pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0002941**
Facility Type	**Industrial**	APS ID	**655817**
Major / Minor	**Major**	Authorization ID	**740929**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**Allegheny Energy Supply Co., LLC**	Facility Name	**Hatfield's Ferry Power Station**
Applicant Address	800 Cabin Hill Drive	Facility Address	2907 E. Roy Furman Highway
	Greensburg, PA 15601		Masontown, PA 15461
Applicant Contact	William E. Cannon	Facility Contact	Randy Jones
Applicant Phone	(724) 838-6018	Facility Phone	(724) 366-2315
Applicant Email	wcannon@firstenergycorp.com	Facility Email	rjones4@fistenergycorp.com
Client ID	159421	Site ID	238493
SIC Code	4911	Municipality	Monongahela Township
SIC Description	Trans. & Utilities - Electric Services	County	Greene
Date Application Received	August 29, 2008	EPA Waived?	No
Date Application Accepted	September 18, 2008	If No, Reason	Major Facility
Purpose of Application	NPDES permit renewal for storm water discharges from the former power station.		

Summary of Review

On August 29, 2008, DEP received an application from Allegheny Energy Supply Company, LLC (AESC) to renew the NPDES permit for the Hatfield's Ferry Power Station. The NPDES permit currently in effect was issued on December 9, 2003 with an effective date of January 1, 2004 and an expiration date of December 31, 2008.

On December 30, 2008, after several months of exceedances of the in-stream total dissolved solids (TDS) and sulfate water quality criteria in the Monongahela River, DEP issued an amended NPDES Permit to AESC authorizing it to discharge wastewater from a new FGD Scrubber. The amended permit established water quality-based effluent limits (WQBELs) for TDS and Sulfate at criteria levels. AESC appealed the amended NPDES permit amendment to the Environmental Hearing Board. The Environmental Integrity Project and Citizens' Coal Council (collectively "EIP") intervened in the case in support of DEP. In August 2012, Commonwealth Court approved a multi-party Consent Decree resolving AESC's appeal of the amended NPDES Permit. The Consent Decree established a six (6) year compliance schedule to allow AESC to achieve the amended permit's TDS and Sulfate WQBELs.

On October 9, 2013, AESC decommissioned the three power-generating units at the Hatfield's Ferry Power Station. In 2014, the exceedances of sulfate water quality criteria in the Monongahela River ceased. Accordingly, in July 2014, AESC sought and received a modification of the Consent Decree. The Modified Consent Decree eliminated the 6-year compliance schedule but required AESC to install adequate treatment before it restarts the Hatfield's Ferry Power Station. Also, since July 2014, AESC is required to submit to the Department semi-annual progress reports and is subject to the transfer provisions of the Consent Decree. AESC also must notify the Department of any change in the identity of the AESC contact person. The Consent Decree terminates automatically by its own terms on December 31, 2022.

On May 22, 2015, ownership of the approximately 413-acre captive coal combustion byproducts (CCB) landfill portion of the property was transferred to FirstEnergy Generation LLC. AESC maintained ownership of the power station portion of the property. The power station portion of the property will continue to be identified as the Hatfield's Ferry Power Station (HFPS)

Approve	Deny	Signatures	Date
X		Ryan C. Decker, P.E. / Environmental Engineer	September 16, 2022
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	September 29, 2022

Summary of Review

in this document and in PA0002941, but the HFPS will only encompass the former power station itself. The landfill portion of the property will be identified as the Hatfield CCB Landfill.

On March 31, 2018, FirstEnergy Solutions Corp. and six affiliated debtors—including FirstEnergy Generation LLC—each filed a voluntary petition for relief under Chapter 11 of the US Bankruptcy Code in the US Bankruptcy Court for the Northern District of Ohio. FirstEnergy Solutions Corp. emerged from bankruptcy on February 27, 2020 as an independent company named Energy Harbor. FirstEnergy Generation LLC was renamed to Energy Harbor Generation LLC.

On May 9, 2018, DEP issued a new NPDES Permit (PA0255297) to APV Renaissance Partners Opco LLC for new discharges of industrial waste, sewage, and storm water from a proposed natural gas-fired 1,000 MW combined-cycle electric power-generating facility called the Renaissance Energy Center (REC). The REC was to be constructed on approximately 33 acres of land formerly used by AESC to store and blend coal. On April 20, 2020, DEP received a Notice of Termination from APV requesting termination of PA0255297. The REC was never constructed and plans for the plant were abandoned. PA0255297 and associated Water Quality Management Permit 3017200 were terminated on June 2, 2020, thus maintaining the post-deactivation conditions that existed at the site.

On November 20, 2020, DEP received an updated NPDES permit application from AESC to renew PA0002941 for discharges from the HFPS. The updated application seeks to remove facility areas and outfalls associated with the Hatfield CCB Landfill from NPDES Permit PA0002941 such that PA0002941 only authorizes discharges from the HFPS. On the same day, DEP received a permit application from Energy Harbor Generation LLC for a new NPDES permit (PA0255840) to authorize discharges from the Hatfield CCB Landfill. Following the 2015 transfer of ownership of the Hatfield CCB Landfill, discharges from the landfill have been managed by AESC under PA0002941.

Pursuant to the November 20, 2020 application update, the following discharges were eliminated from the site:

- Outfall 001 – Sewage treatment plant
- Outfall 003 – Intake screen backwash
- Outfall 005 – Intake strainer backwash
- IMP 206 – Industrial wastewater treatment plant (ash transport water, coal pile runoff, and low volume wastes)
- IMP 306 – FGD process wastewater treatment plant discharge

AESC requested to maintain the following monitoring points in PA0002941: 002, 502, 004, 006, 010, 013. The outfalls will discharge storm water runoff from unused facilities, basins, and ponds at the HFPS with semi-annual monitoring requirements based on Appendix H of DEP's PAG-03 General Permit for Discharges of Stormwater Associated with Industrial Activities. No requirements pertaining to Section 316(b) of the Clean Water Act (regarding best technology available for impingement and entrainment minimization at cooling water intake structures) will be imposed in the renewed permit. An intake structure remains at the site, but it is not used to withdraw water for cooling purposes or for any other purpose.

The following monitoring points will be authorized by the new NPDES Permit PA0255840 issued to Energy Harbor Generation LLC for discharges from the Hatfield CCB Landfill: 007, 009, 114, 214, 314, 414, 014, 015, 016, 017, 019, 021, and 022.

Outfall 018 no longer exists. Outfall 020 is the same as Outfall 009, so Outfall 020 will not be permitted. Applicable limits from PA0002941 will be maintained for monitoring points carried over to PA0255840 (i.e., anti-backsliding requirements will apply to existing/ongoing discharges from the Hatfield CCB Landfill despite the issuance of a new permit).

The renewal of PA0002941 for the HFPS is being coordinated with the issuance of PA0255840 for the Hatfield CCB Landfill to ensure no lapse in coverage and no duplication of coverage for existing/ongoing discharges.

<u>Demolition and Site Restoration of the Hatfield's Ferry Power Station</u>

On February 7, 2022, AESC provided DEP with preliminary notice that the Hatfield's Ferry Power Station was set to be demolished and the site restored to an undeveloped, vegetated area with limited impervious area. AESC stated that it would follow up with additional details once they were available. On June 6, 2022, AESC emailed DEP and provided a detailed explanation of the plan for demolition (see **Attachment B**). That email included a copy of a Notice of Intent for coverage under a PAG-02 General Permit that AESC had submitted to the Greene County Conservation District. The PAG-02 and corresponding Erosion and Sediment Control Plan will cover storm water discharges during planned earthmoving activities that will take place during demolition and site restoration. During a call among relevant parties (DEP, AESC, Green County

Summary of Review

Conservation District, North American Dismantling Company, and TetraTech) on August 2, 2022, it was concluded that storm water discharges during earthmoving activities are unlikely to contain industrial pollutants that would require coverage under PA0002941. It was also concluded that no further updates to the November 20, 2020 NPDES permit application would be needed to accommodate demolition activities.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	Variable
Latitude	39° 51' 28.0"	Longitude	-79° 55' 33.0"
Quad Name	Smithfield	Quad Code	2007
Wastewater Description:	Storm water runoff from site roadways and potential storm water contributions from the former cooling tower basins and overflows from the former Coal Pile Settling Chamber No. 2 and the former neutralization basin		

Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99416404	RMI	78.72
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	19-B	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Monongahela River TMDL

