



Pittsburgh Water and Sewer Authority

Environmental Compliance Audit

Aspinwall Water Treatment Plant

900 Freeport Road

Pittsburgh, Pennsylvania

January 11, 2023

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Acronyms and Abbreviations

ACM	asbestos containing materials
ALCOSAN	Allegheny County Sanitary Authority
AST	Aboveground Storage Tank
Btu	British thermal unit
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIU	categorical industrial user
CRTs	Cathode Ray Tubes
DMR	Discharge Monitoring Report
DOT	Department of Transportation
EHS	extremely hazardous substance
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know-Act
ERP	Emergency Response Plan
ESL	Environmental Services Laboratory
HAPs	Hazardous Air Pollutants
hp	horsepower
ICP	Integrated Contingency Plan
kW	kilowatt
LCSS	large-capacity septic systems
LEPC	local emergency planning committee
LIMS	laboratory information management system
LQG	Large Quantity Generator
MACT	Maximum Achievable Control Technology
MMbtu/hr	million British thermal units per hour
NA	Not Applicable
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NOV	Noticed of Violation
NPDES	National Pollution Discharge Elimination System
NRC	National Response Center
NSPS	New Source Performance Standards

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NTU	Nephelometric Turbidity unit
PA DEP	Pennsylvania Department of Environmental Protection
PCBS	Polychlorinated Biphenyl
PE	professional engineer
POTW	Publicly Owned Treatment Works
PPC	Pollution, Prevention and Contingency
PRP	potentially responsible party
PTE	potential to emit
PWSA	Pittsburgh Water & Sewer Authority
RCRA	Resource Conservation Recovery Act
RMP	Rick Management Plan
RQ	reportable quantity
RWCs	Residual Waste Codes
SARA	Superfund Amendments and Reauthorization Act
SCADA	supervisory control and data acquisition
SDS	safety data sheet
SERC	state emergency response commission
SIC	Standard Industrial Classification
SIU	Significant Industrial User
SOP	standard operating procedure
SPCC	Spill Prevention, Control and Countermeasures
SQG	Small Quantity Generator
SWPPP	Stormwater Pollution Prevention Plan
TPQ	threshold planning quantity
TSDFs	Treatment, Storage and Disposal Facilities
UIC	Underground Injection Control
US EPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	volatile organic compounds
VSQG	Very Small Quantity Generator

Executive Summary

On November 14th – 16th 2022, Arcadis U.S., Inc. conducted an environmental compliance audit at the Pittsburgh Water & Sewer Authority (PWSA), Aspinwall Water Treatment Plant located at 900 Freeport Road, Pittsburgh, PA 15238 (site). The intent of the audit was to assess the environmental compliance of the site in accordance with the requirements outlined by the United States Probation Office, United States Attorney's Office, and the Environmental Protection Agency (EPA) and general environmental compliance requirements.

The audit team consisted of Subject Matter Experts (SMEs) in Environmental Compliance Auditing, Water Quality and Supply and Air Quality.

The objectives of the environmental compliance audit were as follows:

- Review current environmental practices and identify gaps for PWSA to address.
- Raise awareness of environmental regulatory responsibilities and challenges.
- Evaluate the facility against environmental regulatory requirements.
- Ensure that systems are in place to maintain the environmental programs going forward.
- Guide PWSA to develop a correctives action plan based on findings.

The compliance audit consisted of three discrete tasks:

Task 1: Audit Design Phase (Pre-Audit)

This task consisted of an inventory of site compliance issues, selection and assembly of applicable regulations and checklists applicable to federal, state, and local requirements associated with the following program areas: waste quality and supply; chemical, oil and hazardous materials; stormwater and wastewater discharges; air; waste; other miscellaneous compliance obligations; and a review and coordination of the audit design with PWSA.

Task 2: Audit Phase (Field Audit)

This task consisted of the on-site portion of the environmental compliance audit and included an opening meeting, on-site review of documents, permits, procedures, orders, and operation activities for compliance with regulatory requirements, and site tours. Interviews were also conducted with operational and management personnel.

Task 3: Post Audit Phase

This task consisted of additional document review, closing meeting presentation and a compliance audit findings report. Findings are categorized by area and identified points of noncompliance with permits, order and regulatory requirements.

Overall, the site was adhering to the environmental regulatory requirements with a few non-compliance and potential non-compliance areas, which PWSA should address to improve operations. This report provides a summary of findings and recommendations based on information observed and provided to Arcadis during the audit.

