY (air=1):	2.4
GRAVITY @ 68/68 F / 20/20 C:	
SPECIFIC GRAVITY (Water=1):	1.4
POUNDS/GALLON:	11.7
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERATURE:	Not Available
VOCs (>0.044 Lbs/Sq In) :	0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
TOTAL VOC'S (TVOC)*:	0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
NONEXEMPT VOC'S (CVOC)*:	0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS):	100.0 Wt% / 1400.0 g/L / 11.7 Lbs/Gal
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	0.0

* Using CARB (California Air Resources Board Rules).

COMPANY IDENTITY: Univar SDS DATE: 07/17/2013
PRODUCT IDENTITY: CHLORINE, LIQUIFIED GAS ORIGINAL: 07/17/2013

SECTION 10. STABILITY & REACTIVITY

STABILITY
Stable but Reacts with most metals producing hydrogen which is extremely flammable & may explode. OXIDIZER! Reacts with organics.

CONDITIONS TO AVOID
Isolate from oxidizers, alkalis, heat, & open flame.

MATERIALS TO AVOID
The substance is a strong acid, reacts violently with bases and is corrosive.
Reacts violently with strong reducers, metals, and combustibles.
Reacts violently with strong bases, causing fire & explosion hazard.

HAZARDOUS DECOMPOSITION PRODUCTS
Chlorine, Hydrogen Chloride, Phosgene from heating in the presence of water.

HAZARDOUS POLYMERIZATION
Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE HAZARDS

EYE & SKIN CONTACT:
Severe burns to skin, defatting, dermatitis, evaporation causes frost bite.
Severe burns to eyes, redness, tearing, blurred vision. Rapid evaporation causes frost bite. Gas can cause severe skin & eye burns. Wash thoroughly after handling.

INHALATION:
Severe respiratory tract irritation may occur. Chemical burns, pulmonary edema. Vapor harmful.

SWALLOWING:
Not a likely hazard. Harmful or fatal if swallowed.
The symptoms of chemical pneumonitis may not show up for a few days.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

CONDITIONS AGGRAVATED
Persons with severe lung, skin, liver or kidney problems should avoid use.

CHRONIC HAZARDS

CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:
Causes damage to respiratory system by prolonged or repeated exposure.
This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

IRRITANCY OF PRODUCT: This product is irritating to contaminated tissue.
SENSITIZATION TO THE PRODUCT: No component of this product is known to be a sensitizer.
MUTAGENICITY: This product is reported to produce mutagenic effects in humans.
EMBRYOTOXICITY: This product is not reported to produce embryotoxic effects in humans.
TERATOGENICITY: This product is not reported to produce teratogenic effects in humans.
REPRODUCTIVE TOXICITY: This product is not reported to cause reproductive effects in humans.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical which causes damage to a developing embryo (such as: within the eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

COMPANY IDENTITY: Univar SDS DATE: 07/17/2013
PRODUCT IDENTITY: CHLORINE, LIQUIFIED GAS ORIGINAL: 07/17/2013

SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

MAMMALIAN TOXICITY INFORMATION

LC50 (1 hour): 0.86 mg/L or 293 ppm (Rat)

0.2 - 0.4 ppm	Odor Detected
1 - 3 ppm	Mild mucous membrane irritation
5 - 15 ppm	Moderate upper respiratory irritation
30 ppm	Immediate chest pain, vomiting, dyspnea, and cough
40 - 60 ppm	Toxic pneumonitis, pulmonary edema
430 ppm	Lethal in 30 minutes
1000 ppm	Fatal in a few minutes

Action on respiratory tract is due to strong oxidizing effect

SECTION 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

EFFECT OF MATERIAL ON PLANTS AND ANIMALS:
This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

EFFECT OF MATERIAL ON AQUATIC LIFE:

LC50 (Fathead minnow):	0.07 - 0.15 mg/L (96 hours)
LC50 (Bluegill):	0.44 mg/L (96 hours)
LC50 (Daphnia):	30 - 150 ug/L (48 hours)

MOBILITY IN SOIL
This material is a mobile gas.

DEGRADABILITY

Atmospheric Half-life:	10 minutes
Atmospheric Lifetime:	14 minutes
Fresh Water Half-life:	1.3 - 5 hours

ACCUMULATION
This product does not accumulate or biomagnify in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal.
ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES. EPA CHARACTERISTIC: D002, D003

SECTION 14. TRANSPORT INFORMATION

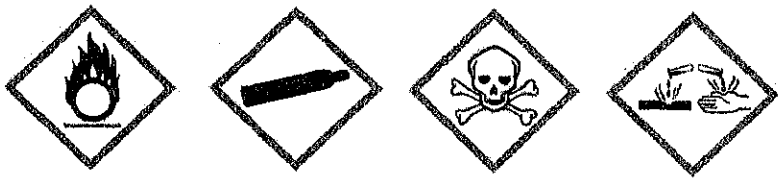
IF > 10 LB / 4.5 KG OF THIS PRODUCT IS IN 1 CONTAINER, IT EXCEEDS THE RQ OF CHLORINE. "RQ" MUST BE PUT BEFORE THE DOT SHIPPING NAME.

DOT/TDG SHIP NAME:	UN1017, Chlorine, 2.3, 5.1, 8, Toxic-Inhalation Hazard Zone B
DRUM LABEL:	(OXIDIZER), (CORROSIVE)
IATA / ICAO:	UN1017, Chlorine, 2.3, 5.1, 8, Toxic-Inhalation Hazard Zone B
IMO / IMDG:	UN1017, Chlorine, 2.3, 5.1, 8, Toxic-Inhalation Hazard Zone B

EMERGENCY RESPONSE GUIDEBOOK NUMBER: 124

COMPANY IDENTITY: Univar
PRODUCT IDENTITY: CHLORINE, LIQUIFIED GAS

SDS DATE: 07/17/2013
ORIGINAL: 07/17/2013



SECTION 15. REGULATORY INFORMATION

EPA REGULATION:
SARA SECTION 311/312 HAZARDS: Acute Health

SARA TITLE III INGREDIENTS	CAS#	EINECS#	WT%	(REG.SECTION)	RQ(LBS)
Chlorine gas	7782-50-5	-	99.5-100	(302,311,312,313,RCRA)	10

All components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification
This product contains the indicated <*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

STATE REGULATIONS:
CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):
This product may contain contaminants known to the State of California to cause cancer or reproductive toxicity.

INTERNATIONAL REGULATIONS
The components of this product are listed on the chemical inventories of the following countries:
Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS)G
Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC),
Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)
A: Compressed Gas
C: Oxidizing Material
D1A: Material causing Immediate and Serious Toxic Effects (Very Toxic Material)
E: Corrosive Material.

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:
HEALTH (NFPA): 3, HEALTH (HMIS): 4, FLAMMABILITY: 0, PHYSICAL HAZARD: 0
(Personal Protection Rating to be supplied by user based on use conditions.)
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

EMPLOYEE TRAINING
See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

Univar USA Inc Safety Data Sheet

For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

Notice

Univar USA Inc. ("Univar") expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Univar makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Univar's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process

Univar USA Inc Safety Data Sheet

GREENVILLE MUNICIPAL
WATER PLANT
45 SOUTH WATER STREET
GREENVILLE
PA 16125

SDS No:	
Version No:	011 06/02/15
Order No:	PT723164

3075 Highland Pkwy, Ste 200, Downers Grove, IL 60515
(425) 889 3400

Emergency Assistance

For emergency assistance involving chemicals call
Chemtrec - (800) 424-9300

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SAFETY DATA SHEET

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Product name
SUPERFLOC N-1986

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture

Flocculating agent.

Recommended restrictions on use

-

Supplier's details

Kemira Chemicals, Inc.
1000 Parkwood Circle, Suite 500
30339 Atlanta USA
Telephone+17704361542, Telefax. +17704363432
ProductSafety.US.Kennesaw@kemira.com

HEAD OFFICE
Kemira Oyj
P.O. Box 330
00101 HELSINKI
FINLAND
Telephone +358108611 Telefax +358108621124

Emergency number

CHEMTREC: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin irritation; Category 2; Causes skin irritation.;

GHS-Labelling

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SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

Hazard pictograms :

Signal word : Warning

Hazard statements : **Hazard statements:**

H315	Causes skin irritation.

Precautionary statements : **Prevention:**

P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:	
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing.
Disposal:	
P501	Dispose of contents/container as special waste in compliance with local and national regulations.

Other hazards which do not result in classification

Advice; Solutions extremely slippery when spilled.
Inhalation; Avoid breathing vapors or mist.
Skin; Causes skin irritation.
Eyes; May cause eye irritation.
Ingestion; May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances /Mixtures

Chemical nature Polyacrylamide in water-in-oil emulsion

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SAFETY DATA SHEET

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

Hazardous components

Chemical Name	CAS-No.	Concentration[%]
Distillates (petroleum), hydrotreated light	64742-47-8	23 - 27 %
Alcohols, C12-14, ethoxylated	68439-50-9	0 - 5 %
Alcohols, C12-16, ethoxylated	68551-12-2	0 - 5 %
Alcohols, C10-16, ethoxylated	68002-97-1	0 - 5 %

Components listed above that have a zero minimum and a common maximum range are interchangeably used components based on availability. Only one of these components is contained in the product up to the maximum amount noted.

4. FIRST AID MEASURES

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance.

Inhalation

Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Skin contact

Remove contaminated clothing and shoes. Wash off with plenty of water. Wash contaminated clothing before reuse. If a person feels unwell or symptoms of skin irritation appear, consult a physician.

Eye contact

Rinse immediately with plenty of water for at least 15 minutes. Consult a physician if necessary.

Ingestion

If swallowed, call a poison control centre or doctor immediately. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Water spray

Carbon dioxide (CO2)

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SAFETY DATA SHEET

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

Dry chemical

Special hazards arising from the substance or mixture

Cool closed containers exposed to fire with water spray.

Special protective actions for fire-fighters

Wear full protective clothing and self-contained breathing apparatus.

Use NIOSH/MSHA approved respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Where the exposure level is not known, wear approved, positive pressure, self-contained respirator. Where the exposure level is known, wear approved respirator suitable for the level of exposure. Wear suitable protective clothing and gloves. Chemical resistant boots.

Environmental precautions

Try to prevent the material from entering drains or water courses.

Methods and materials for containment and cleaning up

Danger for slipping. Soak up with inert absorbent material. Sweep up and shovel. After cleaning, flush away traces with water. Use detergent if needed.

7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

To avoid product degradation and equipment corrosion, do not use iron, copper or aluminium containers or equipment.

Materials for packaging

Unsuitable material: To avoid product degradation and equipment corrosion, do not use iron, copper or aluminium containers or equipment.