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake		Municipal Authority of the Borough of Carmichaels	
PWS ID	5300005	PWS Withdrawal (MGD)	
PWS Waters	Monongahela River	Flow at Intake (cfs)	
PWS RMI	75.02	Distance from Outfall (mi)	3.7

Discharge, Receiving Waters and Water Supply Information

IMP No.	502	Design Flow (MGD)	Variable
Quad Name	Smithfield	Quad Code	2007
Wastewater Description:	Storm water runoff from the roadway between the cooling towers and the plant		

Changes Since Last Permit Issuance:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	Variable
Latitude	39° 51' 38.0"	Longitude	-79° 55' 37.0"
Quad Name	Smithfield	Quad Code	2007
Wastewater Description:	Emergency overflows of storm water from the former Coal Pile Settling Chamber No. 1		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99416266	RMI	78.53
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	19-B	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Monongahela River TMDL

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake		Municipal Authority of the Borough of Carmichaels	
PWS ID	5300005	PWS Withdrawal (MGD)	
PWS Waters	Monongahela River	Flow at Intake (cfs)	
PWS RMI	75.02	Distance from Outfall (mi)	3.51

Changes Since Last Permit Issuance:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	006	Design Flow (MGD)	Variable
Latitude	39° 51' 49.0"	Longitude	-79° 55' 49.0"
Quad Name	Smithfield	Quad Code	2007
Wastewater Description:	Storm water monitored at IMP 206		

Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99416266	RMI	78.34
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	19-B	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Monongahela River TMDL

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake		Municipal Authority of the Borough of Carmichaels	
PWS ID	5300005	PWS Withdrawal (MGD)	
PWS Waters	Monongahela River	Flow at Intake (cfs)	
PWS RMI	75.02	Distance from Outfall (mi)	3.32

Discharge, Receiving Waters and Water Supply Information

IMP No.	206	Design Flow (MGD)	Variable
Quad Name	Smithfield	Quad Code	2007
Wastewater Description:	Storm water pumped to and treated by the former Process Wastewater Treatment Lagoons		

Changes Since Last Permit Issuance:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	010	Design Flow (MGD)	Variable
Latitude	39° 51' 13.0"	Longitude	-79° 55' 40.0"
Quad Name	Smithfield	Quad Code	2007
Wastewater Description:	Storm water runoff from a gravel parking area and a hillside area		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99416536	RMI	79.07
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	19-G	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Monongahela River TMDL

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake	Municipal Authority of the Borough of Carmichaels		
PWS ID	5300005	PWS Withdrawal (MGD)	
PWS Waters	Monongahela River	Flow at Intake (cfs)	
PWS RMI	75.02	Distance from Outfall (mi)	4.05

Changes Since Last Permit Issuance:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	013	Design Flow (MGD)	Variable
Latitude	39° 51' 13.0"	Longitude	-79° 55' 40.0"
Quad Name	Smithfield	Quad Code	2007
Wastewater Description:	Storm water runoff from roof drains and an unused parking lot		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99416536	RMI	79.07
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	19-G	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Monongahela River TMDL

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake	Carmichaels Borough Municipal Authority (PWS ID 5300005)		
PWS Waters	Monongahela River	Flow at Intake (cfs)	
PWS RMI	75.02	Distance from Outfall (mi)	4.05

Changes Since Last Permit Issuance:

Treatment Facility Summary		
Treatment Facility: Industrial Waste Treatment Facilities		
WQM Permit No.	**Issuance Date**	**Purpose**
3074201	January 9, 1975	Permit issued to West Penn Power Company by the Department of Environmental Resources (DER) for new and modified industrial wastewater treatment systems consisting of intercepting sewers gravity flowing to a new neutralization sump with a pH probe for caustic soda feed and a 12" diameter force main from the sump to two new polishing lagoons. The modifications also rerouted cooling tower blowdown from the existing settling basin clearwell so that it discharges directly to the Monongahela River; and rerouted effluent from the existing settling basin to the new polishing lagoons.
3074201 (Reissued)	July 28, 1976	Permit reissued to West Penn Power Company by DER to add two settling basins for coal pile runoff.
3074201 A-1	March 22, 1995	Permit amendment issued to West Penn Power Company by DER to authorize the operation of a previously constructed 20,000-gallon steel, cylindrical, horizontal parallel corrugated plate coalescing oil/water separator with an 80 gpm oil draw-off pump and inlet heaters. The separator treats up to 2.16 MGD of wastewater from floor and yard drains collected in a drainage sump. A 2,000-gallon oil holding tank also was constructed.
3074201 A-2	October 2, 1998	Permit amendment issued to West Penn Power Company by DEP to authorize the construction and operation of an automated floating dredge system (submerged auger/pump type) in each ash settling basin to collect and transfer slurry solids to a new 90,000-gallon, 25-foot diameter steel surge/decant tank with a mixer, two inlet cyclones, and a 500-gpm centrifugal pump to transfer settled solids to the Unit 1 or Unit 2 fly ash mixer/unloaders.
3074201 A-3	September 20, 1999	Permit amendment issued to West Penn Power Company d/b/a Allegheny Power by DEP to authorize the construction and operation of a storm water detention basin with a pre-cast concrete sump and two 40-gpm submersible pumps to collect storm water runoff from the coal handling area and transfer it to a nearby existing drainage channel that flows to existing coal pile settling chamber no. 2 for later treatment. This modification eliminated the discharge of untreated coal handling area runoff to the river. A nearby catch basin also was raised to stop collecting that runoff.
3074201 T-1	May 22, 2000	Permit (and amendments) transferred from West Penn Power Company to Allegheny Energy Supply Company, LLC.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Primary	Sedimentation, oil/water separation, and neutralization.	N/A	Various

Treatment Facility Summary		
Treatment Facility: Hatfield CCB Landfill Phase I/II Passive Wetlands Treatment System and Sedimentation Pond		
WQM Permit No.	**Issuance Date**	**Purpose**
3083201	May 7, 1984	Permit issued to West Penn Power Company by the Sanitary Water Board to authorize the construction and operation of a sedimentation pond (25-year, 24-hour design basis) to treat combustion residual leachate and underdrain flow from Phases I and II of the coal combustion byproducts landfill.

WQM Permit No.	Issuance Date	Purpose
3083201 T-1	May 22, 2000	Permit transferred from West Penn Power Company to Allegheny Energy Supply Company, LLC.
3083201 A-1	May 26, 2000	Permit issued to Allegheny Energy Supply Company, LLC by DEP to authorize the construction and operation of a passive constructed wetlands treatment system upstream of the existing sedimentation pond. The wetland system consists of precast concrete collection vaults each with two 120-gpm pumps for Phase I and Phase II areas; an equalization basin (160' L × 75' W × 6' D) for aluminum and iron oxidation/precipitation; four vegetated aerobic wetland cells (185' L × 58' W × 2' D) for iron removal; five rock drains (58' to 158' L × 24' to 32' W × variable D) for manganese removal; and associated piping. The effluent from the rock drains leads to the existing sedimentation pond.
3083201 T-2	April 4, 2022	Permit transferred from Allegheny Energy Supply Company, LLC to Energy Harbor Generation LLC (see NPDES PA0255840)

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Primary	Sedimentation and chemical precipitation	N/A	N/A

Treatment Facility Summary		
Treatment Facility: Industrial Waste Treatment Facilities		
WQM Permit No.	**Issuance Date**	**Purpose**
3068201	February 14, 1969	Permit issued to West Penn Power Company, Monongahela Power Company, and Potomac Edison Company by the Sanitary Water Board to authorize the construction and operation of industrial waste treatment facilities consisting of a 78,000-gallon (55' × 20' × 9'-6") neutralization pit with caustic injection and a circulation pump to pre-treat acid wastes; and an ash settling basin with two settling chambers (180' × 28' × 8' each) and two clearwells (80' × 28' × 9'-6") to treat up to 5.49 MGD of boiler ash hopper overflows, ash storage bin overflows and drainage from the ash sluicing system, and batch discharges from the neutralization pit. Cooling tower blowdown discharged to the clearwells.
3068201 T-1	May 22, 2000	Permit transferred from West Penn Power to Allegheny Energy Supply Company, LLC.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Primary	Sedimentation and neutralization	N/A	5.49