Environmental Compliance Audit Report

General Site Information

Topic	Observations
Address (General Location)	900 Freeport Road, Pittsburgh, PA 15238
Legal Description	Pittsburgh Water & Sewer Authority, Aspinwall Water Treatment Plant
Description of Operations (Since year operations commenced)	Water treatment for customer drinking water usage.
Number of employees and hours of operation	3 shifts; ~64 employees
Surrounding Properties	The Waterworks shopping complex; Allegheny River; Lighthouse Pointe Village at Chapel Harbor (residential area)
Number of Buildings on the Site	8
Building Construction Date	1910
Building Expansion(s) Date	1965, 1984
Number of Floors (include all levels, whether above or below ground)	Most buildings have 2 floors
In-ground pits, sumps and / or trenches	Yes
Remaining Portions of Property	NA
Services provided to the Site	Sewer Service: Fox Chapel and ALCOSAN Electricity: Duquesne Light Natural Gas: People's Gas
Watercourses, Ditches or Storm Water Management Ponds	Small rain garden in front of the Operation Center that attenuates stormwater from the roadways on-site. Allegheny River borders the entire southern edge of the property.
Number and fuel type of Emergency Back-up Power Generators (list the make, model number, year, HP, etc.)	See inspection report.

Summary of Existing Permits/Registrations

Topic Area	Permit Number/ Registration	Effective Date	Expiration Date
Storage Tanks (ASTs/USTs)	Registration on-file at PWSA.	Varies	Varies
Stormwater Permit	PA0218961	April 1, 2017	March 31, 2022 The Site submitted a permit renewal application on October 2, 2021. An extension was provided to December 31, 2021, for additional testing.
Wastewater Permit (Industrial Discharge)	P2-0008	October 1, 2020	September 30, 2025 Permit modification submitted December 30, 2022. Updated permit is pending.
	R-0183 (FRP Storage Tanks)	October 7, 2022	October 5, 2023
Air Emissions	WTP: 0117-OP21	March 23, 2021	March 22, 2026
Hazardous Waste Generator Status	PAR000561282 – SQG	December 7, 2021	NA
Drinking Water	Multiple	Varies	NA

Environmental Compliance Review

Compliance Topic	Compliance Status	Discussion
Drinking Water		
<p>Drinking Water</p> <p> <input type="checkbox"/> Not Applicable <input type="checkbox"/> In Compliance <input type="checkbox"/> Potential Non-compliance <input checked="" type="checkbox"/> Non-compliance </p>		<p>The drinking water compliance audit focused on the requirements set forth in the Pennsylvania Code, Title 25 Chapter 109 (safe drinking water regulations).</p> <p>No major compliance issues were found. However, it was discovered that there are no approved SOPs for the alkalinity and orthophosphate measurements being conducted in-house. The data from both measurements are used to comply with the water quality parameter monitoring requirements under the Lead and Copper Rule (25 Pa. Code Chapter 109.1103(c)(2)). Consequently, these measurements must be performed by a certified operator or someone following an SOP approved by a certified operator (as per 25 Pa. Code Chapter 109.304(c)).</p> <p>Also, historical records for certain regulated water quality parameters are either incomplete or could not easily be reviewed during the onsite inspection. An archiving effort is underway that involves organizing and scanning older paper reports. Laboratories are being asked to provide duplicate reports to complete the necessary onsite databases for regulated water quality parameters. 25 Pa. Code Chapter 109 indicates that laboratory reports (for regulated parameters) must be maintained onsite.</p>
Stormwater		
<p>NPDES Permit</p> <p> <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> In Compliance <input type="checkbox"/> Potential Non-compliance <input type="checkbox"/> Non-compliance </p>		<p>The NPDES compliance audit focused on the requirements set forth in the Pennsylvania Code, Title 25 Chapter 252 (environmental laboratory accreditation) and in the NPDES permit for the Aspinwall Water Treatment Plant.</p> <p>No compliance issues were discovered.</p>