Materials to avoid:

Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

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SAFETY DATA SHEET

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

Components	CAS-No.	Value	Form of exposure	Control parameters	Update	Basis
Distillates (petroleum), hydrotreated light	64742-47-8	TWA		200 mg/m³	2006-11-29	CA BC OEL
		TWA		197 ppm 1,200 mg/m³		

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and immediately after handling the product. Avoid contact with skin and eyes. Do not breathe vapour. Ensure that eyewash stations and safety showers are close to the workstation location. Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Wash hands before eating, drinking, or smoking. Keep away from food and drink. Keep away from tobacco products.

Individual protection measures, such as personal protective equipment

Respiratory protection

Use the indicated respiratory protection if the occupational exposure limit is exceeded.

Hand protection

Glove material: Chemical resistant gloves.

Skin and body protection

Protective clothing. Avoid contact with skin.

Eye protection

Safety goggles or Face-shield

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid, viscous liquid
Colour	white
Odour	hydrocarbon-like

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SAFETY DATA SHEET

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

pH	4 - 6
Melting point/range	Melting point/range -18 °C
Initial boiling point and boiling range	Boiling point/boiling range ca. 347 °F
Flash point	212 °F (closed cup) (Pensky-Martens)
Evaporation rate	< 1
Explosive properties:	
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	Not applicable
Relative vapour density	No data available
Density	1 g/cm³
Solubility(ies):	
Water solubility	Limited by viscosity.
Partition coefficient: n-octanol/water	No data available
Decomposition temperature	No data available
Saturation in air (% vol.)	No data available
Volatile organic content (VOC)	No data available
Surface tension	not determined

10. STABILITY AND REACTIVITY

Reactivity

Chemical stability

Possibility of hazardous reactions

Hazardous reactions: Hazardous polymerisation does not occur.

Conditions to avoid

Conditions to avoid: No data available

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SAFETY DATA SHEET

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

Incompatible materials

Materials to avoid: Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products: ammonia
Carbon dioxide (CO2)
Carbon monoxide (CO)
oxides of nitrogen

Thermal decomposition: Note: No data available

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute oral toxicity Conclusion: The acute toxicological results displayed may not be the results of actual testing of this material but based on a similar tested material.

Conclusion: Product, :

Conclusion: Petroleum distillates, :
/Rat/> 10,000 mg/kg/LD50

Remarks: estimated
/Rat/> 5,000 mg/kg/LD50

Acute oral toxicity **Distillates (petroleum), hydrotreated light:**
/>/Rat/5,000 mg/kg/LD50

Acute inhalation toxicity LC50/Rat/4 h/>/20 mg/lRemarks: estimated

Acute inhalation toxicity **Distillates (petroleum), hydrotreated light:**
LC50/Rat/4 h/>/5.2 mg/l

Acute dermal toxicity

Remarks: Product, :

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SAFETY DATA SHEET

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

	LD50/Rabbit /> 10,000 mg/kg Remarks: Petroleum distillates, : LD50/Rabbit /> 3,160 mg/kg Remarks: estimated
Acute dermal toxicity	**Distillates (petroleum), hydrotreated light:** LD50/Rabbit/> /2,000 mg/kg
Skin corrosion/irritation	Rabbit Result: irritating
Serious eye damage/eye irritation	Rabbit Result: irritating

Respiratory or skin sensitisation

Skin sensitisation	Result: Not sensitizing.
Skin sensitisation	**Distillates (petroleum), hydrotreated light:** Conclusion: This substance is not classified as a sensitizer.

Germ cell mutagenicity

Carcinogenicity

Carcinogenicity	**Distillates (petroleum), hydrotreated light:** Not classified by IARC or NTP.

Reproductive toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic toxicity

Ecotoxicological information provided is based on a structurally or compositionally similar product. This material is not classified as dangerous for the environment.
LC50/96 h/Lepomis macrochirus (bluegill sunfish)/Acute toxicity/OECD Test Guideline 203: > 100 mg/l
Remarks: fresh water

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SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

LC50/96 h/Oncorhynchus mykiss (rainbow trout)/Acute toxicity/OECD Test Guideline 203: > 100 mg/l
Remarks: fresh water
EC50/48 h/Daphnia magna (Water flea)/Immobilization/OECD Test Guideline 202: > 100 mg/l
IC50/72 h/Green algae (Selenastrum capricornutum)/Growth inhibition/OECD Test Guideline 201: > 100 mg/l

Toxicity to other organisms

Remarks: No data available

Persistence and degradability

Biological degradability:
CO2 Evolution Test/OECD Test Guideline 301B:

Because of the high molecular weight of the polymer diffusion through biological membranes is very small. Not readily biodegradable.

Bioaccumulative potential

Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water: No data available

Mobility in soil

Water solubility: Limited by viscosity.
Surface tension: not determined

Other adverse effects

No data available
Additional ecological information: Ecotoxicological information provided is based on a structurally or compositionally similar product.

13. DISPOSAL CONSIDERATIONS

Product	Recycling, recovery and reuse of materials is recommended if permitted by regulations.If recycling is not practicable, dispose of in compliance with local regulations.Incineration is recommended. EPA Hazardous Waste - NO
Contaminated packaging	Packages must be disposed of according to local and national regulations.

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SAFETY DATA SHEET

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

14. TRANSPORT INFORMATION

Land transport

Not classified as dangerous in the meaning of transport regulations.

Sea transport

Not classified as dangerous in the meaning of transport regulations.

Air transport

Not classified as dangerous in the meaning of transport regulations.

Special precautions for user

None known.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Title III Section 311 Categories

Immediate (Acute) Health Effects: Yes;
Delayed (Chronic) Health Effects: No;
Fire Hazard: No;
Sudden Release Of Pressure Hazard: No;
Reactivity Hazard: No;

US. Environmental Protection Agency (EPA); Superfund Amendments and Reauthorization Act (SARA) Section 302 Extremely Hazardous Substances as amended by US Federal Register Final rules.

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
None Present ()

While this product does not contain any component CAS numbers directly listed under SARA 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), it does contain ammonia chemical(s) that may be sources per EPA of aqueous ammonia, a reportable chemical. For our customer's use evaluation for reporting purposes we have listed these source chemical(s) below with their quantities when present at >1%. Please refer to EPA Guidance for Reporting Aqueous Ammonia, EPA 745-R-00-005.

While this product does not contain any component CAS numbers directly listed under SARA

kemira **SAFETY DATA SHEET**

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), it does contain ammonia chemical(s) that may be sources per EPA of aqueous ammonia, a reportable chemical. For our customer's use evaluation for reporting purposes we have listed these source chemical(s) below with their quantities when present at >1%. Please refer to EPA Guidance for Reporting Aqueous Ammonia, EPA 745-R-00-005.
Ammonium sulphate (7783-20-2)
Toxic chemical release substances. 52 fr 21152 (6/4/87). Subject to sara title III.

California Proposition 65

Acrylamide (79-06-1) < 0.05 %
Remarks: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproduction harm.

Other regulations : None.

Notification status

:
: All components of this product are included in the United States TSCA Chemical Inventory or are not required to be listed on the United States TSCA Chemical Inventory.
: All components of this product are included in the Canada Domestic Substance List (DSL) or are not required to be listed on the Canada Domestic Substance List (DSL).
: All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.
: All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on the Australian Inventory of Chemical Substances (AICS).
: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.
: All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese (ENCS) inventory.
: All components of this product are included in the Korean (ECL) inventory or are not required to be listed on the Korean (ECL) inventory.
: All components of this product are included on the Philippine

kemira

SAFETY DATA SHEET

SUPERFLOC N-1986

Ref. /US/EN

Revision Date: 03/13/2015 Previous date: 00/00/0000 Print Date:06/02/2015

(PICCS) inventory or are not required to be listed on the Philippine (PICCS) inventory.
: This product's New Zealand Inventory of Chemical Substances (NZIoC) status has NOT been determined.
: This product's Taiwan Toxic Chemical Substances Control Act Inventory status has NOT been determined.

16. OTHER INFORMATION

HMIS Rating
Health: 2
Flammability: 1
Reactivity: 0

NFPA Rating
Health: 2
Fire: 1
Reactivity: 0

Training advice

Read the safety data sheet before using the product.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Sources of key data used to compile the Safety Data Sheet

Regulations, databases, literature, own tests.

Additions, Deletions, Revisions

Relevant changes have been marked with vertical lines.

Univar USA Inc Safety Data Sheet

For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

Notice

Univar USA Inc. ("Univar") expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Univar makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Univar's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process

SAFETY DATA SHEET

KEMIRA SternPAC

Ref. /US/EN

Revision Date: 11/11/2015 Previous date: 02/12/2015 Print Date:12/08/2016

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Product name
KEMIRA SternPAC

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture

Recommended restrictions on use
There are no uses advised against.

Supplier's details

Kemira Water Solutions, Inc.
1000 Parkwood Circle, Suite 500
30339 Atlanta USA
Telephone+18635335990, Telefax. +18635337077

HEAD OFFICE
Kemira Oyj
P.O. Box 330
00101 HELSINKI
FINLAND
Telephone +358108611 Telefax +358108621124

Emergency telephone number

CHEMTREC: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Corrosive to metals; Category 1; May be corrosive to metals.;
Serious eye damage; Category 1; Causes serious eye damage.;

GHS-Labelling

Hazard pictograms :

Signal word : Danger

Hazard statements : **Hazard statements:**

H290	May be corrosive to metals.
H318	Causes serious eye damage.

Precautionary statements : **Prevention:**

P234	Keep only in original container.
P280	Wear protective gloves/ eye protection/ face protection.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.
P390	Absorb spillage to prevent material damage.

Storage:

P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.

Disposal:

P501	Dispose of contents/container as special waste in compliance with local and national regulations.

Hazardous components which must be listed on the label:

- 39290-78-3 Aluminium chloride hydroxide sulfate

Other hazards which do not result in classification

Advice; Irritating to eyes, respiratory system and skin. Gastrointestinal irritation
Inhalation; May cause irritation of respiratory tract.

Skin; Causes moderate skin irritation.
Eyes; Causes eye irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances /Mixtures

Chemical nature Aqueous solution

Aluminium chloride hydroxide sulfate	39290-78-3	30 - 35 %

Further information

This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

This product contains WHMIS regulated (hazardous) components.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation

If breathing is difficult, remove to fresh air and provide oxygen. If not breathing, give artificial respiration. Seek medical attention if cough or other symptoms develop.

Skin contact

Wash off immediately with plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If possible use lukewarm water. Seek medical advice.

Ingestion

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Drink 1 or 2 glasses of water. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture

Not combustible. Thermal decomposition products:
aluminium compounds, Sulphur oxides, hydrogen chloride (HCl)

Special protective actions for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Further information

Cool containers/tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment.

Environmental precautions

Should not be released into the soil, surface water or ground water system. Must be disposed of in accordance with local and national regulations.

Methods and materials for containment and cleaning up

Small amounts:

Absorb with materials such as; Clay. or Neutralize with lime or soda. Collect for subsequent disposal.

Large amounts:

In case of large spillage, contain by damming up. Collect by pump or with suitable inert absorbent material. Neutralize with lime or soda. Flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin, eyes and clothing. Wash contact areas after handling.