Treatment Facility Summary		
Treatment Facility: Sewage Treatment Plant		
WQM Permit No.	**Issuance Date**	**Purpose**
3068401	March 6, 1969	Permit issued to West Penn Power Company, Monongahela Power Company, and Potomac Edison Company by the Sanitary Water Board to authorize the construction and operation of a 0.0096 MGD sewage treatment plant (design organic loading of 21 lbs/day BOD) consisting of a comminutor with a bar screened bypass, a 12,750-gallon activated sludge aeration tank (14'-9" × 11'-6" × 13'-6"), a 3,000-gallon final settling tank (8'-0" × 8'-0" × 13'-6"), a 2,800-gallon sludge storage tank (8'-0" × 3'-6" × 13'-6"), a 1,300-gallon chlorine contact tank (8'-0" × 3'-0" × 7'-6") with baffles, and a water spray system (submersible pump, strainer, and piping) for froth control

WQM Permit No.	Issuance Date	Purpose
3068401 T-1	May 22, 2000	Permit transferred from West Penn Power to Allegheny Energy Supply Company, LLC.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Secondary	Activated sludge	Chlorine	0.0096

Treatment Facility Summary

Treatment Facility: Sewage Treatment Plant

WQM Permit No.	Issuance Date	Purpose
3085201	September 11, 1986	Permit issued to Allegheny Power System (West Penn Power Company) by DER to authorize the construction and operation of a 2,000-gpd package sewage treatment plant to treated sanitary wastewaters from facilities in the coal handling and storeroom areas. The package plant consists of a surge tank, sludge holding tank, aeration tank, clarifier, bar scree, comminutor pumps, and chlorine contact tank.
3085201 T-1	May 22, 2000	Permit transferred from West Penn Power to Allegheny Energy Supply Company, LLC.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial			N/A	N/A

Treatment Facility Summary

Treatment Facility: Untreated cooling water discharge. Discharge authorization superseded by NPDES PA0002941.

WQM Permit No.	Issuance Date	Purpose
467I018	January 24, 1968	Permit issued to West Penn Power Company, Monongahela Power Company, and Potomac Edison Company by the Sanitary Water Board for discharges of untreated cooling water.
467I018 (Letter Mod.)	February 28, 1969	Permit modified to conform to then-current regulations of heated wastes.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	N/A	Cooling water recirculation.	N/A	N/A

Treatment Facility Summary

Treatment Facility: FGD scrubber blowdown wastewater treatment plant

WQM Permit No.	Issuance Date	Purpose
3208201	March 28, 2008	Permit issued to Allegheny Energy Supply Company, LLC by DEP to authorize the construction and operation of flue gas desulfurization scrubber blowdown wastewater treatment plant.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Secondary	Sedimentation, chemical precipitation, biological treatment	N/A	

Treatment Facility Summary		
Treatment Facility: Hatfield CCB Landfill Phase III Leachate Storage Impoundment and Haul Road Sediment Facilities		
WQM Permit No.	**Issuance Date**	**Purpose**
3006201	May 5, 2009	Permit issued to Allegheny Energy Supply Company, LLC by DEP to authorize the construction and operation of a lined Leachate Storage Impoundment for the Phase III landfill expansion. The impoundment was designed to meet Class I residual waste disposal impoundment requirements. The permit also authorized two haul road sediment removal facilities.
3006201 A-1, T-1	April 4, 2022	Permit transferred from Allegheny Energy Supply Company, LLC to Energy Harbor Generation LLC (see NPDES PA0255840) and amended to authorize the installation and use of a sodium hydroxide feed system for pH control of landfill leachate.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Industrial	Primary	Sedimentation and neutralization	N/A	N/A

Changes Since Last Permit Issuance:

Compliance History

DMR Data for Outfall 006 (from August 1, 2021 to July 31, 2022)

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Flow (MGD) Average Monthly		0.0193	0.0300	0.0378	0.0212	0.0519	0.0391	0.0170	0.0097	0.0117	0.0145	0.0113
Flow (MGD) Daily Maximum		0.1025	0.1204	0.1426	0.1476	0.2996	0.3422	0.2395	0.1677	0.1027	0.1096	0.1217
pH (S.U.) Minimum		7.5	7.3	7.4	7.5	7.2	7.2	7.1	7.1	7.7	7.1	6.9
pH (S.U.) Maximum		7.7	7.6	7.7	7.5	7.5	7.4	7.2	7.1	7.7	7.1	6.9
TSS (mg/L) Average Monthly		< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TSS (mg/L) Daily Maximum		< 4.0	< 4.0	6.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Total Dissolved Solids (mg/L) Average Monthly		462	556	683	658	560	694	732	616	580	596	588
Total Dissolved Solids (mg/L) Daily Maximum		488	596	732	688	608	712	748	616	580	604	588
Oil and Grease (mg/L) Average Monthly		< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	1.8	< 1.4	< 1.4	< 1.4	< 1.4
Oil and Grease (mg/L) Daily Maximum		1.7	< 1.4	< 1.4	< 1.4	< 1.4	1.7	2.0	< 1.4	< 1.4	< 1.4	< 1.4
Total Cadmium (mg/L) Average Monthly		0.0005	< 0.0004	< 0.0004	0.0011	0.0004	0.0010	0.0007	0.0005	< 0.0004	0.0016	0.0011
Total Cadmium (mg/L) Daily Maximum		0.0009	0.0005	< 0.0004	0.0015	0.0008	0.0011	0.0008	0.0005	< 0.0004	0.0029	0.0011
Total Mercury (mg/L) Average Monthly		< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Total Mercury (mg/L) Daily Maximum		< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Total Selenium (mg/L) Average Monthly		< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017
Total Selenium (mg/L) Daily Maximum		< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017
Sulfate (mg/L) Average Monthly		229.7	287.233	380.3	391.000	332.3	421.500	433.000	377.000	313.000	309.0	324.0
Total Thallium (mg/L) Average Monthly		< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00008	< 0.00016	< 0.00016	< 0.00016	< 0.00016

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Total Thallium (mg/L) Daily Maximum		< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00008	< 0.00016	< 0.00016	< 0.00016	< 0.00016

DMR Data for Outfall 007 (from August 1, 2021 to July 31, 2022)

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Flow (MGD) Average Monthly	0.0817	0.0938	0.0882	0.1591	0.0821	0.0738	0.0864	0.0743	0.0702	0.0695	0.1107	0.1026
Flow (MGD) Daily Maximum	0.0893	0.1782	0.1080	0.3600	0.0936	0.0864	0.1008	0.1224	0.0792	0.0835	0.2886	0.1800
pH (S.U.) Minimum	7.5	7.4	7.5	7.4	7.6	7.4	7.3	7.5	7.4	7.5	6.8	6.7
pH (S.U.) Maximum	8.2	7.9	7.6	7.7	7.9	7.6	7.6	7.8	7.7	8.1	7.3	6.9
TSS (mg/L) Average Monthly	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TSS (mg/L) Daily Maximum	5.0	9.0	6.0	6.0	< 4.0	< 4.0	< 4.0	7.0	< 4.0	5.0	5.0	7.0
Total Aluminum (mg/L) Average Monthly	< 0.0135	< 0.0135	< 0.0135	0.0215	< 0.0135	< 0.0135	< 0.0135	< 0.0135	< 0.0135	< 0.0135	0.0725	< 0.0135
Total Aluminum (mg/L) Daily Maximum	< 0.0135	< 0.0135	< 0.0135	0.0861	< 0.0135	< 0.0135	0.0539	0.0153	< 0.0135	0.0465	0.1169	< 0.0189
Total Iron (mg/L) Average Monthly	0.1026	0.0734	< 0.0250	0.0410	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250	< 0.0250
Total Iron (mg/L) Daily Maximum	0.1280	0.1419	0.0311	0.1638	< 0.0250	< 0.0250	0.0502	< 0.0250	< 0.0250	0.0278	0.0516	< 0.0250
Total Manganese (mg/L) Average Monthly	0.0494	0.1876	0.0509	0.0152	0.0057	0.0053	< 0.0044	< 0.0044	0.0091	0.0196	0.0240	0.0409
Total Manganese (mg/L) Daily Maximum	0.0635	0.4850	0.0789	0.0359	0.0112	0.0061	0.0059	0.0090	0.0158	0.0376	0.0474	0.0634
Total Thallium (mg/L) Average Monthly	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016
Total Thallium (mg/L) Daily Maximum	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016

DMR Data for Outfall 010 (from August 1, 2021 to July 31, 2022)