Compliance Topic	Compliance Status	Discussion
<p>Stormwater Discharge Permit for Industrial Stormwater Discharge</p> <p>Stormwater permits are required for certain facilities, based on the SIC code the facility operates under. Check the state's general permit for a list of covered SIC codes and categories.</p> <p>Facilities which operate under a covered SIC code, but maintain a condition of no exposure, may be eligible for a No Exposure Certification (which requires submittal of a form).</p> <p>Facilities may also be covered under an individual NPDES permit, rather than the general permit.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>According to the Chief Environmental Compliance & Ethics Officer, the SIC code for the Site is 4941, Water Supply. Based on this SIC code and the stormwater discharges generated, the Site is subject to NPDES permitting requirements for stormwater discharges associated with industrial activity. The Site is permitted under Minor Source Industrial Waste Permit PA0218961.</p> <p>The Site submitted a permit renewal application on October 2, 2021. An extension was provided to December 31, 2021, for additional testing.</p>
<p>Stormwater Discharge Permit for Construction Stormwater Discharge</p> <p>Construction stormwater discharge permits are required for Sites undergoing construction in a 1-acre or larger area, subject to construction stormwater permitting requirements. Certain construction sites between 1 and 5 acres may be eligible for a Small Construction Activity Waiver</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site is not undergoing construction; therefore, construction stormwater regulations do not apply. Major construction is planned for 2023 and therefore the Site will need to make the appropriate notifications.</p> <p>Regarding pollution prevention, there was several procedures in place which would prevent impact stormwater pollution.</p>
<p>Stormwater Pollution Prevention Plan (SWPPP)</p> <p>SWPPP requirements are dictated by the stormwater permit. Most stormwater permits include requirements for the covered facility to prepare and implement a SWPPP.</p> <p>Facilities with a No Exposure Exclusion are not required to have a SWPPP.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site has an integrated Contingency Plan (ICP). The final ICP was dated March 2016; a draft ICP was dated September 2021 and amended on February 4, 2022.</p> <p>The ICP needs to be reviewed for accuracy of the required information, including a stormwater pollution prevention team, Site description, summary of potential pollutant sources, description of control measures, documentation to support eligibility considerations under other federal laws, and signatures.</p> <p>The ICP will be reviewed again in March 2023.</p>

Compliance Topic	Compliance Status	Discussion
<p>Inspections and Violations</p>	<p> <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> In Compliance <input type="checkbox"/> Potential Non-compliance <input type="checkbox"/> Non-compliance </p>	<p>The Site has been subject to one inspection by the Pennsylvania Department of Environmental Protection (PA DEP) on June 16th, 2022. A Notice of Violation (NOV) was issued on July 5, 2022, which pertain to exceedances of the NPDES permit effluent parameters at outfalls 001, 014, 015, 019 and 0024. Other violations include less frequent sampling due to an abrupt stop of discharge from outfalls 007 and 024 and improper reporting of the discharge from outfall 025. PWSA submitted a response on August 4, 2022 which describes the cause of the noncompliance and steps taken to prevent reoccurrence.</p> <p>PA DEP also conducted an inspection at Brecken on August 5th to inspect outfalls 29, 30 and 31 which are to be included in the updated permit. This inspection was related to an unauthorized discharge of white granules along the riverbank of outfalls 029 and 030. PWSA submitted a response on September 13, 2022 which describes the cause of the noncompliance and steps taken to prevent reoccurrence.</p>