Conditions for safe storage, including any incompatibilities

Store in original container. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Store in corrosive resistant stainless steel container with a resistant inner liner. plastic with fiberglass reinforcement or plastic
Keep containers tightly closed in a cool, well-ventilated place.

Materials for packaging

Suitable material: butyl-rubber, plastic

Materials to avoid:

Iron, steel, metals (including their alloys)

Corrodes base metals., Carbon steel, aluminium, carbon, brass, Nylon

mineral acids, Bases, Alkaline materials

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value	Form of exposure	Control parameters	Update	Basis

Appropriate engineering controls

Ensure adequate ventilation. Ensure that eyewash stations and safety showers are close to the workstation location.
Handle in accordance with good industrial hygiene and safety practice.

Eye wash bottle or emergency eye-wash fountain must be found in the work place.

Individual protection measures, such as personal protective equipment

Respiratory protection

When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

Hand protection

Glove material: PVC and neoprene gloves
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.
Break through time: > 480 min

Skin and body protection

Wear suitable protective clothing.

Eye protection

Tightly fitting safety goggles or face-shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	, liquid
Colour	clear, amber, or, colourless
Odour	slight
pH	2.1 - 3.1
Freezing point :	-12 °C 10.4 °F
Initial boiling point and boiling range	Boiling point/boiling range 102 °C Boiling point/boiling range 215.6 °F
Relative vapour density	1.3
Density	1.18 - 1.28 g/cm³
Solubility(ies):	
Water solubility	completely soluble
Volatile organic content (VOC)	Not applicable

10. STABILITY AND REACTIVITY

Reactivity

Chemical stability

Possibility of hazardous reactions

Hazardous reactions: Hazardous polymerisation does not occur.

Conditions to avoid

Conditions to avoid: Stable
Avoid extreme temperatures.

Incompatible materials

Materials to avoid: Iron
steel
metals (including their alloys)

Corrodes base metals.
Carbon steel
aluminium
carbon
brass
Nylon

mineral acids
Bases
Alkaline materials

Hazardous decomposition products

Hazardous decomposition products: Sulphur oxides (SOx)
Aluminium oxide
Hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute oral toxicity **Aluminium chloride hydroxide sulfate:**
/OECD Test Guideline 401/Rat/2,360 mg/kg/LD50

Acute inhalation toxicity **Aluminium chloride hydroxide sulfate:**
LC50/Rat/4 h/aerosol: />/5 mg/l/OECD Test Guideline 403

Acute dermal toxicity **Aluminium chloride hydroxide sulfate:**
LD50/Rat/male and female/>
/2,000 mg/kg/OECD Test Guideline 402

Skin corrosion/irritation

Conclusion: Repeated or prolonged skin contact may cause:, Skin irritation, dry skin

Skin corrosion/irritation **Aluminium chloride hydroxide sulfate:**
Rabbit
Result: No irritating effects.
/OECD Test Guideline 404

Serious eye damage/eye irritation

Conclusion: May cause irreversible eye damage.

Serious eye damage/eye irritation	**Aluminium chloride hydroxide sulfate:** Rabbit Result: No eye irritation /OECD Test Guideline 405/72 h

Respiratory or skin sensitisation

Skin sensitisation	**Aluminium chloride hydroxide sulfate:** /Guinea pig Not sensitizing./OECD Test Guideline 406 Remarks: Read-across (Analogy), CAS-No., 12042-91-0

Germ cell mutagenicity

Genotoxicity in vitro	**Aluminium chloride hydroxide sulfate:** AMES test/Mutagenicity (Salmonella typhimurium - reverse mutation assay)/with and without Result: negative OECD Test Guideline 471 **Aluminium chloride hydroxide sulfate:** micronucleus test/In vitro mammalian cells/with and without Result: negative OECD Test Guideline 487 Remarks: Read-across (Analogy), 1327-41-9 **Aluminium chloride hydroxide sulfate:** Lymphoma/In vitro gene mutation study in mammalian cells/with and without Result: negative OECD Test Guideline 476 Remarks: Read-across (Analogy), 1327-41-9

Carcinogenicity

Carcinogenicity	**Aluminium chloride hydroxide sulfate:** Not believed to be a carcinogen.

Reproductive toxicity

Toxicity for reproduction	**Aluminium chloride hydroxide sulfate:** Reproductive effects/Rat/female/Oral/3,225 mg/kg/OECD Test Guideline 452 Remarks: Read-across (Analogy), CAS-No., 31142-56-0 Conclusion: No known effect.

Aluminium chloride hydroxide sulfate:
Screening test/Rat/male and female/Oral/1,000 mg/kg/OECD Test Guideline 422
Remarks: Read-across (Analogy), 1327-41-9
Conclusion: No known effect.
Aluminium chloride hydroxide sulfate:

Conclusion: Not believed to be toxic for reproduction.

Teratogenicity

Aluminium chloride hydroxide sulfate:
Rat/female/Oral/1,075 mg/kg/OECD Test Guideline 452
Conclusion: Read-across (Analogy), Did not show mutagenic or teratogenic effects in animal experiments., CAS-No., 31142-56-0

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic toxicity

This material is not classified as dangerous for the environment. At environmentally relevant pH 5,5 – 8, the solubility of aluminium is low. Aluminium salts dissociate with water resulting in rapid formation and precipitation of aluminium hydroxides. At pH <5.5, the free ion (Al3+) becomes the prevalent form, the increased availability at this pH is reflected in higher toxicity. At pH 6.0–7.5, solubility declines due to the presence of insoluble Al(OH)3. At higher pH (pH >8.0), the more soluble Al(OH)4 - species predominate, which again increases availability.
Aluminium salts must not be released to rivers and lakes in an uncontrolled way and pH variations around 5 - 5.5 should be avoided.

Aluminium chloride hydroxide sulfate:
LC50/96 h/Danio rerio/semi-static test/OECD Test Guideline 203: > 1,000 mg/l
Remarks: Read-across (Analogy), CAS-No., 1327-41-9
NOEC/Danio rerio/semi-static test/OECD Test Guideline 203: > 1,000 mg/l
Remarks: Read-across (Analogy), CAS-No., 1327-41-9
LC50/Danio rerio/semi-static test/OECD Test Guideline 203: > 0.156 mg/l
Calculated as Al Maximum soluble concentration under the test conditions.
EC50/48 h/Daphnia magna (Water flea)/OECD Test Guideline 202: 98 mg/l
Remarks: Read-across (Analogy), CAS-No., 1327-41-9
NOEC/Daphnia magna (Water flea)/OECD Test Guideline 202: 24 mg/l
Remarks: Read-across (Analogy), CAS-No., 1327-41-9
EC50/72 h/Pseudokirchneriella subcapitata (green algae)/static test/OECD Test Guideline 201: 14 mg/l
EC50: 3.4 mg/l
Calculated as Al

NOEC/72 h/Pseudokirchneriella subcapitata (green algae)/static test/OECD Test Guideline 201: 1 mg/l
NOEC: 0.24 mg/l
Calculated as Al

Toxicity to other organisms

Persistence and degradability

Biological degradability:

The methods for determining biodegradability are not applicable to inorganic substances.
Chemical degradation:
When reacting with water on pH range 5,8 - 8 precipitates of aluminium hydroxides are formed.

Biological degradability:
Aluminium chloride hydroxide sulfate:
The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential

The product is not expected to bioaccumulate.

Aluminium chloride hydroxide sulfate:

The product is not expected to bioaccumulate.
Partition coefficient: n-octanol/water: Not applicable, inorganic compound

Mobility in soil

Water solubility: completely soluble

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Product	Must be disposed of in accordance with local and national regulations. EPA Hazardous Waste - NO.
Contaminated packaging	Packages that cannot be cleaned must be disposed of the same way as the unused product.

14. TRANSPORT INFORMATION

UN number	3264

Land transport
DOT:

Description of the goods:	UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminium chloride hydroxide sulfate)
Proper shipping name	
Class:	8
Packaging group:	III
DOT-Labels	8

Sea transport
IMDG:

Description of the goods:	
UN proper shipping name	UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ALUMINIUM CHLORIDE HYDROXIDE SULFATE)
Class:	8
Packaging group:	III
IMDG-Labels:	8

Air transport
ICAO/IATA:

Description of the goods:	
UN proper shipping name	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Aluminium chloride hydroxide sulfate)
Class:	8
Packaging group:	III
ICAO-Labels:	8

Special precautions for user

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Title III Section 311 Categories
Immediate (Acute) Health Effects: Yes;
Delayed (Chronic) Health Effects: No;
Fire Hazard: No;
Sudden Release Of Pressure Hazard: No;
Reactivity Hazard: No;

SARA 313 - Specific Toxic Chemical Listings
None Present ()

None Present ()
There are no WHMIS Ingredient Disclosure Listed components present above the component's WHMIS Concentration Threshold.

California Proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
None Present ()

Other regulations : None

Notification status

:
: All components of this product are included in the United States TSCA Chemical Inventory or are not required to be listed on the United States TSCA Chemical Inventory.
: All components of this product are included in the Canada Domestic Substance List (DSL) or are not required to be listed on the Canada Domestic Substance List (DSL).
: All components of this product are NOT included on the Australian Inventory of Chemical Substances (AICS).
: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.
: All components of this product are included in the Korean (ECL) inventory or are not required to be listed on the Korean (ECL) inventory.
: All components of this product are NOT included on the Philippine (PICCS) inventory.
: All components of this product are NOT included on the Japanese (ENCS) inventory.
: All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.
: All components of this product are NOT included on the New Zealand Inventory of Chemical Substances.
: This product's Taiwan Toxic Chemical Substances Control Act Inventory status has NOT been determined.

16. OTHER INFORMATION

HMIS Rating

Health: 2
Flammability: 0
Reactivity: 1

NFPA Rating

Health: 2
Fire: 0
Reactivity: 1

Training advice

Read the safety data sheet before using the product.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Sources of key data used to compile the Safety Data Sheet

Regulations, databases, literature, own tests.

Additions, Deletions, Revisions

Relevant changes have been marked with vertical lines.

DelPAC 2000, 2020, 2500

SDS No. 102
1/31/2019

Safety Data Sheet

1. IDENTIFICATION

Product Identifier
Product Name Aluminum Chloride Hydroxide Sulfate Solution

Other means of identification
SDS # 102

UN/ID No UN1760

Manufacturer

USALCO, LLC
2601 Cannery Ave
Baltimore, MD 21226

Recommended use of the chemical and restrictions on use
Recommended Use Water treatment chemical.

Emergency Telephone Number
Company Phone Number 410-918-2230
Emergency Telephone (24 hr) 800-282-5322

2. HAZARDS IDENTIFICATION

Appearance **Clear**, Colorless to amber Liquid **Physical State** Liquid **Odor** Negligible

Classification

Irritating to eyes	Category 2
Corrosive to metals	Category 1

Signal Word
Warning

Hazard Statements
Causes skin and eye irritation
May be corrosive to metals

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves, and eye protection. Keep only in original container.