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
pH (S.U.) Minimum	7.1			7.2	7.5	7.6		7.3	7.3	8.2	7.2	7.0
pH (S.U.) Maximum	7.1			7.2	7.5	7.6		7.3	7.3	8.2	7.2	7.0
TSS (mg/L) Daily Maximum	16			19	5.0	6		< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Oil and Grease (mg/L) Daily Maximum	< 1.4			< 1.4	< 1.4	< 1.4		1.5	2.0	< 1.4	1.4	1.6
Total Aluminum (mg/L) Daily Maximum	0.3332			0.2918	0.1156	0.0490		0.0912	< 0.0135	< 0.0135	< 0.0135	0.0530
Total Iron (mg/L) Daily Maximum	0.5291			0.5858	0.3198	0.0535		0.0721	< 0.0250	< 0.0250	< 0.0250	< 0.0250
Total Manganese (mg/L) Daily Maximum	0.0356			0.0231	0.0674	< 0.0044		< 0.0044	< 0.0044	< 0.0044	< 0.0044	< 0.0044

DMR Data for Outfall 013 (from August 1, 2021 to July 31, 2022)

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
pH (S.U.) Minimum	7.1			7.2	7.5	7.4		7.2	7.0	8.3	7.1	6.9
pH (S.U.) Maximum	7.1			7.2	7.5	7.4		7.2	7.0	8.3	7.1	6.9
TSS (mg/L) Daily Maximum	15			< 4	< 4.0	< 4.0		< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Oil and Grease (mg/L) Daily Maximum	1.9			< 1.4	< 1.4	< 1.4		< 1.4	1.5	1.9	< 1.4	< 1.4
Total Aluminum (mg/L) Daily Maximum	0.3138			0.0940	0.2147	0.0389		0.0313	0.0156	0.0189	0.0386	0.0781
Total Iron (mg/L) Daily Maximum	0.4004			0.1478	0.3451	0.0367		0.0312	< 0.0250	< 0.0250	0.0296	0.0794
Total Manganese (mg/L) Daily Maximum	0.0193			0.0077	0.0406	< 0.0044		< 0.0044	< 0.0044	< 0.0044	< 0.0044	0.0105

DMR Data for Outfall 014 (from August 1, 2021 to July 31, 2022)

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Flow (MGD) Average Monthly	0.0216	0.0216	0.0216	0.0516	0.0516	0.0216	0.0216	0.0216	0.0216	0.0216	0.0516	0.0216
Flow (MGD) Daily Maximum	0.0216	0.0216	0.0216	0.0816	0.0816	0.0216	0.0216	0.0216	0.0216	0.0216	0.0816	0.0216
pH (S.U.) Minimum	8.5	8.4	7.9	7.7	8.0	7.5	7.4	7.6	7.6	7.9	7.3	7.9
pH (S.U.) Maximum	8.9	8.4	8.5	8.1	8.2	8.0	7.8	7.6	7.9	8.2	7.9	8.0
TSS (mg/L) Average Monthly	< 4.0	< 4.0	< 4.0	7.0	8.0	< 4.0	7.0	35.0	7.0	< 4.0	< 4.0	< 4.0
TSS (mg/L) Daily Maximum	< 4.0	< 4.0	5.0	8.0	8.0	5.0	13.0	47.0	7.0	< 4.0	7.0	< 4.0

DMR Data for Outfall 114 (from August 1, 2021 to July 31, 2022)

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Flow (MGD) Average Monthly	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216
Flow (MGD) Daily Maximum	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216
pH (S.U.) Minimum	8.5	8.4	7.9	7.7	8.0	7.6	7.4	7.5	7.6	7.9	7.3	7.9
pH (S.U.) Maximum	8.9	8.4	8.5	8.2	8.2	7.9	7.8	7.7	7.9	8.2	7.9	8.0
TSS (mg/L) Average Monthly	< 4.0	< 4.0	6.0	4.0	< 4.0	< 4.0	9.0	35.0	< 4.0	< 4.0	5.0	< 4.0
TSS (mg/L) Daily Maximum	7.0	5.0	7.0	8.0	7.0	< 4.0	10.0	47.0	< 4.0	7.0	9.0	< 4.0
Total Aluminum (mg/L) Average Monthly	0.0380	< 0.0135	0.1196	0.1138	0.1317	0.1160	0.3178	0.9457	0.1592	0.1035	0.1295	0.0462
Total Aluminum (mg/L) Daily Maximum	0.0760	< 0.0135	0.1532	0.1493	0.1695	0.1619	0.3890	1.4000	0.1697	0.1609	0.2163	0.0543
Total Boron (mg/L) Average Monthly	27.886	26.872	19.962	14.550	23.988	20.917	12.335	27.377	21.719	20.771	13.375	29.567
Total Boron (mg/L) Daily Maximum	28.891	27.912	21.922	19.510	25.635	27.335	13.964	27.861	26.700	22.718	19.590	29.651
Total Iron (mg/L) Average Monthly	< 0.0250	0.0394	0.1164	0.1837	0.1355	0.0854	0.3350	1.2110	0.2746	0.0664	0.1764	< 0.0250
Total Iron (mg/L) Daily Maximum	< 0.0250	0.0421	0.1178	0.2096	0.1787	0.1088	0.4253	1.5100	0.2955	0.0948	0.3177	< 0.0250

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Total Manganese (mg/L) Average Monthly	0.0156	0.0546	0.0885	0.0807	0.1812	0.1639	0.2762	0.7448	0.0914	0.0970	0.1358	0.0147
Total Manganese (mg/L) Daily Maximum	0.0245	0.0692	0.1083	0.1044	0.2033	0.2006	0.4393	0.8969	0.1068	0.1622	0.2352	0.0217
Total Selenium (mg/L) Average Monthly	0.0032	0.0027	0.0084	0.0112	0.0159	0.0124	0.0147	0.0043	0.0041	0.0027	0.0019	0.0032
Total Selenium (mg/L) Daily Maximum	0.0034	0.0033	0.0104	0.0175	0.0185	0.0141	0.0194	0.0046	0.0053	0.0033	0.0038	0.0036
Total Thallium (mg/L) Average Monthly	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016
Total Thallium (mg/L) Daily Maximum	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016

DMR Data for Outfall 206 (from August 1, 2021 to July 31, 2022)

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Flow (MGD) Average Monthly		0.0193	0.0300	0.0378	0.0212	0.0519	0.0391	0.0170	0.0097	0.0117	0.0145	0.0113
Flow (MGD) Daily Maximum		0.1025	0.1204	0.1426	0.1476	0.2996	0.3422	0.2395	0.1677	0.1027	0.1096	0.1217
pH (S.U.) Minimum		7.5	7.3	7.4	7.4	7.5	7.2	7.1	7.0	7.6	7.1	6.8
pH (S.U.) Maximum		7.6	7.6	7.7	7.6	7.5	7.2	7.2	7.0	7.6	7.1	6.8
TSS (mg/L) Average Monthly		< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	5.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
TSS (mg/L) Daily Maximum		< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	9.0	6.0	< 4.0	< 4.0	< 4.0	< 4.0
Oil and Grease (mg/L) Average Monthly		< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	2.0	< 1.4	< 1.4	< 1.4	< 1.4	1.5
Oil and Grease (mg/L) Daily Maximum		< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	2.3	1.8	< 1.4	< 1.4	< 1.4	1.5
Total Cadmium (mg/L) Average Monthly		0.0009	< 0.0004	< 0.0004	0.0009	< 0.0004	0.0007	0.0006	< 0.0004	0.0011	< 0.0004	0.0011
Total Cadmium (mg/L) Daily Maximum		0.0009	0.0004	< 0.0004	0.0010	0.0004	0.0010	0.0008	< 0.0004	0.0011	< 0.0004	0.0011
Total Mercury (mg/L) Average Monthly		< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Total Mercury (mg/L) Daily Maximum		< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Total Selenium (mg/L) Average Monthly		< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017
Total Selenium (mg/L) Daily Maximum		< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017	< 0.0017
Total Thallium (mg/L) Average Monthly		< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00008	< 0.00016	< 0.00016	< 0.00016	< 0.00016
Total Thallium (mg/L) Daily Maximum		< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	< 0.00016	0.00008	< 0.00016	< 0.00016	< 0.00016	< 0.00016

DMR Data for Outfall 414 (from August 1, 2021 to July 31, 2022)