Wastewater

<p>Class V Underground Injection Control (UIC) Wells</p> <p>Septic systems which receive solely sanitary waste from non-residential establishments with capacity to serve 20 or more people per day are considered large-capacity septic systems (LCSSs) and are subject to regulation as Class V underground injection wells. Operators of Class V underground injection wells are required to notify the USEPA [or state agency] prior to construction of the well and may also be required to obtain a permit for the well.</p> <p>Septic systems which receive industrial or commercial wastewater are subject to regulation as Class V underground injection wells. Operators of Class V underground injection wells are required to notify the USEPA [or state agency] prior to construction of the well and may also be required to obtain a permit for the well</p>	<p> <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> In Compliance <input type="checkbox"/> Potential Non-compliance <input type="checkbox"/> Non-compliance </p>	<p>No Class V injection wells are located at the Site.</p>
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Compliance Topic	Compliance Status	Discussion
<p>Wastewater Discharge Permit</p>	<p> <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> In Compliance <input type="checkbox"/> Potential Non-compliance <input type="checkbox"/> Non-compliance </p>	<p>The Site has obtained an industrial wastewater discharge permit P2-008 with the Allegheny County Sanitary Authority (ALCOSAN). The permit was issued on October 1, 2020 and will expire on September 30, 2025. The descriptions of the wastewater treatment equipment and operations in the permit appeared generally consistent with Site observations. According to permit, the Site is a significant industrial user (SIU). Based on the Site operations and process wastewater discharged to the POTW, the Site is not subject to categorical pre-treatment standards and is not considered to be a categorical industrial user (CIU).</p> <p>The Site is required to sample and submit Self-Monitoring Compliance Reports at monthly and quarterly intervals. It appears that this has been done.</p> <p>A permit modification submitted December 30, 2022. The updated permit is pending.</p> <p>They also have industrial wastewater discharge permit R-0183 associated with the FRP Storage Tanks. This permit was issued on October 7, 2022 and will expire on October 5, 2023. Everything also appears to be in order with this permit.</p>
<p>Inspections and Violations</p>	<p> <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> In Compliance <input type="checkbox"/> Potential Non-compliance <input type="checkbox"/> Non-compliance </p>	<p>The Site has not been subject to regulatory inspections by ALCOSAN regarding its wastewater permitting compliance.</p> <p>No NOV's associated with wastewater discharge or permitting were identified.</p>
Storage Tanks – ASTs		
<p>Registration and Permitting</p> <p>Permitting requirements are generally driven by the state or local regulatory authority, and often depend on size and/or contents.</p>	<p> <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> In Compliance <input type="checkbox"/> Potential Non-compliance <input type="checkbox"/> Non-compliance </p>	<p>ASTs are present and registered.</p> <p>As a BMP, registration certificates should be placed near the tank.</p>

Compliance Topic	Compliance Status	Discussion
<p>Tank Management</p> <p>The storage tank facility owner and operator shall immediately initiate the actions necessary to correct deficiencies noted during the 72-hour visual and monthly maintenance inspections.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input checked="" type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>Although tank inspections are being conducted and corrective action notifications being made to facility management, there is also a lack of follow-up when tank inspection issues are identified and resolved. For example, it was noted on the AST Inspection forms that there is a "product escape" of soda ash when the soda ash is being transported. This issue was noted on multiple monthly inspections but did not have an immediate action taken for 3+ months. Although the soda ash tank is not registered nor are inspections required, PWSA indicated that they complete these inspections as a Best Management Practice. Also, in the Hypochlorite Building, there were white shavings under the piping. It appeared to be plastic shavings but should be confirmed. It has been noted that this site is an active construction zone.</p> <p>There was a lack of proper Globally Harmonized System (GHS) labelling on one Lime Slurry tank.</p>
Storage Tanks - USTs		
<p>Registration</p> <p>The owner or operator is required to notify the implementing agency within 30 days of installation of a UST.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The gasoline USTs present on-site is out of service. A lock has been placed on the valve so that access is prohibited.</p>
Hazardous Materials – EPCRA		
<p>Section 302 (Emergency Planning Notification)</p> <p>Facilities where extremely hazardous substances (EHSs) are present in excess of the threshold planning quantity (TPQ) for the substance must notify the state emergency response commission (SERC) and local emergency planning committee (LEPC).</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>A notification was provided to the SERC and LEPC on February 14, 2022, that the following EHSs are stored on site:</p> <p>Ferric Chloride 40%</p> <p>No obvious deficiencies were identified.</p>