Precautionary Statements - Response
If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Precautionary Statements - Storage
Store in corrosive resistant plastic or FRP container or a container with corrosive resistant inner liner.

Precautionary Statements - Disposal
Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): May be D002 under §261.22(a)(2) due to the rate of corrosion of metal.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Polyaluminum chloride, solution

Chemical Name	CAS No	Weight-%
Water	7732-18-5	55-85
Aluminum Chloride Hydroxide Sulfate	39290-78-3	15-45

4. FIRST-AID MEASURES

First Aid Measures

General Advice After first aid, get appropriate in-plant, paramedic, or community medical support.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical advice/attention.

Skin Contact Wash off immediately with plenty of water. Take off contaminated clothing.

Inhalation (mist or spray) Remove from exposure; seek medical treatment if any symptoms occur.

Ingestion If conscious give large amounts of water. Seek medical attention immediately.

Most important symptoms and effects

Symptoms Causes serious eye damage. May cause skin irritation.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None identified.

Specific Hazards Arising from the Chemical Negligible fire hazard. Decomposition products may be toxic.

Hazardous Decomposition Products Hydrogen chloride. Sulfur dioxide.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protection recommended in Section 8. Keep unnecessary people away, isolate hazard area and restrict entry.

Environmental Precautions Do not release into sewers or waterways. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up	Small Spills: If directed to an industrial sewer, wash down with large volumes of water. Spills can be neutralized and absorbed with soda ash or lime, but neutralization will release carbon dioxide, which can generate a breathing hazard. For large spills, dike far ahead of spill for later disposal. Contain large spills and pump into a suitable tank for disposal. Neutralize with soda ash or lime if necessary. Adequate ventilation is required due to release of Carbon Dioxide.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Ensure that all containers are labeled in accordance with OSHA regulations. Treat as a dilute acid. Avoid contact with metal, as product will slowly corrode iron, brass, copper, aluminum and mild steel. Avoid contact with skin and eyes. Use personal protection recommended in Section 8. Wash thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep storage temperature below 30°C/86°F. Store away from incompatible materials. Keep only in original container.
Packaging Materials	Store in rubber-lined, plastic or FRP vessels.
Incompatible Materials	Metals such as aluminum, tin, and zinc. Strong alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines	No exposure limits noted for ingredient(s)

Appropriate engineering controls

Engineering Controls	Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.
Skin and Body Protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Respiratory Protection	Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. WARNING!: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
General Hygiene Considerations	Contaminated Equipment: Separate contaminated work clothes from street clothes. Remove this material from your shoes and clean personal protective equipment. Do not eat, drink, smoke, or apply cosmetics while handling this product. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid, clear, colorless to amber color
Odor	Negligible
Odor threshold	Not determined
pH	>2 to 3.5
Relative density; (specific gravity)	1.2 ± 0.1 (1=Water) @ 4°C
Melting point/freezing point	< -17.8°C / <0°F
Initial boiling point and boiling range	> 110°C / >230°F
Decomposition temperature	±120°C / 250°F
Viscosity	5-50 centipoise @ 25 °C (77 °F)
Auto-ignition temperature	Not flammable
Evaporation rate;	Similar to water
Flammability (solid, gas)	Not flammable
Flash point	Will not burn
Upper/lower flammability or explosive limits	Will not burn
Partition coefficient: n-octanol/water	Not relevant
Solubility	Soluble in water
Vapor density	Similar to water
Vapor pressure	Similar to water

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
Reacts with Zinc and Aluminum to form Hydrogen gas. Contact with strong alkalis (e.g. Ammonia and its solutions, Sodium hydroxide (caustic), Potassium hydroxide, chlorites) may generate heat, splattering or boiling and toxic vapors.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid
Contact with incompatible materials.

Incompatible Materials
Metals such as aluminum, tin, and zinc. Strong alkalis.

Hazardous Decomposition Products
Hydrogen chloride. Sulfur dioxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin Contact Avoid contact with skin.

Inhalation Avoid breathing vapors or mists.

Ingestion Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Aluminum Chloride Hydroxide Sulfate 39290-78-3	> 5000 mg/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity
Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Aluminum Chloride Hydroxide Sulfate 39290-78-3		1460 - 1500: 48 h Leuciscus idus melanotus mg/L LC50 static		

Persistence/Degradability
Not determined

Bioaccumulation
Not determined

Mobility

Chemical Name	Partition Coefficient
Aluminum Chloride Hydroxide Sulfate 39290-78-3	3

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): May be D002 under §261.22(a)(2) due to the rate of corrosion of metal.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1760
Proper Shipping Name Corrosive liquid, n.o.s. (Aluminum chloride hydroxide sulfate)
Hazard Class 8
Packing Group III

IATA

UN/ID No	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s. (Aluminum chloride hydroxide sulfate)
Hazard Class	8
Packing Group	III

IMDG

UN/ID No	UN1760
Proper Shipping Name	Corrosive liquid, n.o.s. (Aluminum chloride hydroxide sulfate)
Hazard Class	8
Packing Group	III
Marine Pollutant	This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories
Not determined

US Federal Regulations

Component Analysis
None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313
Not listed

CWA (Clean Water Act)
Not listed

US State Regulations

U.S. State Right-to-Know Regulations
Not determined

16. OTHER INFORMATION

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	1	0	0	Not determined
HMIS	**Health Hazards**	**Flammability**	**Physical Hazards**	**Personal Protection**
	1	0	0	Not determined

Issue Date	2/1/2012
Revision Date:	3/3/2015 New format; 1/31/2019 Review
Revision Note	

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

October 11, 2017

Carol Paul
Manager
Greenville Borough Municipal Authority
44 Clinton Street
Greenville, PA 16125-2281

Re: Final NPDES Permit- Industrial Waste
Greenville Borough WTP
NPDES Permit No. PA0221970
Authorization ID No. 1103901
Hempfield Township, Mercer County

Dear Ms. Paul:

Your NPDES permit is enclosed. Please read the permit carefully. The permit expires on the date identified on page 1 of the permit. A renewal application must be submitted to this office 180 days prior to the permit expiration date, if a discharge is expected to continue past the expiration date of the permit.

Enclosed are Discharge Monitoring Report (DMR) templates and DMR instructions. It is recommended that you retain the DMR templates in the event you are unable to submit DMRs electronically through DEP's eDMR system. Routine use of the eDMR system is a requirement of the permit unless the conditions in Part A III.B.3 of the permit are met to submit hard copies.

Also enclosed is a Supplemental Form Inventory, which identifies the forms that are attached to the permit and must be submitted as attachments to eDMR reports, as applicable (see individual form instructions). The submission of other supplemental forms may be required in accordance with the permit. We encourage you to use the spreadsheet versions of supplemental forms that contain appropriate validation and DEP-approved calculations.

Part C of the permit contains requirements relating to chemical additives. These requirements have changed in comparison to previous permits. Please review the chemical additives requirements carefully and contact this office if you have questions. Additional information may be found on DEP's website at www.depweb.state.pa.us/chemicaladditives.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice

of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717.787.3483) FOR MORE INFORMATION.

If you have any questions, please contact Robert Hutchinson at 814.332.6679.

Sincerely,

John A. Holden, P.E.
Environmental Program Manager
Clean Water Program

Enclosures

cc: Thomas Thompson, Project Manager, Gannett Fleming Inc.
Lora Lattanzi, US Fish & Wildlife Service (e-mail pdf w/ attachemnts)
Central Office, Division of Operations

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE REQUIREMENTS FOR INDUSTRIAL WASTEWATER FACILITIES

NPDES PERMIT NO: PA0221970

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*,

Greenville Borough Municipal Authority
44 Clinton Street
Greenville, PA 16125-2281

is authorized to discharge from a facility known as **Greenville Borough WTP**, located at **45 South Water Street, Greenville PA 16125** in **Hempfield Township, Mercer County**, to the **Shenango River** in Watershed **20-A** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B and C hereof.

THIS PERMIT SHALL BECOME EFFECTIVE ON NOV 0 1 2017

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON OCT 3 1 2022

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.

2. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (40 CFR 122.41(a))

3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. (40 CFR 122.41(b), 122.21(d)(2))

   In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. (25 Pa. Code §§ 92a.7 (b), (c))

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

DATE PERMIT ISSUED OCT 11 2017

ISSUED BY

John A. Holden, P.E.
Clean Water Program Manager
Northwest Regional Office

Permit No. PA0221970

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. **For Outfall** 001 , **Latitude** 41° 24' 08" , **Longitude** 80° 23' 28" , **River Mile Index** 59 , **Stream Code** 35482

Type of Effluent: Treated filter backwash

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/day	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0 Max	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
Total Suspended Solids	XXX	XXX	XXX	30	60	75	2/month	8-Hr Composite
Aluminum, Total	XXX	XXX	XXX	4	8	10	2/month	8-Hr Composite
Iron, Total	XXX	XXX	XXX	2	4	5	2/month	8-Hr Composite
Manganese, Total	XXX	XXX	XXX	1	2	2.5	2/month	8-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall 001 – prior to mixing with any other waters

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS (Continued)

Additional Requirements

The permittee may not discharge:

1. Floating solids, scum, sheen or substances that result in observed deposits in the receiving water. (25 Pa Code § 92a.41(c))

2. Oil and grease in amounts that cause a film or sheen upon or discoloration of the waters of this Commonwealth or adjoining shoreline, or that exceed 15 mg/l as a daily average or 30 mg/l at any time (or lesser amounts if specified in this permit). (25 Pa. Code § 92a.47(a)(7), § 95.2(2))

3. Substances in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (25 Pa Code § 93.6(a))

4. Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. For the purpose of determining compliance with this condition, DEP will compare conditions in the receiving water upstream of the discharge to conditions in the receiving water approximately 100 feet downstream of the discharge to determine if there is an observable change in the receiving water. (25 Pa Code § 92a.41(c))

Footnotes

(1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.

(2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.

Supplemental Information

The effluent limitations for Outfall 001 were determined using an effluent discharge rate of 0.12 MGD.

II. DEFINITIONS

At Outfall (XXX) means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

Average refers to the use of an arithmetic mean, unless otherwise specified in this permit. (40 CFR 122.41(l)(4)(iii))

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollutant loading to surface waters of the Commonwealth. The term also includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim, and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities. (25 Pa. Code § 92a.2)

Bypass means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i))

Calendar Week is defined as the seven consecutive days from Sunday through Saturday, unless the permittee has been given permission by DEP to provide weekly data as Monday through Friday based on showing excellent performance of the facility and a history of compliance. In cases when the week falls in two separate months, the month with the most days in that week shall be the month for reporting.

Clean Water Act means the Federal Water Pollution Control Act, as amended. (33 U.S.C.A. §§ 1251 to 1387).