Parameter	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21
Flow (MGD) Average Monthly				0.0600	0.0600			0.0600	0.0600	0.0600	0.0600	
Flow (MGD) Daily Maximum				0.0600	0.0600			0.0600	0.0600	0.0600	0.0600	
pH (S.U.) Minimum				7.6	7.2			7.4	7.2	7.1	7.6	
pH (S.U.) Maximum				7.6	7.2			7.4	7.2	7.1	7.6	
TSS (mg/L) Average Monthly				< 4.0	4.0			< 4.0	< 4.0	< 4.0	< 4.0	
TSS (mg/L) Daily Maximum				< 4.0	4.0			< 4.0	< 4.0	< 4.0	< 4.0	
Oil and Grease (mg/L) Average Monthly				< 1.4	< 1.4			1.6	1.9	< 1.4	< 1.4	
Oil and Grease (mg/L) Daily Maximum				< 1.4	< 1.4			1.6	1.9	< 1.4	< 1.4	
Total Aluminum (mg/L) Average Monthly				0.0862	0.0848			0.0471	0.0371	0.0470	0.0618	
Total Aluminum (mg/L) Daily Maximum				0.0862	0.0848			0.0471	0.0371	0.0470	0.0618	
Total Iron (mg/L) Average Monthly				0.0795	0.2396			0.2328	0.3309	0.1513	0.0630	
Total Iron (mg/L) Daily Maximum				0.0795	0.2396			0.2328	0.3309	0.1513	0.0630	
Total Manganese (mg/L) Average Monthly				0.0114	0.0312			0.0209	0.0446	0.0431	0.0322	
Total Manganese (mg/L) Daily Maximum				0.0114	0.0312			0.0209	0.0446	0.0431	0.0322	

Development of Effluent Limitations

IMP No. 502 **Design Flow (MGD)** Variable
Wastewater Description: Storm water runoff from the roadway between the cooling towers and the plant

502.A. Technology-Based Effluent Limitations (TBELs)

There are no Federal Effluent Limitations Guidelines (ELGs) applicable to the storm water monitored at IMP 502. In the absence of applicable ELGs, TBELs, if warranted, are developed based on Best Professional Judgment.

Internal Monitoring Point (IMP) 502 was previously permitted as a discharge of uncontaminated storm water runoff. "Uncontaminated" is not a term of art in DEP's regulations, but a storm water discharge's status as "uncontaminated" generally corresponds to EPA's conditional exclusion for 'no exposure' of industrial activities and materials to storm water (40 CFR 122.26(g) incorporated by reference at 25 Pa. Code § 92a.32). EPA requires that a facility operator submit a signed certification stating that there are no discharges of storm water contaminated by exposure to industrial materials and activities. That certification is represented on DEP's permit application as a "No Exposure?" checkbox on Module 1 – Stormwater. AESC did not identify IMP 502 as "not exposed", but AESC states in the description for IMP 502 that there is no industrial impact on the discharge. Even though facilities at the site remain partly intact, industrial impacts should not be present at the former power station because active power-generating activities under SIC Code 4911 ceased.

AESC sampled IMP 502 to complete the analytical results section of Module 1. The results are summarized below.

Table 1. Storm Water Analytical Results for IMP 502

Parameter	Maximum (mg/L)	No Exposure Thresholds (mg/L)	MSGP Benchmarks (mg/L)
Oil and Grease	<5.0	≤ 5.0	N/A
BOD_5	<3.0	≤ 10.0	30
COD	<3.0	≤ 30.0	120
TSS	2	≤ 30.0	100
Total Nitrogen	<1.27	≤ 2.0 (Tot. N)	N/A
Total Phosphorus	<0.01	≤ 1.0	2.0
pH (s.u.)	7.69	6.0 – 9.0 s.u.	6.0 – 9.0 s.u.
Total Dissolved Solids	157	<500†	N/A
Sulfate	38.2	<250†	N/A
Aluminum	0.0326	<0.75†	N/A
Boron	<0.050	1.6†	N/A
Chromium	<0.0040	<0.010†	N/A
Copper	<0.0040	0.009†	5.19
Iron	<0.050	<1.50†	1.0
Manganese	0.0025	<1.0†	N/A
Selenium, Total	<0.0050	0.0046	0.0031
TOC	2.3	N/A	N/A

† Most stringent water quality criterion in 25 Pa. Code Chapter 93. Hardness-dependent criteria are shown based on a hardness of 100 mg/L.

Notwithstanding the lack of no exposure certification, the analytical data for IMP 502 in combination with the inactive status of the power station and AESC's description regarding no industrial impacts supports the permitting of IMP 502's storm water discharges as discharges of uncontaminated storm water runoff. Therefore, no TBELs or monitoring requirements are imposed at IMP 502.

502.B. Water Quality-Based Effluent Limitations (WQBELs)

Generally, DEP does not develop numeric WQBELs for storm water discharges. Pursuant to 25 Pa. Code § 96.4(g), mathematical modeling used to develop WQBELs must be performed at Q_{7-10} low-flow conditions. Precipitation-induced discharges generally do not occur at Q_{7-10} design conditions because the precipitation that causes storm water discharges also will increase the receiving stream's flow and that increased stream flow will provide additional assimilative capacity during a storm event. Even if the discharges were modeled to evaluate whether they have a reasonable potential to cause

or contribute to excursions above water quality criteria, analytical data demonstrate that potential storm water pollutants are not present at concentrations that exceed water quality criteria and the available assimilative capacity of the Monongahela River is significant enough to not warrant analysis of the site's remaining storm water discharges to the river.

Even though no mathematical modeling is performed, conditions in Part C of the permit will ensure compliance with water quality standards through a combination of best management practices including pollution prevention and exposure minimization, good housekeeping, erosion and sediment control, and spill prevention and response.

502.C. Effluent Limitations and Monitoring Requirements for Internal Monitoring Point 502

No effluent limits or monitoring requirements are imposed at IMP 502. The monitoring point will be maintained in the renewed permit to identify the effluent source as uncontaminated storm water runoff.

Development of Effluent Limitations

Outfall No. 002 **Design Flow (MGD)** Variable
Latitude 39° 51' 28.00" **Longitude** -79° 55' 33.00"
Wastewater Description: Storm water runoff from site roadways and potential storm water contributions from the former cooling tower basins and overflows from the former Coal Pile Settling Chamber No. 2 and the former neutralization basin

Outfall 002 was formerly permitted to discharge a combination of sources including cooling tower blowdown, emergency overflows from the neutralization basin (sampled at IMP 102), treated sewage (sampled at IMP 202), emergency overflows from Coal Pile Settling Chamber No. 2 (sampled at IMP 302), and uncontaminated storm water (IMP 502). All industrial and sewage-related discharges from Outfall 002 were eliminated when the power station was deactivated, but the structures from which those discharges occurred—the cooling towers, the coal pile settling basins, and the neutralization basin—remain at the site and have the potential to collect and discharge storm water.

In the application, AESC identified IMP 502 as the sampling point for Outfall 002. However, since the cooling tower basins, coal pile settling basins, and the neutralization basin have the potential to discharge storm water runoff independent of IMP 502, Outfall 002 will remain in the permit as a sampling point for storm water contributions from those other sources.

Table 2. Existing Effluent Limits and Monitoring Requirements for Outfall 002

Parameter	Mass (pounds)		Concentration (mg/L)			Sampling Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum		
Flow (MGD)	Report	Report	—	—	—	1/week	Measured
Total Residual Chlorine	—	—	0.5	—	1.0	1/week	Grab
Free Available Chlorine	—	—	0.2	—	0.5	1/week	Grab
Temperature (°F)	—	—	—	—	110	1/week	I-S
Chromium, Total	—	—	0.2	0.2	—	1/week	Grab
Zinc, Total	—	—	1.0	1.0	—	1/week	Grab
pH (s.u.)	—	—	6.0 (Min)	—	9.0 (Max)	1/week	Grab

002.A. Technology-Based Effluent Limitations (TBELs)

Storm water discharges through former IMPs 102 and 302 were not characterized in the application as 'no exposure' discharges. Therefore, consistent with 25 Pa. Code § 92a.61(h) and DEP's policy for permitting storm water discharges associated with industrial activities, minimum standards described in the PAG-03 will be applied to those storm water discharges. Based on the facility's SIC Code of 4911, the facility would be classified under Appendix H – Steam Electric Generating Facilities of the PAG-03 General Permit.[1] Therefore, the monitoring requirements of Appendix H of the PAG-03 General Permit will be imposed at Outfall 002.

Table 3. PAG-03 Appendix H – Minimum Monitoring Requirements

Discharge Parameter	Units	Sample Type	Appendix H Measurement Frequency
Total Suspended Solids	mg/L	1 Grab	1/6 months
Oil and Grease	mg/L	1 Grab	1/6 months
Iron, Total	mg/L	1 Grab	1/6 months
pH	s.u.	1 Grab	1/6 months

To the extent that effluent limits are necessary to ensure that storm water Best Management Practices (BMPs) are adequately implemented, effluent limits are developed for industrial storm water discharges based on a determination of Best Available Technology (BAT) using Best Professional Judgment (BPJ). BPJ of BAT typically involves the evaluation of end-of-pipe wastewater treatment technologies, but DEP considers the use of BMPs to be BAT for storm water outfalls unless effluent concentrations indicate that Best Management Practices (BMPs) provide inadequate pollution control.