Compliance Topic	Compliance Status	Discussion
<p>EPCRA Sections 311 and 312 (Hazardous Chemical Storage Reporting, a/k/a “Tier II Reporting”)</p> <p>Facilities that manufacture, process, or store hazardous chemicals above specific thresholds must make the SDSs and inventory information of the hazardous chemicals available to the SERC, LEPC, local fire departments, and the public. EPCRA Section 311 requires an initial, one-time submittal of the SDS (or a chemical inventory identifying the chemical hazard) for chemicals above the thresholds. EPCRA Section 312 requires submittal of annual inventory reports for the same chemicals.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>Annual Tier II reports submitted February 14, 2022 identifies the following chemicals at the Site in recent years: 2-Propen-1-Aminum, N, N-Dimethyl-N-2-Propenyl-, Chloride, Homopolymer (Liquidcationic Polymer); Ferric Chloride 40%; Fluorosilic Acid; Gasoline; Lime Slurry Plus; Phosphoric Acid 45-85%; Potassium Permanganate; Powdered activated carbon, steam activated; Propane; Sodium bisulfite; Sodium carbonate peroxyhydrate; Sodium Carbonate Anhydrous; Sodium Hydroxide 50% (Caustic); Sodium Hypochlorite 12.5%.</p> <p>No obvious deficiencies were identified related to EPCRA Section 312 reporting requirements.</p>
<p>Section 304 (Emergency Release Notification)</p> <p>In the event of an accidental release of EHSs or hazardous substances in excess of the reportable quantity (RQ) for the substance, the facility must report the release to the SERC, LEPC, and National Response Center (NRC), and the information must be available to the public.</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>There was no evidence of releases of EHSs or hazardous substances in excess of the applicable RQs.</p>
Chemical Management		
<p>Spill Procedures</p> <p>In areas where chemicals are being stored, employers must ensure that information pertaining to chemical hazards are adequately transmitted to employees.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input checked="" type="checkbox"/> Potential Non-compliance</p> <p><input checked="" type="checkbox"/> Non-compliance</p>	<p>Bays 3 and 4 had incorrect Spill Procedures posted. The two chemicals stored in these areas included Phosphoric acid (UN1805) and Sodium bisulfite (UN2693). Both procedures were posted but had been reversed based on storage.</p> <p>Also, spill Procedures do not accurately reflect the modified spill response procedures.</p> <p>In the North Garage Universal Waste section, there are painted signs that say "mask required" or "chlorine tanks" that are no longer applicable to the area.</p>
<p>Container Management</p> <p>As a BMP, facility owner and operator shall visually inspect containers and immediately initiate the actions necessary to correct deficiencies.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input checked="" type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>In containment area, there was product/corrosion under a sodium bisulfide tote. It had a strong chemical odor and a dried chalky texture. Also, at hypochlorite tank number 24A there was product that had crystalized under a pipe joint. It appeared to be indicative of a slow leak.</p>

Compliance Topic	Compliance Status	Discussion
<p>Propane Tanks</p> <p>Propane tanks shall be located outside a building, with the exceptions found at 29 CFR 1910.110(B)(6)(i)(a-f).</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input checked="" type="checkbox"/> Non-compliance</p>	<p>In the Chemical Feed Building Annex, there are propane tanks being stored in an improper manner. Two empty tanks that did not fit in the storage cages were strapped to the storage cages with a bungee cord.</p> <p>It was communicated by the Environmental Compliance Team that the propane tanks may no longer be needed.</p>
<p>Obsolete Chemicals</p> <p>As a BMP, facilities should develop a procedure where the Environmental Compliance Team is notified of obsolete materials and that they are properly disposed.</p> <p>Conducting periodic chemical sweeps to gather materials which may be obsolete or no longer needed is also important, especially in maintenance shops and areas where employee do not routinely enter.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input checked="" type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>In the South Garage, there is a container by the stairs that was marked "Formula 160 Car & Truck Wash". The Environmental Compliance Team indicated that they no longer wash vehicles at this location.</p> <p>In the Electrical Room of the Chemical Building, there was a milk jug of compressor oil.</p> <p>In the Aspinwall Pump Station Electrical Room, there are a significant amount of obsolete materials. It was communicated that this area would be cleaned during the building decommissioning activities.</p>
Spill Prevention, Control, and Countermeasures (SPCC)		
<p>SPCC Plan</p> <p>Facilities are required to develop and implement an SPCC Plan if there is a potential for impact to surface water or groundwater at facilities that store oil underground in quantities exceeding 42,000 gallons (unless the material is contained in a tank regulated under 40 CFR 280 or 281), or at facilities that have greater than 1,320 gallons of aboveground oil storage in the aggregate (excluding containers with less than a 55-gallon capacity.)</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The aggregate aboveground storage capacity of oils is approximately 2,200 gallons. An SPCC Plan, dated February 1st, 2022, was prepared, partially implemented, and found to be adequate to meet the needs of the facility.</p> <p>It will be reviewed annually to ensure necessary updates are made.</p>
<p>SPCC Plan Certification</p> <p>SPCC Plans are required to be certified by a Professional Engineer (PE), unless the facility qualifies as a Tier I or Tier II Qualified Facility based on the oil storage capacity and history of oil spills. SPCC Plans for Tier I or Tier II Qualified Facilities can be "self-certified" and do not require a PE certification.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site meets the definition of a Tier II Qualified Facility. Therefore, the SPCC Plan is self-certified based on the Tier II Qualified Facility Requirements.</p>