Chemical Additive means a chemical product (including products of disassociation and degradation, collectively "products") introduced into a waste stream that is used for cleaning, disinfecting, or maintenance and which may be detected in effluent discharged to waters of the Commonwealth. The term generally excludes chemicals used for neutralization of waste streams, the production of goods, and treatment of wastewater.

Composite Sample (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters (mL) each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite. (EPA Form 2C)

Composite Sample (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). A separate analysis should be performed for each sample and the results should be averaged.

Daily Average Temperature means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (25 Pa. Code § 92a.2, 40 CFR 122.2)

Daily Maximum Discharge Limitation means the highest allowable "daily discharge."

Discharge Monitoring Report (DMR) means the DEP or EPA supplied form(s) for the reporting of self-monitoring results by the permittee. (25 Pa. Code § 92a.2, 40 CFR 122.2)

Estimated Flow means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

Geometric Mean means the average of a set of n sample results given by the nth root of their product.

Grab Sample means an individual sample of at least 100 mL collected at a randomly selected time over a period not to exceed 15 minutes. (EPA Form 2C)

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. (40 CFR 122.2)

Hauled-In Wastes means any waste that is introduced into a treatment facility through any method other than a direct connection to the wastewater collection system. The term includes wastes transported to and disposed of within the treatment facility or other entry points within the collection system.

Immersion Stabilization (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

Instantaneous Maximum Effluent Limitation means the highest allowable discharge of a concentration or mass of a substance at any one time as measured by a grab sample. (25 Pa. Code § 92a.2)

Measured Flow means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Monthly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. (25 Pa. Code § 92a.2)

Municipal Waste means garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities; and sludge not meeting the definition of residual or hazardous waste under this section from a municipal, commercial or institutional water supply treatment plant, waste water treatment plant or air pollution control facility. (25 Pa. Code § 271.1)

Non-contact Cooling Water means water used to reduce temperature which does not come in direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.

Residual Waste means garbage, refuse, other discarded material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations and sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous. The term does not include coal refuse as defined in the Coal Refuse Disposal Control Act. The term does not include treatment sludges from coal mine drainage treatment plants, disposal of which is being carried on under and in compliance with a valid permit issued under the Clean Streams Law. (25 Pa Code § 287.1)

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii))

Stormwater means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. (25 Pa. Code § 92a.2)

Stormwater Associated With Industrial Activity means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant, and as defined at 40 CFR 122.26(b)(14) (i) - (ix) & (xi) and 25 Pa. Code § 92a.2.

Total Dissolved Solids means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136.

Toxic Pollutant means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring. (25 Pa. Code § 92a.2)

III. SELF-MONITORING, REPORTING AND RECORDKEEPING

A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR 122.41(j)(1)). Representative sampling includes the collection of samples, where possible, during periods of adverse weather, changes in treatment plant performance and changes in treatment plant loading. If possible, effluent samples must be collected where the effluent is well mixed near the center of the discharge conveyance and at the approximate mid-depth point, where the turbulence is at a maximum and the settlement of solids is minimized. (40 CFR 122.48, 25 Pa. Code § 92a.61)

2. Records Retention (40 CFR 122.41(j)(2))

   Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least 5 years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for 3 years from the date of the sample measurement, report or application, unless a longer retention period is required by the permit. The 3-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results (40 CFR 122.41(j)(3))

   For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

   a. The exact place, date and time of sampling or measurements.
   b. The person(s) who performed the sampling or measurements.
   c. The date(s) the analyses were performed.
   d. The person(s) who performed the analyses.
   e. The analytical techniques or methods used; and the associated detection level.
   f. The results of such analyses.

4. Test Procedures

   a. Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§ 4101-4113) and 25 Pa. Code Chapter 252, relating to environmental laboratory accreditation.

   b. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be those approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, unless the method is specified in this permit or has been otherwise approved in writing by DEP. (40 CFR 122.41(j)(4), 122.44(i)(1)(iv))

   c. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be sufficiently sensitive. A method is sufficiently sensitive when 1) the method minimum level is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest minimum level of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, for the measured pollutant or pollutant parameter; or 3) the method is specified in this permit or has been otherwise approved in writing by DEP for the measured pollutant or pollutant parameter. Permittees have the option of providing matrix or sample-specific minimum levels rather than the published levels. (40 CFR 122.44(i)(1)(iv))

5. Quality/Assurance/Control

In an effort to assure accurate self-monitoring analyses results:

a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. (40 CFR 122.41(e), 122.41(i)(3))

b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. (40 CFR 122.41(j)(4))

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.44, 92a.61(i) and 40 CFR §§ 122.41(e), 122.44(i)(1))

2. The permittee shall use DEP's electronic Discharge Monitoring Report (eDMR) system to report the results of compliance monitoring under this permit (see www.dep.pa.gov/edmr). Permittees that are not using the eDMR system as of the effective date of this permit shall submit the necessary registration and trading partner agreement forms to DEP's Bureau of Clean Water (BCW) within 30 days of the effective date of this permit and begin using the eDMR system when notified by DEP BCW to do so. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.61(g) and 40 CFR § 122.41(l)(4))

3. Submission of a physical (paper) copy of a Discharge Monitoring Report (DMR) is acceptable under the following circumstances:

a. For a permittee that is not yet using the eDMR system, the permittee shall submit a physical copy of a DMR to the DEP regional office that issued the permit during the interim period between the submission of registration and trading partner agreement forms to DEP and DEP's notification to begin using the eDMR system.

b. For any permittee, as a contingency a physical DMR may be mailed to the DEP regional office that issued the permit if there are technological malfunction(s) that prevent the successful submission of a DMR through the eDMR system. In such situations, the permittee shall submit the DMR through the eDMR system within 5 days following remedy of the malfunction(s).

4. DMRs must be completed in accordance with DEP's published DMR instructions (3800-FM-BPNPSM0463). DMRs must be received by DEP no later than 28 days following the end of the monitoring period. DMRs are based on calendar reporting periods and must be received by DEP in accordance with the following schedule:

- Monthly DMRs must be received within 28 days following the end of each calendar month.
- Quarterly DMRs must be received within 28 days following the end of each calendar quarter, i.e., January 28, April 28, July 28, and October 28.
- Semiannual DMRs must be received within 28 days following the end of each calendar semiannual period, i.e., January 28 and July 28.
- Annual DMRs must be received by January 28, unless Part C of this permit requires otherwise.

5. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) attached to this permit, or an approved equivalent, and submit the signed, completed forms as attachments to the DMR, through DEP's eDMR system. DEP's Supplemental Laboratory Accreditation Form (3800-FM-BPNPSM0189) must be completed and submitted to DEP with the first DMR following issuance of this permit, and anytime thereafter when changes to laboratories or methods occur. (25 Pa. Code §§ 92a.3(c), 92a.41(a), 92a.61(g) and 40 CFR § 122.41(l)(4))

6. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:

- For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
- For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
- For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

If signed by a person other than the above and for co-permittees, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form. (40 CFR § 122.22(b))

7. If the permittee monitors any pollutant at monitoring points as designated by this permit, using analytical methods described in Part A III.A.4. herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR. (40 CFR 122.41(l)(4)(ii))

C. Reporting Requirements

1. Planned Changes to Physical Facilities – The permittee shall give notice to DEP as soon as possible but no later than 30 days prior to planned physical alterations or additions to the permitted facility. A permit under 25 Pa. Code Chapter 91 may be required for these situations prior to implementing the planned changes. A permit application, or other written submission to DEP, can be used to satisfy the notification requirements of this section.

   Notice is required when:

   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b). (40 CFR 122.41(l)(1)(i))

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit. (40 CFR 122.41(l)(1)(ii))

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii))

   d. The planned change may result in noncompliance with permit requirements. (40 CFR 122.41(l)(2))

2. Planned Changes to Waste Stream – Under the authority of 25 Pa. Code § 92a.24(a), the permittee shall provide notice to DEP as soon as possible but no later than 45 days prior to any planned changes in the volume or pollutant concentration of its influent waste stream, as specified in paragraphs 2.a. and 2.b., below. Notice shall be provided on the "Planned Changes to Waste Stream" Supplemental Report (3800-FM-BPNPSM0482), available on DEP's website. The permittee shall provide information on the quality and quantity of waste introduced into the facility, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility. The Report shall be sent via Certified Mail or other means to confirm DEP's receipt of the notification. DEP will determine if the submission of a new application and receipt of a new or amended permit is required.

   a. Introduction of New Pollutants (25 Pa. Code § 92a.24(a))

      New pollutants are defined as parameters that meet all of the following criteria:

(i) Were not detected in the facilities' influent waste stream as reported in the permit application; and

(ii) Have not been approved to be included in the permittee's influent waste stream by DEP in writing.

The permittee shall provide notification of the introduction of new pollutants in accordance with paragraph 2 above. The permittee may not authorize the introduction of new pollutants until the permittee receives DEP's written approval.

b. Increased Loading of Approved Pollutants (25 Pa. Code § 92a.24(a))

Approved pollutants are defined as parameters that meet one or more of the following criteria:

(i) Were detected in the facilities' influent waste stream as reported in the permittee's permit application; or

(ii) Have been approved to be included in the permittee's influent waste stream by DEP in writing; or

(iii) Have an effluent limitation or monitoring requirement in this permit.

The permittee shall provide notification of the introduction of increased influent loading (lbs/day) of approved pollutants in accordance with paragraph 2 above when (1) the cumulative increase in influent loading (lbs/day) exceeds 20% of the maximum loading reported in the permit application, or a loading previously approved by DEP, or (2) may cause an exceedance in the effluent of Effluent Limitation Guidelines (ELGs) or limitations in Part A of this permit, or (3) may cause interference or pass through at the facility, or (4) may cause exceedances of the applicable water quality standards in the receiving stream. Unless specified otherwise in this permit, if DEP does not respond to the notification within 30 days of its receipt, the permittee may proceed with the increase in loading. The acceptance of increased loading of approved pollutants may not result in an exceedance of ELGs or effluent limitations and may not cause exceedances of the applicable water quality standards in the receiving stream.

3. Reporting Requirements for Hauled-In Wastes

a. Receipt of Residual Waste

(i) The permittee shall document the receipt of all hauled-in residual wastes (including but not limited to wastewater from oil and gas wells, food processing waste, and landfill leachate), as defined at 25 Pa. Code § 287.1, that are received for processing at the treatment facility. The permittee shall report hauled-in residual wastes on a monthly basis to DEP on the "Hauled In Residual Wastes" Supplemental Report (3800-FM-BPNPSM0450) as an attachment to the DMR. If no residual wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report. The information used to develop the Report shall be retained by the permittee for five years from the date of receipt and must be made available to DEP or EPA upon request.

(1) The dates that residual wastes were received.

(2) The volume (gallons) of wastes received.

(3) The license plate number of the vehicle transporting the waste to the treatment facility.

(4) The permit number(s) of the well(s) where residual wastes were generated, if applicable.