AESC did not report any effluent results on the application for Outfall 002 (other than IMP 502 results) and no discharges have been reported at Outfall 002 since at least September 2016. Therefore, the quality of storm water from sources other

[1] The determination of which of the PAG-03 General Permit's appendices applies to a facility is based on a facility's SIC Code.

than IMP 502 and the performance of any BMPs currently employed to control storm water quality cannot be evaluated. However, the performance of BMPs will be evaluated under the terms and conditions of the NPDES permit with the use of benchmark values based on EPA's Multi-Sector General Permit (MSGP).

EPA's MSGP is the federal equivalent of DEP's PAG-03 General Permit. EPA uses benchmark monitoring in the MSGP as an indicator of the effectiveness of a facility's BMPs. DEP uses benchmark values for the same purpose. Benchmark values of 100 mg/L for TSS, 5.0 mg/L for oil and grease, 1.5 mg/L for iron, and pH benchmarks of 6.0 minimum and 9.0 maximum will be listed in the permit based, in part, on EPA's MSGP benchmark values (see **Attachment A** to this Fact Sheet). The 5.0 mg/L benchmark value for oil and grease is based on DEP's minimum target quantitation limit for oil and grease because oil and grease generally should not be present in storm water that does not require treatment. The 1.5 mg/L benchmark value for iron is the Department's most stringent water quality criterion for total iron.

The benchmark values are not effluent limitations and exceedances do not constitute permit violations. However, if sampling demonstrates exceedances of benchmark values for two consecutive monitoring periods, AESC must submit a corrective action plan within 90 days of the end of the monitoring period triggering the plan. Failure to submit a corrective action plan when required will be a violation of the permit. The corrective action plan requirement and the benchmark values will be specified in a condition in Part C of the permit.

Anti-backsliding

TBELs and effluent standards for temperature, chromium, zinc, free available chlorine, total residual chlorine, and pH based partly on the requirements of 40 CFR Part 423 – Steam Electric Power Generating Point Source Category Effluent Limitations Guidelines will be removed from Outfall 002 pursuant to the exception to anti-backsliding given by 40 CFR § 122.44(l)(2)(i)(A):

> (l)(2)(i) Exceptions—A permit with respect to which paragraph (l)(2) of this section applies may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant, if—
>
> > (A) Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation;

The material and substantial alterations to the facility include deactivation of the power plant, the elimination of federally regulated wastewater discharges, and the elimination of heated wastewater discharges that previously supported the imposition of effluent limits for temperature, chromium, zinc, free available chlorine, total residual chlorine, and pH.

002.B. Water Quality-Based Effluent Limitations (WQBELs)

Pursuant to DEP's explanation in Section 502.B of this Fact Sheet, no modeling is performed for Outfall 002's storm water discharges.

Even though no mathematical modeling is performed, conditions in Part C of the permit will ensure compliance with water quality standards through a combination of BMPs including pollution prevention and exposure minimization, good housekeeping, erosion and sediment control, and spill prevention and response.

002.C. Effluent Limitations and Monitoring Requirements for Outfall 002

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61, effluent limits at Outfall 002 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized in the following table.

Table 4. Effluent Limits and Monitoring Requirements for Outfall 002

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	25 Pa. Code § 92a.61(d)(1)
Total Suspended Solids	—	—	—	Report	—	PAG-03, Appendix H; 25 Pa. Code § 92a.61
Oil and Grease	—	—	—	Report	—	
Iron, Total	—	—	—	Report	—	
pH (s.u.)	—	—	—	Report	—	

The sampling frequency and type for all parameters will be 1/6 months grab samples as established in Appendix H of the PAG-03 General Permit on which the monitoring requirements are based. Flow should be estimated at the time of sampling.

Sampling at Outfall 002 will be required only if discharges include storm water contributions from the cooling tower basins, the coal pile settling basins, and neutralization basin. Otherwise, Outfall 002 should only discharge "uncontaminated" storm water from IMP 502 for which no monitoring requirements are imposed.

Development of Effluent Limitations

Outfall No. 004 **Design Flow (MGD)** Variable
Latitude 39° 51' 38.0" **Longitude** -79° 55' 37.0"
Wastewater Description: Emergency overflows of storm water from the former Coal Pile Settling Chamber No. 1

Outfall 004 has the potential to discharge storm water from Coal Pile Settling Chamber No. 1 as an emergency overflow. However, as with Coal Pile Settling Chamber No. 1 (former IMP 302), all process wastewater discharges have ceased. AESC explained on the application as follows:

> Although the actual coal pile has long since been removed, its former acreage still produces stormwater. This stormwater continues to flow to the Coal Pile Settling Chamber, from which it continues to be forwarded to the Ash Settling Basin system, then back out to the Process Wastewater Lagoons. Accumulated sediments were excavated from each of these components following station decommissioning. Under normal operations the wastewater lagoons were operated in an alternating pattern, one in service while the other was dewatered and excavated. Following deactivation, with very low sediment loading, only one lagoon has been used and the other sits empty. Two points of potential chemical addition remain: Soda Ash is staged at the Number 2 (former) Coal Pile Settling Chamber and at the Ash Settling Basin. Neither are used or necessary with any consistency, but rather, simply maintained readily available to ensure continued compliance.

Existing effluent limits and monitoring requirements for Outfall 004 are summarized in the table below.

Table 5. Existing Effluent Limits and Monitoring Requirements for Outfall 004

Parameter	Mass (pounds)		Concentration (mg/L)			Sampling Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum		
Flow (MGD)	Report	Report	—	—	—	1/discharge	Estimate
Total Suspended Solids	—	—	—	—	50.0	1/discharge	Grab
pH (s.u.)	—	—	6.0 (Min)	—	9.0 (Max)	1/discharge	Grab

004.A. Technology-Based Effluent Limitations (TBELs)

Since the coal pile was eliminated, any storm water runoff that collects in the Coal Pile Settling Chambers from the former coal pile area is not coal pile runoff and is not subject to the 50 mg/L instantaneous maximum limit for TSS or the minimum and maximum pH limits from 40 CFR Part 423. Therefore, pursuant to the exception to anti-backsliding given by 40 CFR § 122.44(l)(2)(i)(A) (regarding material and substantial alterations that justify less stringent limits), the TSS and pH limits at Outfall 004 will be removed from the permit.

AESC did not characterize storm water discharges from Outfall 004 as 'no exposure' and chemical addition is maintained at Coal Pile Settling Chamber No. 2 to treat the effluent (if necessary), which suggests that pollutants may be present in elevated/treatable concentrations. Therefore, consistent with 25 Pa. Code § 92a.61(h) and DEP's policy for permitting storm water discharges associated with industrial activities, minimum standards from Appendix H of the PAG-03 General Permit will be imposed at Outfall 004 (refer to Table 2 in this Fact Sheet).

AESC did not report any effluent results on the application for Outfall 004 and no discharges have been reported at Outfall 004 since at least September 2016. Therefore, no other technology-based requirements are imposed at Outfall 004. Discharges from Outfall 004 will be subject to the benchmark monitoring requirements described in Section 002.B of this Fact Sheet.

004.B. Water Quality-Based Effluent Limitations (WQBELs)

Pursuant to DEP's explanation in Section 502.B of this Fact Sheet, no modeling is performed for Outfall 004's storm water discharges. In addition to elevated stream flow conditions that provide additional assimilative capacity, DEP further observes that no discharges have been reported from Outfall 004 in at least the last five years. An outfall that rarely discharges and that—as an emergency overflow—is expected to discharge only during elevated stream flow conditions does not exhibit a reasonable potential to cause or contribute to excursions above water quality criteria.

Even though no mathematical modeling is performed, conditions in Part C of the permit will ensure compliance with water quality standards through a combination of best management practices including pollution prevention and exposure minimization, good housekeeping, erosion and sediment control, and spill prevention and response.

004.C. Effluent Limitations and Monitoring Requirements for Outfall 004

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61, effluent limits at Outfall 004 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized in the following table.