Compliance Topic	Compliance Status	Discussion
<p>Secondary Containment</p> <p>Use this section for deficiencies associated with secondary containment that is required but is missing, damaged, or inadequate. Secondary containment requirements are typically driven by the SPCC Plan.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>Secondary containment was observed around oil storage tanks. It appears to be adequate for the volumes stored.</p>
Air Quality		
<p>RICE Maintenance Documentation</p> <p>If you own or operate an existing stationary Reciprocating Internal Combustion Engines (RICE) located at an area source of Hazardous Air Pollutant (HAP) emissions, you must comply with the requirements in Table 2d of 40 CFR 63 Subpart ZZZZ and the operating limitations in Table 2b that apply to you.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input checked="" type="checkbox"/> Non-compliance</p>	<p>The facility is missing maintenance documentation for the natural gas fired emergency engine that demonstrates that the engine is being maintained according to the maintenance practice requirements in 40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines since it was manufactured before June 12, 2006.</p> <p>PWSA has a contract with the engine manufacturer to perform semi-annual maintenance. However, they are not providing documentation of these maintenance activities.</p>
<p>Portable Generator Engines</p> <p>If you own or operate portable generator engines, you must demonstrate that they do not operate at one location for more than 12 months and therefore do not trigger applicability of the federal engine rules.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input checked="" type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The site operates several portable generator engines throughout the facility as the need arises. While the facility has established a documentation template to be used to demonstrate that the portable engines do not operate at one location for more than 12 months and therefore do not trigger applicability of the federal engine rules, the documentation procedures have not yet been implemented.</p>
<p>Air Permit 0117-OP21</p> <p>A permittee must ensure that all ensures that all compliance documents filed with the Agency reflect the current permit's issuance date and information.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input checked="" type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>Annual compliance certification cover letter for Permit 0117-OP21 references a permit issuance date of October 26, 2009, with an amendment date of July 22, 2010 and the attached form lists the permit issuance date as October 18, 2009. The semi-annual reports filed reference the correct permit issuance date of March 23, 2021.</p>

Compliance Topic	Compliance Status	Discussion
<p>Risk Management Plan</p> <p>An owner or operator of a stationary source that uses or stores more than a threshold quantity (TPQ) of a regulated substance, as determined under 40 CFR 68.115, shall comply with the requirements to develop a Risk Management Plan (RMP) no later than the date on which a regulated substance is first present above a threshold quantity in a process.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input checked="" type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>There is a need to evaluate the needs for an RMP program based on the 2021 operating year Tier II reported inventory of 19,480.95 lbs. of hydrogen chloride (anhydrous) (CAS # 7647-01-0), as the amount exceeds the 5,000 lbs. threshold of this regulated substance under the Tier II program.</p>
<p>Inspections and Violations</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site has not had any air regulatory inspections by the Allegheny County Health Department or PADEP regarding its air permitting compliance within the past 2 years, per Site personnel.</p>
Hazardous Waste Management		
<p>USEPA ID Number</p> <p>Required for <u>LQGs</u> and <u>SQGs</u>: The facility is required to acquire a unique USEPA identification number.</p> <p>Not required for <u>VSQGs</u>.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site is registered as an SQG and has been assigned the USEPA ID Number PAR000561282.</p>
<p>On-site Accumulation Quantity</p> <p>No requirement for <u>LQGs</u>.</p> <p>Required for <u>SQGs</u>: Between 220 and 2,200 pounds of hazardous waste may accumulate on site.</p> <p>Required for <u>VSQGs</u>: Up to 100 kilograms (approximately 220 pounds) of hazardous waste, up to 1 kilogram (approximately 2.2 pounds) of acute hazardous waste, and up to 100 kilograms (approximately 220 pounds) of acute spill residue or soil may accumulate onsite.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>Documentation appeared adequate regarding monthly waste generator status (hazardous and universal). As of 12/7/2022, the site identified as a Small Quantity Generator (SQG), and they track quantities to not exceed their storage limits.</p>
<p>Accumulation Time Limit</p> <p>Required for <u>LQGs</u>: Hazardous waste may accumulate on site for up to 90 days.</p> <p>Required for <u>SQGs</u>: Hazardous waste may accumulate on site for up to 180 days, or up to 270 days for wastes that are transported greater than 200 miles.</p> <p>Not required for <u>VSQGs</u>.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>Arcadis did not observe hazardous waste tanks or containers with accumulation dates more than 180 days old.</p>