(5) The name and address of the generator of the residual wastes.

(6) The type of wastewater.

The transporter of residual waste must maintain these and other records as part of the daily operational record (25 Pa. Code § 299.219). If the transporter is unable to provide this information or the permittee has not otherwise received the information from the generator, the residual wastes shall not be accepted by the permittee until such time as the permittee receives such information from the transporter or generator.

(ii) The following conditions apply to the characterization of residual wastes received by the permittee:

(1) If the generator is required to complete a chemical analysis of residual wastes in accordance with 25 Pa. Code § 287.51, the permittee must receive and maintain on file a chemical analysis of the residual wastes it receives. The chemical analysis must conform to the Bureau of Waste Management's Form 26R except as noted in paragraph (2), below. Each load of residual waste received must be covered by a chemical analysis if the generator is required to complete it.

(2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the chemical analysis may be a general frac wastewater characterization approved by DEP. Thereafter, the chemical analysis must be waste-specific and be reported on the Form 26R.

b. Receipt of Municipal Waste

(i) The permittee shall document the receipt of all hauled-in municipal wastes (including but not limited to septage and liquid sewage sludge), as defined at 25 Pa. Code § 271.1, that are received for processing at the treatment facility. The permittee shall report hauled-in municipal wastes on a monthly basis to DEP on the "Hauled In Municipal Wastes" Supplemental Report (3800-FM-BPNPSM0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

(1) The dates that municipal wastes were received.

(2) The volume (gallons) of wastes received.

(3) The BOD_5 concentration (mg/l) and load (lbs) for the wastes received.

(4) The location(s) where wastes were disposed of within the treatment facility.

(ii) Sampling and analysis of hauled-in municipal wastes must be completed to characterize the organic strength of the wastes, unless composite sampling of influent wastewater is performed at a location downstream of the point of entry for the wastes.

4. Unanticipated Noncompliance or Potential Pollution Reporting

a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b).

(i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification

to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.

(ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.

(iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:

(i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and

(3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement. (40 CFR 122.44(g))

(ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (40 CFR 122.41(l)(6)(iii))

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.4 of this section or specific requirements of compliance schedules, at the time DMRs are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

D. Specific Toxic Pollutant Notification Levels (for Manufacturing, Commercial, Mining, and Silvicultural Direct Dischargers) - The permittee shall notify DEP as soon as it knows or has reason to believe the following: (40 CFR 122.42(a))

1. That any activity has occurred, or will occur, which would result in the discharge of any toxic pollutant which is not limited in this permit, if that discharge on a routine or frequent basis will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(1))

a. One hundred micrograms per liter.

b. Two hundred micrograms per liter for acrolein and acrylonitrile.

c. Five hundred micrograms per liter for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol.

d. One milligram per liter for antimony.

e. Five times the maximum concentration value reported for that pollutant in this permit application.

f. Any other notification level established by DEP.

2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(2))

a. Five hundred micrograms per liter.

b. One milligram per liter for antimony.

c. Ten times the maximum concentration value reported for that pollutant in the permit application.

d. Any other notification level established by DEP.

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance

1. The permittee shall comply with all conditions of this permit. If a compliance schedule has been established in this permit, the permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit. (40 CFR 122.41(a)(1))

2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. (25 Pa. Code § 92a.51(c), 40 CFR 122.47(a)(4))

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with 25 Pa. Code § 92a.72 and 40 CFR 122.41(f).

2. 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. (40 CFR 122.41(f))

3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. (40 CFR 122.41(a)(1))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. (40 CFR 122.41(h))

2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))

3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))

D. 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 terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d))

F. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions in paragraphs two, three and four of this section. (40 CFR 122.41(m)(2))

2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:

   a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." (40 CFR 122.41(m)(4)(i)(A))

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. (40 CFR 122.41(m)(4)(i)(B))

   c. The permittee submitted the necessary notice required in F.4.a. and b. below. (40 CFR 122.41(m)(4)(i)(C))

3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in F.2. above. (40 CFR 122.41(m)(4)(ii))

4. Notice

   a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. (40 CFR 122.41(m)(3)(i))

   b. Unanticipated Bypass – The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.4.b.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR 122.41(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or

- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A § 4904 and 40 CFR 122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the 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. (40 CFR 122.41(c))

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92a and 40 CFR 122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To 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; (40 CFR 122.41(i)(1))

2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; (40 CFR 122.41(i)(2))

3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and (40 CFR 122.41(i)(3))

4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (40 CFR 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))

2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))

   b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (40 CFR 122.61(b)(2))

c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (40 CFR 122.61(b)(3))

d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code §_92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code § 92a.71)

3. In the event DEP does not approve transfer of this permit, the new owner or operator must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 122.41(g))

D. 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 apply for a new permit. (40 CFR 122.41(b))

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

IV. ANNUAL FEES

Permittees shall pay an annual fee in accordance with 25 Pa. Code § 92a.62. Annual fee amounts are specified in the following schedule and are due on each anniversary of the effective date of the most recent new or reissued permit. All flows identified in the schedule are annual average design flows. (25 Pa. Code § 92a. 62)

Minor IW Facility without ELG (Effluent Limitation Guideline)	$500
Minor IW Facility with ELG	$1,500
Major IW Facility < 250 MGD (million gallons per day)	$5,000
Major IW Facility ≥ 250 MGD	$25,000
IW Stormwater Individual Permit	$1,000
CAAP (Concentrated Aquatic Animal Production Facility)	$0

As of the effective date of this permit, the facility covered by the permit is classified in the following fee category: **Minor IW Facility without ELG.**

Invoices for annual fees will be mailed to permittees approximately three months prior to the due date. In the event that an invoice is not received, the permittee is nonetheless responsible for payment. Throughout a five year permit term, permittees will pay four annual fees followed by a permit renewal application fee in the last year of permit coverage. Permittees may contact DEP at 717-787-6744 with questions related to annual fees. The fees identified above are subject to change in accordance with 25 Pa. Code § 92a.62(e).

Payment for annual fees shall be remitted to DEP at the address below by the anniversary date. Checks should be made payable to the Commonwealth of Pennsylvania.

PA Department of Environmental Protection
Bureau of Clean Water
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

PART C

I. OTHER REQUIREMENTS

A. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.

B. Collected screenings, slurries, sludges, and other solids shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste, requirements for generators and transporters, and hazardous waste permit programs), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments. Screenings collected at intake structures shall be collected and managed and not be returned to the receiving waters.

The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport and disposal of solid waste materials generated as a result of wastewater treatment.

C. If the applicable standard or effluent guideline limitation relating to the application for Best Available Technology (BAT) Economically Achievable or to Best Conventional Technology (BCT) is developed by DEP or EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding limitations of this permit (or if it controls pollutants not covered by this permit), DEP may modify or revoke and reissue the permit to conform with that standard or limitation.

D. The permittee shall optimize chlorine dosages used for disinfection or other purposes to minimize the concentration of Total Residual Chlorine (TRC) in the effluent, meet applicable effluent limitations, and reduce the possibility of adversely affecting the receiving waters. Optimization efforts may include an evaluation of wastewater characteristics, mixing characteristics, and contact times, adjustments to process controls, and maintenance of the disinfection facilities. If DEP determines that effluent TRC is causing adverse water quality impacts, DEP may reopen this permit to apply new or more stringent effluent limitations and/or require implementation of control measures or operational practices to eliminate such impacts.

II. CHEMICAL ADDITIVES

A. Approved Chemical Additives List

1. The permittee is authorized to use chemical additives that are published on DEP's Approved Chemical Additives List (Approved List) (see www.depweb.state.pa.us/chemicaladditives) subject to paragraphs A.2 and A.3, below.

2. The permittee may not discharge a chemical additive at a concentration that is greater than the water quality-based effluent limitation (WQBEL) for the chemical additive or, if applicable, a technology-based effluent limitation. If effluent limitations are not specified in Part A of this permit for the chemical additive, the permittee is responsible for determining the WQBEL and ensuring the WQBEL is not exceeded by restricting usage to an amount that will not cause an excursion above in-stream water quality standards.

3. If the permittee decides to use a chemical additive that is on DEP's Approved List and the use would either (1) constitute an increase in the usage rate specified in the NPDES permit application or previous notification to DEP or (2) constitute a new use, not identified in the NPDES permit application or otherwise no previous notification occurred, the permittee shall complete and submit the "Chemical

Additives Notification Form" (3800-FM-BPNPSM0487) to the DEP regional office that issued the permit. The permittee may proceed to use the chemical additive as reported on the Form upon receipt by the DEP regional office.

B. New Chemical Additives, Not on Approved Chemical Additives List

1. In the event the permittee wishes to use a chemical additive that is not listed on DEP's Approved List, the permittee shall submit the "New Chemical Additives Request Form" (3800-FM-BPNPSM0486) to DEP's Central Office, Bureau of Point and Non-Point Source Management (BPNPSM), Division of Planning and Permitting, Rachel Carson State Office Building, PO Box 8774, Harrisburg, PA 17105-8774, prior to use. A copy shall be submitted to the DEP regional office that issued the permit. The form must be completed in whole in order for BPNPSM to approve the chemical additive, and a Material Safety Data Sheet (MSDS) that meets the minimum requirements of 29 CFR 1910.1200(g) must be attached.

2. Following placement of the chemical additive on the Approved List, the permittee may submit the Chemical Additive Notification Form in accordance with paragraph A.3, above, to notify DEP of the intent to use the approved chemical additive. The permittee may proceed with usage when the new chemical has been identified on DEP's Approved List and following DEP's receipt of the Chemical Additives Notification Form.

3. The permittee shall restrict usage of chemical additives to the maximum usage rates determined and reported to DEP on Chemical Additives Notification Forms.

C. Chemical Additives Usage Reporting Requirements

The "Chemical Additives Usage Form" (3800-FM-BPNPSM0439) shall be used to report the usage of chemical additives and shall be submitted as an attachment to the Discharge Monitoring Report (DMR) at the time the DMR is submitted.

D. DEP may amend this permit to include WQBELs or otherwise control usage rates of chemical additives if there is evidence that usage is adversely affecting receiving waters, producing Whole Effluent Toxicity test failures, or is causing excursions of in-stream water quality standards.

III. SEDIMENTATION BASIN CLEANING

A. The permittee shall submit written notification to the DEP at least three weeks prior to the start of the periodic basin cleaning operations. The notification shall include the date and duration of the basin cleaning operations. In addition, the permittee shall provide documentation that identifies any deviations from the basin cleaning procedures outlined in the facility's PPC Plan.

B. The monitoring frequency for all parameters shall be daily during the period of dewatering of the sedimentation basins. The parameters with composite sample type shall be a 24-hour composite during dewatering period. Additional measures shall be taken during dewatering of the sedimentation basins to prevent accumulated sediment loss to the stream. The Clean Water Program Operations Section shall be notified at least 48 hours prior to commencement of dewatering of basins.