Table 6. Effluent Limits and Monitoring Requirements for Outfall 004

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	25 Pa. Code § 92a.61(d)(1)
Total Suspended Solids	—	—	—	Report	—	PAG-03, Appendix H; 25 Pa. Code § 92a.61
Oil and Grease	—	—	—	Report	—	
Iron, Total	—	—	—	Report	—	
pH (s.u.)	—	—	—	Report	—	

As an emergency overflow that discharges infrequently, the sampling frequency and type for all parameters will be 1/discharge grab samples. Flow should be estimated at the time of sampling.

Development of Effluent Limitations

Outfall No. 006 **Design Flow (MGD)** Variable
Latitude 39° 51' 49.0" **Longitude** -79° 55' 49.0"
Wastewater Description: Storm water pumped to and treated by the former Process Wastewater Treatment Lagoons

While operating, coal pile runoff was collected in three sumps, transferred to the Ash Settling Basin Collection Channel where it mixed with various in-plant wastewater sources (chemical and non-chemical metal cleaning wastewaters and low volume waste sources), flowing then to the Ash Settling Basin, then on to the Neutralization Basin, before being forwarded via pipeline to the Station's Process Wastewater Treatment Lagoons. Water treatment chemicals were added at various points. The FGD wastewater system effluent (former IMP 306) joined the discharge of the lagoon system (former IMP 206) before the final discharge at Outfall 006. Since decommissioning, there are no longer any process wastewater discharges. IMP 206 discharges storm water pumped to and treated by one of the lagoons. The storm water sources include runoff from yard drains in the cooling tower area, runoff from the ash silo area, runoff from the former coal pile area, and station storm water drains collected in drainage sump no. 2. No contributions from IMP 306 remain.

Since the wastewaters monitored at IMP 206 and Outfall 006 are now the same given that IMP 206 is the sole contributor to Outfall 006, IMP 206 is unnecessary and will be removed from the permit. If AESC intended to maintain IMP 206 as the sampling point for Outfall 006's wastewaters—a sampling point located upstream of the outfall itself—the sampling location for Outfall 006 can be identified in the permit as a point upstream of Outfall 006.

Table 7. Existing Effluent Limits and Monitoring Requirements for Outfall 006

Parameter	Mass (pounds)		Concentration (mg/L)			Sampling Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum		
Flow (MGD)	Report	Report	—	—	—	Continuous	Measured
Total Suspended Solids	—	—	30.0	100.0	—	1/week	24-Hr. Comp.
Total Dissolved Solids	—	—	Report	Report	—	1/week	24-Hr. Comp.
Oil and Grease	—	—	15.0	20.0	30.0	1/week	Grab
Cadmium, Total	—	—	0.021	0.042	—	1/week	24-Hr. Comp.
Mercury, Total	—	—	0.004	0.008	—	1/week	Grab
Selenium, Total	—	—	0.4	0.8	—	1/week	24-Hr. Comp.
Sulfate, Total	—	—	950.0	—	—	1/week	24-Hr. Comp.
Thallium, Total	—	—	0.019	0.038	—	1/week	24-Hr. Comp.
pH (s.u.)	—	—	6.0 (Min)	—	9.0 (Max)	1/week	Grab

Table 8. Existing Effluent Limits and Monitoring Requirements for IMP 206

Parameter	Mass (pounds)		Concentration (mg/L)			Sampling Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum		
Flow (MGD)	Report	Report	—	—	—	Continuous	Measured
Total Suspended Solids	—	—	30.0	100.0	—	1/week	24-Hr. Comp.
Oil and Grease	—	—	15.0	20.0	—	1/week	Grab
Cadmium, Total	—	—	Report	Report	—	1/week	Grab
Mercury, Total	—	—	Report	Report	—	1/week	Grab
Selenium, Total	—	—	Report	Report	—	1/week	Grab
Thallium, Total	—	—	Report	Report	—	1/week	Grab
pH (s.u.)	—	—	6.0 (Min)	—	9.0 (Max)	1/week	Grab

006.A. Technology-Based Effluent Limitations (TBELs)

Since process wastewaters discharging through Outfall 006 were eliminated, TBELs for TSS, oil and grease, and pH previously imposed at Outfall 006 based on 40 CFR Part 423 – Steam Electric Power Generating Point Source Category Effluent Limitations Guidelines do not apply. The TBELs will be removed from Outfall 006 pursuant to 40 CFR § 122.44(l)(2)(i)(A) regarding material and substantial changes that justify the application of less stringent limits.

AESC did not characterize storm water discharges through IMP 206 as 'no exposure' and chemical addition is maintained at Coal Pile Settling Chamber No. 2 and the Ash Settling Basin (both structures contributing to discharges through Outfall 006) to treat the effluent (if necessary), which suggests that pollutants may be present in elevated concentrations. Therefore, consistent with 25 Pa. Code § 92a.61(h) and DEP's policy for permitting storm water discharges associated with industrial activities, minimum standards from Appendix H of the PAG-03 General Permit will be imposed at Outfall 006 (refer to Table 2 in this Fact Sheet).

AESC provided analytical data for discharges through IMP 206 (representing Outfall 006) to supplement DMR data. No pollutants were present in elevated concentrations that would indicate a failure of BMPs. Therefore, no other technology-based requirements are imposed at Outfall 006.

006.B. Water Quality-Based Effluent Limitations (WQBELs)

WQBELs and monitoring requirements for cadmium, mercury, selenium, sulfate, and thallium will be removed from Outfall 006 pursuant to Section 303(d)(4)(B) of the Clean Water Act, which states:

> (B) STANDARD ATTAINED.—For waters identified under paragraph (1)(A) where the quality of such waters equals or exceeds levels necessary to protect the designated use for such waters or otherwise required by applicable water quality standard, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section, or any water quality standard established under this section, or any other permitting standard may be revised only if such revision is subject to and consistent with the antidegradation policy established under this section.

The Monongahela River is attaining its designated uses in the vicinity of the former HFPS. DMR data show that cadmium, mercury, selenium, and thallium were rarely detected in the effluent over the last five years or were otherwise detected in low concentrations. Sulfate concentrations averaged less than half of the 950 mg/L limit. Those results are consistent with AESC's elimination of process wastewaters, which were the primary sources of pollutants in the discharges. Since the discharges no longer exhibit a reasonable potential to cause or contribute to excursions above water quality criteria, no degradation of the Monongahela River is expected from removal of the WQBELs. Therefore, backsliding from those limits is consistent with DEP's antidegradation policies and is allowable under § 303(d)(4)(B) of the Clean Water Act.

All that remains at Outfall 006 is storm water. Pursuant to DEP's explanation in Section 502.B of this Fact Sheet, no modeling is performed for Outfall 006's storm water discharges.

Even though no mathematical modeling is performed, conditions in Part C of the permit will ensure compliance with water quality standards through a combination of best management practices including pollution prevention and exposure minimization, good housekeeping, erosion and sediment control, and spill prevention and response.

006.C. Effluent Limitations and Monitoring Requirements for Outfall 006

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61, effluent limits at Outfall 006 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized in the following table.

Table 9. Effluent Limits and Monitoring Requirements for Outfall 006

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	25 Pa. Code § 92a.61(d)(1)
Total Suspended Solids	—	—	—	Report	—	PAG-03, Appendix H; 25 Pa. Code § 92a.61
Oil and Grease	—	—	—	Report	—	
Iron, Total	—	—	—	Report	—	
pH (s.u.)	—	—	—	Report	—	

The sampling frequency and type for all parameters will be 1/6 months grab samples as established in Appendix H of the PAG-03 General Permit on which the monitoring requirements are based. Flow should be estimated at the time of sampling.

Development of Effluent Limitations

Outfall No. 010 **Design Flow (MGD)** Variable
Latitude 39° 51' 13.0" **Longitude** -79° 55' 40.0"
Wastewater Description: Storm water runoff from a gravel parking area and a hillside area

Outfall 010 discharges storm water runoff from the same areas as those currently permitted. The effluent limits currently imposed as Outfall 010 are summarized in the table below.

Table 10. Existing Monitoring Requirements for Outfall 010

Parameter	Mass (pounds)		Concentration (mg/L)			Sampling Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum		
Total Suspended Solids	—	—	—	Report	—	1/month	Grab
Oil and Grease	—	—	—	Report	—	1/month	Grab
Aluminum, Total	—	—	—	Report	—	1/month	Grab
Iron, Total	—	—	—	Report	—	1/month	Grab
Manganese, Total	—	—	—	Report	—	1/month	Grab
pH (s.u.)	—	—	Report (Min)	—	Report (Max)	1/month	Grab

010.A. Technology-Based Effluent Limitations (TBELs)

AESC did not characterize storm water discharges from Outfall 010 as 'no exposure'. Therefore, consistent with 25 Pa. Code § 92a.61(h) and DEP's policy for permitting storm water discharges associated with industrial activities, minimum standards from Appendix H of the PAG-03 General Permit will be imposed at Outfall 010 (refer to Table 2 in this Fact Sheet).