Environmental Compliance Audit Report – Aspinwall Water Treatment Plant

Compliance Topic	Compliance Status	Discussion
<p>Contingency Plan</p> <p>Required for <u>LQGs</u>: The generator must develop and implement a Contingency Plan and submit it to the local police department, fire department, hospitals, and state and local emergency response teams that may be called upon to provide emergency services.</p> <p>Required for <u>SQGs</u>: A basic contingency plan is required.</p> <p>No requirement for <u>SQGs</u> or <u>VSQGs</u>.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The site has an Integrated Contingency Plan (ICP). The final ICP was amended on February 4, 2022.</p> <p>As an SQG they are required to maintain a basic Contingency Plan, which they are currently doing.</p>
<p>Manifest</p> <p>Required for <u>LQGs</u> and <u>SQGs</u>: The generator must track hazardous waste shipments using the multiple-copy manifest required by the US Department of Transportation (DOT) and USEPA.</p> <p>No requirement for <u>VSQGs</u>.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site tracks hazardous waste shipments using manifests as required.</p> <p>Employees signing hazardous waste manifests have the appropriate training and understand what they are signing.</p>
<p>Pre-Transport Requirements</p> <p>Required for <u>LQGs</u> and <u>SQGs</u>: The generator must package and label hazardous waste for shipment off site to a RCRA facility for treatment, storage, or disposal.</p> <p>Not required for <u>VSQGs</u>.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>Containers had proper labels with pre-transportation information.</p>
<p>Biennial Report</p> <p>Required for <u>LQGs</u>: The generator must submit biennial reports.</p> <p>Not required for <u>SQGs</u> or <u>VSQGs</u>.</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site is an SQG; therefore, Biennial Reports are not required.</p>
<p>Exception Reporting</p> <p>Required for <u>LQGs</u>: The generator must report if any required copies of signed manifests are not received within 35 days.</p> <p>Required for <u>SQGs</u>: The generator must report if any required copies of signed manifests are not received within 60 days.</p> <p>Not required for <u>VSQGs</u>.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>According to the Environmental Compliance Program Manager, all signed manifests have been received from the designated facility/facilities within 60 days.</p>

Compliance Topic	Compliance Status	Discussion
<p>Recordkeeping</p> <p>Required for <u>LQGs</u>: The generator must maintain records of manifests, biennial reports, exception reports, and waste analysis.</p> <p>Required for <u>SQGs</u>: The generator must maintain records of manifests and waste analysis.</p> <p>Not required for <u>VSQGs</u>.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site maintains copies of signed manifests for at least three years.</p> <p>They have also begun keeping documentation pertaining to waste characterization (analytical, generator knowledge, etc.).</p>
<p>Facility Type</p> <p>Required for <u>LQGs</u> and <u>SQGs</u>: The generator must send off-site shipments to RCRA-permitted or interim status facilities.</p> <p>Required for <u>VSQGs</u>: The generator may send off-site shipments to RCRA-permitted or interim status facilities or other facilities that are authorized to manage it.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site sends hazardous waste to RCRA-permitted facilities that have been vetted by their third-party waste vendor.</p>
<p>TSDFs</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site is not a TSDF; therefore, TSDF requirements do not apply to the Site.</p>
<p>Inspections and Violations</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site has not been subject to regulatory inspections by the PA DEP regarding RCRA compliance. No NOVs associated with waste compliance or RCRA were identified.</p>
Universal Waste Management		
<p>Container Labelling</p> <p>A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified in (a) to (f) of 25 Pa Code 266b.1.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input checked="" type="checkbox"/> Non-compliance</p>	<p>In the North Garage Universal Waste section, there was un-labeled or un-dated waste. Some waste was labeled "Prior to date" or "general waste".</p>