C. Monitoring of turbidity during the period of dewatering of sedimentation basins shall be every two hours. The dewatering of the basins shall cease immediately when turbidity in any sample exceeds 100 NTU. A separate detailed monitoring report for this discharge shall be prepared and submitted with the monthly DMR.

3800-FM-BPNPSM0462 3/2012

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Facility Type: Minor

NAME: Greenville Borough Municipal Authority
ADDRESS: 44 Clinton Street
Greenville, PA 16125-2281
FACILITY: Greenville Borough WTP
LOCATION: Hempfield Township
Mercer County
WATERSHED: 20-A
RMS file: CW/IW/Tech Rpts

PA0221970	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: November 1, 2017
DMR Effective To: October 31, 2022
Permit Expires: October 31, 2022
Permit Application Due: May 4, 2022

☐ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Flow	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	Report Avg Mo	XXX	MGD	XXX	XXX	XXX	XXX		1/day	Measured
pH	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	6.0 Min	XXX	9.0 Max	S.U.		1/day	Grab
Total Residual Chlorine (TRC)	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	0.5 Avg Mo	1.6 IMAX	mg/L		1/day	Grab
Total Suspended Solids	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	30 Avg Mo	60 Daily Max	mg/L		2/month	8-Hr Composite
Aluminum, Total	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	4 Avg Mo	8 Daily Max	mg/L		2/month	8-Hr Composite
Iron, Total	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	2 Avg Mo	4 Daily Max	mg/L		2/month	8-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*

3800-FM-BPNPSM0462 3/2012

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Facility Type: Minor

NAME: Greenville Borough Municipal Authority
ADDRESS: 44 Clinton Street
Greenville, PA 16125-2281
FACILITY: Greenville Borough WTP
LOCATION: Hempfield Township
Mercer County
WATERSHED: 20-A
RMS file: CW/IW/Tech Rpts

PA0221970	001
PERMIT NUMBER	OUTFALL NUMBER

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY

Reporting Frequency: Monthly
DMR Effective From: November 1, 2017
DMR Effective To: October 31, 2022
Permit Expires: October 31, 2022
Permit Application Due: May 4, 2022

☐ Check Here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Manganese, Total	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT	XXX	XXX	XXX	XXX	1 Avg Mo	2 Daily Max	mg/L		2/month	8-Hr Composite

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).		TELEPHONE		DATE		
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY
COMMENTS *(Report all violations on the "Non-Compliance Reporting Form")*							

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

INSTRUCTIONS FOR COMPLETING DISCHARGE MONITORING REPORTS (DMRs)

General

One or more Discharge Monitoring Reports (DMRs) are attached to your permit for reporting the results of self-monitoring activities as required by your permit. You should make copies of the DMRs for your ongoing use, unless you elect to participate in the Department of Environmental Protection's (DEP's) electronic DMR (eDMR) program (see www.dep.state.pa.us/edmr).

- Reporting frequencies will vary depending on the monitoring frequencies listed in your permit, and are generally monthly, quarterly semi-annually and annually.
- Your reports must be received by DEP on the 28th day of the month following the end of the reporting period, unless otherwise specified in Part C of your permit.
- Your permit may require submission of DMRs to other agencies, including the U.S. Environmental Protection Agency (EPA).
- If you receive DMRs in the mail from EPA, please discontinue use of DMR Form No. 3800-FM-BPNPSM0462 and begin using EPA's DMRs.
- DMRs will generally include pre-populated information for permittee name and address, facility location, permit number, outfall number, permit expiration date, parameter names, and permit requirements. If you identify any errors on a DMR issued by DEP, please contact the DEP regional office that issued your permit. If you identify any errors on a DMR issued by EPA, please contact DEP's Central Office at 717-787-6744.
- You may use computer-generated replicas of Form No. 3800-FM-BPNPSM0462 or of EPA's DMR if you receive prior approval from DEP and EPA.

Instructions

1. Enter statistical results into each blank field below the "VALUE" column headers. Results must be reported in the same units shown on the DMR.
2. Sum the total number of excursions or exceedances of permit limits across the row for each parameter and enter the value into the "NO. EX" field. For example, if the permit contains limits of 6.0 S.U. (Minimum) and 9.0 S.U. (Maximum) for pH, and the Minimum and Maximum results are 5.9 S.U. and 9.1 S.U., respectively, enter "2" into the "NO. EX" field.
3. Report the actual sampling frequency and sample type utilized during the reporting period in the fields corresponding to "Frequency of Analysis" and "Sample Type", respectively.
4. Type the name of the principal executive officer (or an authorized agent designated by a principal executive officer) who is taking responsibility for the report, sign the report (should be in ink), enter the telephone number of the responsible individual, and record the date that the report was signed. Mail only original, signed copies of DMRs.
5. In the Comments section at the bottom of the DMR, you may write a brief summary of violations in this section; however, DEP requests that all violations during the monitoring period be reported in more detail on DEP's **Non-Compliance Reporting Form** (3800-FM-BPNPSM0440) and be submitted as an attachment to the DMR. Other uses of the Comments Section include explanations of attachments to the DMR, explanations for the unavailability of data, and brief summaries of issues that have affected operations or effluent quality during the monitoring period. Always consider attaching a letter or separate document to explain your situation in more detail.

No Discharge or No Data Available

If there was no discharge at all from an outfall during the monitoring period, check the "No Discharge" box on the top of the DMR. Complete the information above and below the table and mail the DMR to the appropriate agencies. Be sure to sign and date the DMR.

If there was no discharge of a specific parameter (e.g., if a chlorine limit is in the permit but chlorine was not used for disinfection during the entire reporting period), or if data are not available for a specific parameter for the entire reporting period, do not leave the DMR blank. Instead, report one of the following No Data Indicator (NODI) codes that apply to your situation in the appropriate value field, and **provide an explanation as an attachment to the DMR**:

A Use if you are exempted from monitoring the parameter because of a General Permit condition.

E Use if all samples or results are not available for the reporting period due to equipment failure or because sample collection was overlooked or samples could not be collected for the parameter.

GG Use if your permit requires sample collection and analysis only under certain conditions and those conditions were not met during the reporting period (e.g., report chlorine results only when chlorination system is used).

FF Other: use if there is any reason for the absence of data that is not covered by those above.

If you have at least one result for a parameter, the value should be reported and not a NODI code.

Calculations

The following explains how to calculate statistical values that are commonly required by permits:

Monthly Average – For Loading (lbs/day), sum the total of daily loadings and divide by the number of samples during the month. To calculate the daily loading, multiply the daily concentration (mg/l) by the flow (MGD) on the date of sampling and a conversion factor of 8.34. For Concentration, sum the total of daily concentrations and divide by the number of samples.

Weekly Average – For Loading (lbs/day), sum the total of average daily loadings during each week of the reporting period (beginning on a Sunday and ending on a Saturday) and divide by the number of samples during the week. For Concentration, sum the total of daily concentrations each week and divide by the number of samples. Report the maximum weekly average on the DMR.

Maximum Daily ("Daily Max") – Report the maximum concentration or load measured during a 24-hour period during the reporting period; if multiple measurements are taken daily, include all data in the analysis.

Instantaneous Maximum ("IMAX") – Report the maximum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Instantaneous Minimum ("Minimum") – Report the minimum result obtained by a grab sample for a specific pollutant over the entire reporting period covered by a DMR.

Total Monthly Load (lbs) – Sum the total of average daily loadings, divide by the number of samples during the month, and multiply by the number of days in the month.

Geometric Mean – Report the average of a set of *n* sample results given by the *n*th root of their product. If any result is zero (0), substitute 1 for the calculation. For example, five samples were analyzed with the following results: 20, 300, 400, 500, and 0. The calculation of geometric mean is as follows (note that you will need to use the power function on a calculator):

$$\sqrt[5]{20 \cdot 300 \cdot 400 \cdot 500 \cdot 1} = \sqrt[5]{1{,}200{,}000{,}000} = (1{,}200{,}000{,}000)^{1/5} = \mathbf{65}$$

Non-Detect Data

Conventional and Toxic Parameters

For calculating average values of data sets in which there are some "detections" (results at or above the laboratory reporting limit) and some "non-detect" data (results reported below the laboratory reporting limit), use the reporting limit for non-detect data. In other words, ignore the less than (<) symbol for statistical calculations and include the < symbol with the statistical result if there is at least one non-detect result in the data set. For example, four samples were analyzed with the following results: < 1.0, 2.0, < 1.0, and 1.0. The average statistical result is < 1.3.

Where the permit includes an effluent limitation for a parameter that is less than the most sensitive detection limit available, and the laboratory reports a value at or below the lowest level specified by the permit, you may use zero (0) in the calculation in lieu of the reporting limit, if the parameter is identified in 25 Pa. Code Chapter 16, Appendix A, Tables 2A and 2B. In general, parameters with limitations that are less than the most sensitive detection limit will be identified in Part C of the permit, if applicable.

Bacteria Parameters

Report all "non-detect" (e.g., < 2) and "too numerous to count" (TNTC) (e.g., > 2,000) results on DMR supplemental forms as reported by the laboratory. Do not report "TNTC" on supplemental forms, but instead report a value qualified with the">" symbol. Where a data set includes one or more "non-detect" and/or TNTC results, calculate the geometric mean by ignoring qualifying symbols, but report the value with the symbol. If a data set includes both ">" and "<" qualifiers, the ">" qualifier takes precedence for reporting. For all "non-detect" values, specify in the Comments section of the DMR the maximum volume filtered at the laboratory.

Example 1 – For results are determined, < 2, 10, 20, and 30. The geometric mean should be reported as < $(2 \bullet 10 \bullet 20 \bullet 30)^{0.25}$ = < 10. Specify the maximum volume filtered for the < 2 result in the DMR Comments.

Example 2 – Three results are determined, < 2, 1,000, and > 2,000. The geometric mean should be reported as > $(2 \bullet 1{,}000 \bullet 2{,}000^{0.333}$ = > 158.

Rounding and Precision

Statistical values reported on the DMR should be rounded to the same number of decimal places as the limit for the parameter as set forth in the permit. If the permit does not contain a limit but requests monitoring only, statistical values for concentration results should be rounded to the maximum number of decimal places in the data set as reported by the laboratory or the instrument used for analysis. If mass loads must be reported and there is no limit, round statistical values to the nearest whole number, unless the calculated number is less than one, in which case the value should be rounded to one significant figure (e.g., 0.1, 0.05, etc.). If the number you are rounding is followed by 5, 6, 7, 8, or 9, round the number up, otherwise round down.

The documents "Discharge Monitoring Reports Overview and Summary" (3800-BK-DEP3047) and "Management of Non-Detect Results for Discharge Monitoring Reports" (3800-FS-DEP4262) contain more information and are incorporated by reference. These documents are available on DEP's website.