Compliance Topic	Compliance Status	Discussion
Other Regulated Waste		
<p>Academic Laboratory Waste</p> <p>Containers of unwanted materials must be labelled with the words “unwanted materials” or another equally effective, consistently used term; chemical name; information sufficient to make a hazardous waste determination; and accumulation start date. In addition, trained professionals, rather than students, must make hazardous waste determinations. The trained professional can make the hazardous waste determination in the laboratory, at an on-site central accumulation area, or at an on-site TSDF. The facility must also develop and implement a Laboratory Management Plan.</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site does not generate academic laboratory waste.</p>
<p>Cathode Ray Tubes (CRTs)</p> <p>CRT glass contains lead; therefore, CRTs intended for disposal are considered hazardous waste under RCRA. However, if certain conditions are met, used CRTs and CRT glass, which is recycled or exported for recycling, is not considered solid or hazardous waste.</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>Arcadis did observe CRTs in the Chemical Feed building, including a TV and air conditioner (non-CRT). The Environmental Compliance Team confirmed these items are obsolete and will be disposed of via a third-party.</p>
<p>Municipal Waste</p> <p>Containers used to store residual waste must be watertight, leak-proof, insect-proof and rodent-proof.</p> <p>Containers used to store municipal waste must be equipped with a tight-fitting lid or otherwise sealed, watertight, leak-proof, insect-proof and rodent-proof.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The municipal waste dumpster is enclosed with a hard top to prevent precipitation from entering. It appeared to also be leak-proof, insect-proof and rodent-proof.</p>
<p>Polychlorinated Biphenyl (PCB) Waste</p> <p>PCB wastes are regulated under 40 CFR Part 761, which imposes requirements for generators, commercial storage facilities, transporters, and disposers of PCB wastes.</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site does not generate PCB wastes.</p> <p>The primary transformers/sub-stations on-site are owned by Duquesne Light. The Site reports no liquid filled transformers.</p>

Compliance Topic	Compliance Status	Discussion
<p>Waste Oil</p> <p>Used oil management standards are established in 40 CFR Part 279 and apply to all businesses that handle used oil. The used oil management standards include requirements pertaining to used oil storage, oil spills and leaks, recordkeeping, and mixing used oil with hazardous waste.</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>Most waste oil containers were observed to be covered and labelled. The Site does not mix other wastes with used oil.</p> <p>Waste oil storage areas include the Ross Pump Station top floor and the main building maintenance shop. Both areas had several drums, but they appear to be in good condition.</p>
Off-site Liability		
<p>Under CERCLA and SARA, hazardous waste sites, accidents, spills, and other emergency releases of pollutants and contaminants are cleaned up by the USEPA or through orders and consent decrees from the USEPA. USEPA has the authority to seek out and identify potentially responsible parties (PRPs) to recover costs for clean-up, or to compel the PRPs to clean up Superfund sites. CERCLA imposes liability on current owners and operators of a facility, former owners and operators of a facility, parties who arranged for treatment or disposal of hazardous substances, and transporters of hazardous substances.</p>	<p><input checked="" type="checkbox"/> Not Applicable</p> <p><input type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>No evidence was identified which names the Site as a PRP in conjunction with wastes sent from the Site to off-site disposal facilities. In addition, the Chief Environmental Compliance & Ethics Officer was not aware of off-site disposal liabilities associated with wastes generated at the Site.</p>
Hazardous Building Materials		
<p>Lead-Based Paint</p>	<p><input type="checkbox"/> Not Applicable</p> <p><input checked="" type="checkbox"/> In Compliance</p> <p><input type="checkbox"/> Potential Non-compliance</p> <p><input type="checkbox"/> Non-compliance</p>	<p>The Site had a hazardous material survey conducted by a third-party vendor on July 7 and 26, 2021.</p> <p>Ten paint samples were taken from the lime slurry system area on three floors of the Chemical Building. Lead and hexavalent chromium were identified in all ten paint samples. Heavy metals were found in most samples.</p> <p>Due to the age of the other buildings, the Site suspects that they also contain lead-based paint.</p> <p>It is recommended that the Site identify and document buildings/areas that contain lead-based paint. Special consideration (waste management, employee exposure, etc.) must be considered during construction pre-planning activities.</p>

Compliance Topic	Compliance Status	Discussion
<p>Asbestos and ACM</p>	<p> <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> In Compliance <input type="checkbox"/> Potential Non-compliance <input type="checkbox"/> Non-compliance </p>	<p>The Site had a hazardous material survey conducted by a third-party vendor on July 7 and 26, 2021.</p> <p>The asbestos contractor collected 32 bulk samples of five different suspect materials. Six of the 32 samples had multiple layers which were analysed separately, resulting in a total of 38 samples. There are no known ACM at the lime slurry system inside the Chemical Building.</p> <p>Due to the age of the other buildings, Site personnel suspect that they contain asbestos and ACM.</p> <p>It is recommended that the Site identify and document buildings/areas that contain asbestos and ACM. Special consideration (waste management, employee exposure, etc.) must be considered during construction pre-planning activities.</p>

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