Supplemental Form Inventory

The following supplemental forms (indicated in the check box column) are attached to this permit and must be completed and submitted to DEP in accordance with the permit and the supplemental form instructions. If the eDMR system is used to submit DMR reports, the spreadsheet versions of these supplemental forms, where applicable, should be used and attached to the eDMR submissions. A link to DEP's supplemental form website is available when logging into the eDMR system.

Check Box	Supplemental Form Name and No.
☒	Daily Effluent Monitoring (3800-FM-BPNPSM0435)
☐	Influent & Process Control (3800-FM-BPNPSM0436)
☐	Hauled in Municipal Wastes (3800-FM-BPNPSM0437)
☐	Sewage Sludge/Biosolids Production and Disposal (3800-FM-BPNPSM0438)
☒	Chemical Additives Usage (3800-FM-BPNPSM0439)
☒	Non-Compliance Reporting Form (3800-FM-BPNPSM0440)
☐	CSO Monthly Summary Report (3800-FM-BPNPSM0441)
☐	CSO Detailed Report (3800-FM-BPNPSM0442)
☐	Groundwater Monitoring Data Report (3800-FM-BPNPSM0443)
☐	TMDL Annual Load Summary (3800-FM-BPNPSM0448)
☐	Land Application Systems (3800-FM-BPNPSM0449)
☐	Hauled in Residual Wastes (3800-FM-BPNPSM0450)
☐	Surface Water Monitoring Data Report (3800-FM-BPNPSM0461)
☒	Lab Accreditation Form (3800-FM-BPNPSM0189)
☐	Whole Effluent Toxicity Test Summary Report (3800-FM-BPNPSM0485)
☐	Storm Water Annual Inspection Form (3800-PM-WSFR0083v)
☐	Storm Water Additional Information (3800-PM-WSFR0083t)
☐	Other:

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

SUPPLEMENTAL REPORT
DAILY EFFLUENT MONITORING

Facility Name: Greenville Borough WTP
Municipality: Hempfield Township
Watershed: 20-A
Laboratories:
County: Mercer
Month:
Year:
NPDES Permit No.: PA0221970
Outfall No.: 001
Renewal application due **180 days** prior to expiration
This permit will expire on

Day	Effluent Parameters																	
	Flow		pH		TRC		TSS		Total Aluminum		Total Iron		Total Manganese					
	Q	MGD	Q	S.U.	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q	mg/L	Q		Q	
1																		
2																		
3																		
4																		
5																		
6																		
7																		
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25																		
26																		
27																		
28																		
29																		
30																		
31																		
Avg																		

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By:
Title:
Signature:
Date:

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INSTRUCTIONS FOR COMPLETING DAILY EFFLUENT MONITORING SUPPLEMENTAL REPORT

Use this form to report daily monitoring results for the parameters that must be monitored in effluent for compliance with the permit. Results for influent parameters are normally reported on Form 3800-FM-BPNPSM0436.

1. Enter Facility Name, Municipality, County, Watershed No., Laboratories, Month, Year, NPDES Permit No., Outfall No., and Permit Expiration Date (it is noted that this information may be pre-populated if you have received this form with your permit). For Laboratories, list the names of all laboratories where samples were analyzed during the month, including on-site analysis.

2. In the column headers, below "Effluent Parameters," enter the names of parameters in the permit. Since limited space is provided, abbreviation may be necessary. If there are more parameters for an outfall than columns provided on the form, attach an additional sheet.

3. Below parameter names, and to the right of "Q" (Qualifier) column headers, enter the units associated each parameter (it is noted that this information may be pre-populated if you have received this form with your permit).

4. Enter monitoring results for parameters in the rows corresponding to the day of the month in which samples were collected. Enter results exactly as reported by the laboratory, or if measured with on-site equipment, to the level of precision recommended by the equipment manufacturer. Enter data qualifiers such as "<," ">," "J," and others in the "Q" column.

5. Calculate and report average values at the bottom of the table in accordance with the DMR Instructions (3800-FM-BPNPSM0463) and DEP guidance (3800-BK-DEP3047). Note – for bacteria, calculate and report the geometric mean value.

6. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

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Rev. 3/2014

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

SUPPLEMENTAL REPORT – CHEMICAL ADDITIVES USAGE

Facility Name: Greenville Borough WTP
Municipality: Hempfield Township
Watershed: 20-A
County: Mercer

Month: _____
NPDES Permit No.: PA0221970
Renewal application due **180 days** prior to expiration
This permit will expire on

Year: _____
Outfall No.: _____

Day	Chemical Names															
	gallons	lbs	gallons	lbs	gallons	lbs	gallons	lbs	gallons	lbs	gallons	lbs	gallons	lbs	gallons	lbs
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
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24																
25																
26																
27																
28																
29																
30																
31																
Average																
Maximum																

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____

Title: _____

Signature: _____

Date: _____

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BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

INSTRUCTIONS FOR COMPLETING CHEMICAL ADDITIVES USAGE SUPPLEMENTAL REPORT

1. Enter Facility Name, Municipality, County, Watershed No., Month, Year, NPDES Permit No., Outfall No. and Permit Expiration Date. A separate sheet is required for each outfall that receives chemical additives.

2. In the spaces below the Chemical Names header in the table, enter the chemical additives used at the facility. If more than eight additives are used per Outfall, add more sheets.

3. Enter the daily usage rates for each chemical. Enter additives introduced in liquid form in the "gallons" column and additives in solid form (or if you have calculated the mass equivalent of liquid additives) under the "lbs" column.

4. Calculate and report the average and maximum usage rates for each chemical at the bottom of the table.

5. Type the name of the person who prepared the form, the person's job title, and sign and date the form after reading the certification statement.

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BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). **Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.** If you are reporting other non-compliance events, and the reporting deadline does not coincide with your submission of the DMR, it should be submitted separately to the Department by the reporting deadline set forth in the permit. See instructions for more information.

Facility Name: Greenville Borough WTP

Municipality: Hempfield Township County: Mercer Month: _____ Year: _____

Permit No.: PA0221970

☐ **Violations of Permit Effluent Limitations***

Date	Parameter	Permit Limit	Units	Statistical Code	Result	Units	Cause of Violation	Corrective Action Taken

☐ **Sanitary Sewer Overflows and Other Unauthorized Discharges***

Event Date	Substance Discharged	Location	Volume (gals)	Duration (hrs)	Receiving Waters	Impact on Waters	Cause of Discharge	Date DEP Notified

☐ **Other Permit Violations***

- ☐ Sample collection less frequent than required — Explain _____
- ☐ Sample type not in compliance with permit — Explain _____
- ☐ Violation of permit schedule — Explain _____
- ☐ Other — Explain _____
- ☐ Other — Explain _____

*** If the space provided is not sufficient to record all information, please attach additional sheets.**

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Prepared By: _____ Signature: _____

Title: _____ Date: _____

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INSTRUCTIONS FOR COMPLETING NON-COMPLIANCE REPORTING FORM

Use this supplemental form to report all permit violations and any other non-compliance that may endanger health or the environment, in accordance with your permit. Complete all sections that apply. If you are reporting violations of permit limits, monitoring requirements or schedules that do not pose an immediate threat to health or the environment, you may attach this form to the Discharge Monitoring Report (DMR). If you are reporting other non-compliance events, and the deadline for a written report (e.g., 5 days) does not coincide with your submission of the DMR, this form should be submitted separately to the Department by the reporting deadline set forth in the permit.

If you are unsure of whether an incident constitutes non-compliance that may endanger health or the environment, it is recommended that you notify the Department verbally as soon as possible after you become aware of the incident. Title 25, Pa. Code §§ 91.33 and 91.34 (regarding incidents causing or threatening pollution and activities utilizing pollutants, respectively), in part requires immediate notification by telephone to the Department of pollution incidents, remediation, and may require an additional report on the incident or plan of pollution prevention measures.

Instructions:

1. Enter the name of the facility, the municipality and county where it is located, the month and year when violations occurred, and the NPDES or WQM permit number for the facility.

2. If there were violations of permit effluent limitations during the month, check the box next to "Violations of Permit Effluent Limitations." (Note – if using the electronic version of this form, check the boxes first, and then select Tools – Unprotect Document to enter additional information). Enter the date of the violation (if a violation of a minimum or maximum limit, the date of sample collection, or if a violation of an average limit, the end of the monitoring period), the parameter name, the permit limit and units, the statistical code (e.g., "MIN", "MAX", "MO AVG", etc.), the measured result and units, the cause of the violation and the corrective action taken. **If there are more than two violations during the monitoring period and/or if the space provided is insufficient to explain the cause or corrective action, please attach additional pages.**

3. If there are Sanitary Sewer Overflow (SSO) discharges or other unauthorized discharges from the facility (e.g., spills, leaks, etc.) that enter or have the potential to enter waters of the Commonwealth, including groundwater, notify DEP by phone as soon as possible, and document the discharge on this form by checking the box next to "Sanitary Sewer Overflows and Other Unauthorized Discharges." Record the event (discharge) date, the substance discharged (e.g., sewage, on-site chemicals, etc.), the location where the discharge occurred (e.g., manhole number, pump station name, equipment description, etc.), the volume discharged (gallons), the approximate duration of the discharge (hours), the receiving waters (name of stream or groundwater), the impact on the receiving waters, if observed (e.g., solids deposition, foam, fish kill, etc.), the cause of the discharge, and the date on which the Department was verbally notified. **If there are more than two discharge events during the monitoring period and/or if the space provided is insufficient to explain the discharge, please attach additional pages.**

4. If there are other violations of the permit, check the box next to "Other Permit Violations," and check the appropriate box that describes the violation type. If not identified on the form, check the box next to "Other" and provide a written explanation. **If the space provided is insufficient to explain the violation, please attach additional pages.**

5. Type your name and title and sign and date the form after reading the certification statement.

If you have questions about completing this form, contact the Clean Water Program Operations Section of the Department in your region:

Southeast Region – (484) 250-5970
Northeast Region – (570) 826-2553
Southcentral Region – (717) 705-4707
Northcentral Region – (570) 327-3636
Southwest Region – (412) 442-4060
Northwest Region – (814) 332-6942

3800-FM-BPNPSM0189 3/2012

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SUPPLEMENTAL LABORATORY ACCREDITATION FORM[1]

Permittee Name: Greenville Borough Municipal Authority

Address: 44 Clinton Street
Greenville, PA 16125-2281

PERMIT NUMBER	MONITORING PERIOD Year/Month/Day						
PA0221970				TO			

PARAMETER	ANALYSIS METHOD	LAB NAME	LAB ID NUMBER[2]

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 possibly of fine and imprisonment for knowing violations.

Name/Title Principal Executive Officer _____

Phone: _____

Signature of Principal Executive Officer or Authorized Agent _____

Date: _____

Submit this form with the first Discharge Monitoring Report (DMR) or Annual Report, where sample results are submitted to the Department for compliance purposes. You do not need to send this form to the Department again UNLESS there has been a change to the lab(s), parameter(s) or method(s) of analysis.

[2] For parameter(s) covered under accreditation-by-rule, submit the lab's registration number in lieu of an accreditation number.