Outfall 010 is already subject to monitoring requirements for the parameters in Appendix H of the PAG-03. Reporting requirements for aluminum and manganese were added to Outfall 010 due to the presence of those metals in elevated concentrations.

Based on DMR data and the exception to anti-backsliding given by 40 CFR § 122.44(l)(2)(i)(B) regarding new information that justifies the application of less stringent limits, monitoring requirements and monitoring frequencies are relaxed to those in Appendix H of the PAG-03. All pollutants have been reported in low concentrations, including the additional pollutants analyzed for the application (see Table 11 below). The relaxed requirements eliminate aluminum and manganese reporting and require samples for the remaining parameters to be collected once every six months.

Even though DMR data shows that the Appendix H parameters' concentrations are low, baseline monitoring for those pollutants will remain in effect to evaluate BMP effectiveness.

Table 11. Storm Water Analytical Results for Outfall 010

Parameter	Maximum (mg/L)	No Exposure Thresholds (mg/L)	MSGP Benchmarks (mg/L)
Oil and Grease	<5.0	≤ 5.0	N/A
BOD_5	<3.0	≤ 10.0	30
COD	<10	≤ 30.0	120
TSS	2	≤ 30.0	100
Total Nitrogen	<1.2	≤ 2.0 (Tot. N)	N/A
Total Phosphorus	<0.01	≤ 1.0	2.0
pH (s.u.)	8.25	6.0 – 9.0 s.u.	6.0 – 9.0 s.u.
Total Dissolved Solids	482	<500†	N/A
Sulfate	189	<250†	N/A
Aluminum	0.0202	<0.75†	N/A
Boron	<0.200	1600†	N/A
Chromium	<0.0040	<0.010†	N/A

Table 11 (cont'd). Storm Water Analytical Results for Outfall 010

Parameter	Maximum (mg/L)	No Exposure Thresholds (mg/L)	MSGP Benchmarks (mg/L)
Copper	<0.0040	0.009†	5.19
Iron	<0.050	<1.50†	1.0
Manganese	<0.0020	<1.0†	N/A
Selenium, Total	<0.0050	0.0046	0.0031
TOC	2.9	N/A	N/A

† Most stringent water quality criterion in 25 Pa. Code Chapter 93. Hardness-dependent criteria are shown based on a hardness of 100 mg/L.

Since all storm water concentrations are low, no TBELs are considered. However, Outfall 010 will be subject to the benchmark monitoring requirements described in Section 002.B of this Fact Sheet.

010.B. Water Quality-Based Effluent Limitations (WQBELs)

Pursuant to DEP's explanation in Section 502.B of this Fact Sheet, no modeling is performed for Outfall 010's storm water discharges.

In addition to elevated stream flow conditions that provide additional assimilative capacity,

Additionally, even if Outfall 010's storm water discharge was modeled, the reported pollutants concentrations are less than the most stringent water quality criteria and consequently to not exhibit a reasonable potential to cause or contribute to excursions above water quality criteria. Aluminum, iron, and manganese have five-year average concentrations of 0.07 mg/L, 0.1 mg/L, and 0.008 mg/L, respectively. The five-year maximum concentrations of those metals are 0.394 mg/L, 0.667 mg/L, and 0.0406 mg/L, respectively. All those concentrations are less than corresponding water quality criteria: 0.75 mg/L for aluminum; 1.5 mg/L for iron; and 1.0 mg/L for manganese.

Even though no mathematical modeling is performed, conditions in Part C of the permit will ensure compliance with water quality standards through a combination of best management practices including pollution prevention and exposure minimization, good housekeeping, erosion and sediment control, and spill prevention and response.

010.C. Effluent Limitations and Monitoring Requirements for Outfall 010

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61, effluent limits at Outfall 010 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized in the following table.

Table 12. Effluent Limits and Monitoring Requirements for Outfall 010

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	25 Pa. Code § 92a.61(d)(1)
Total Suspended Solids	—	—	—	Report	—	PAG-03, Appendix H; 25 Pa. Code § 92a.61
Oil and Grease	—	—	—	Report	—	
Iron, Total	—	—	—	Report	—	
pH (s.u.)	—	—	—	Report	—	

The sampling frequency and type for all parameters will be 1/6 months grab samples as established in Appendix H of the PAG-03 General Permit on which the monitoring requirements are based. Flow should be estimated at the time of sampling.

Development of Effluent Limitations

Outfall No. 013 **Design Flow (MGD)** Variable
Latitude 39° 51' 13.0" **Longitude** -79° 55' 40.0"
Wastewater Description: Storm water runoff from a gravel parking area and a hillside area

Outfall 013 discharges storm water runoff from the same areas as those currently permitted.

Table 13. Existing Monitoring Requirements for Outfall 013

Parameter	Mass (pounds)		Concentration (mg/L)			Sampling Frequency	Sample Type
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum		
Total Suspended Solids	—	—	—	Report	—	1/month	Grab
Oil and Grease	—	—	—	Report	—	1/month	Grab
Aluminum, Total	—	—	—	Report	—	1/month	Grab
Iron, Total	—	—	—	Report	—	1/month	Grab
Manganese, Total	—	—	—	Report	—	1/month	Grab
pH (s.u.)	—	—	Report (Min)	—	Report (Max)	1/month	Grab

013.A. Technology-Based Effluent Limitations (TBELs)

AESC did not characterize storm water discharges from Outfall 013 as 'no exposure'. Therefore, consistent with 25 Pa. Code § 92a.61(h) and DEP's policy for permitting storm water discharges associated with industrial activities, minimum standards from Appendix H of the PAG-03 General Permit will be imposed at Outfall 013 (refer to Table 2 in this Fact Sheet).

Outfall 013 is already subject to monitoring requirements for the parameters in Appendix H of the PAG-03. Reporting requirements for aluminum and manganese were added to Outfall 013 due to the presence of those metals in elevated concentrations.

Based on DMR data and the exception to anti-backsliding given by 40 CFR § 122.44(l)(2)(i)(B) regarding new information that justifies the application of less stringent limits, monitoring requirements and monitoring frequencies are relaxed to those in Appendix H of the PAG-03. All pollutants have been reported in low concentrations, including the additional pollutants analyzed for the application (see Table 14 below). The relaxed requirements eliminate aluminum and manganese reporting and require samples for the remaining parameters to be collected once every six months.

Even though DMR data shows that the Appendix H parameters' concentrations are low, baseline monitoring for those pollutants will remain in effect to evaluate BMP effectiveness.

Table 14. Storm Water Analytical Results for Outfall 014

Parameter	Maximum (mg/L)	No Exposure Thresholds (mg/L)	MSGP Benchmarks (mg/L)
Oil and Grease	<5.0	≤ 5.0	N/A
BOD_5	<3.0	≤ 10.0	30
COD	<10	≤ 30.0	120
TSS	2	≤ 30.0	100
Total Nitrogen	<1.3	≤ 2.0 (Tot. N)	N/A
Total Phosphorus	0.0112	≤ 1.0	2.0
pH (s.u.)	7.47	6.0 – 9.0 s.u.	6.0 – 9.0 s.u.
Total Dissolved Solids	81	<500†	N/A
Sulfate	12.4	<250†	N/A
Aluminum	0.0309	<0.75†	N/A
Boron	<0.050	1600†	N/A
Chromium	<0.0040	<0.010†	N/A

Table 14 (cont'd). Storm Water Analytical Results for Outfall 013

Parameter	Maximum (mg/L)	No Exposure Thresholds (mg/L)	MSGP Benchmarks (mg/L)
Copper	<0.0040	0.009†	5.19
Iron	<0.050	<1.50†	1.0
Manganese	0.0022	<1.0†	N/A
Selenium, Total	<0.0050	0.0046	0.0031
TOC	2	N/A	N/A

† Most stringent water quality criterion in 25 Pa. Code Chapter 93. Hardness-dependent criteria are shown based on a hardness of 100 mg/L.

Since all storm water concentrations are low, no TBELs are considered. However, Outfall 013 will be subject to the benchmark monitoring requirements described in Section 002.B of this Fact Sheet.

013.B. Water Quality-Based Effluent Limitations (WQBELs)

As explained in Section 206.B of this Fact Sheet, DEP generally does not develop numeric WQBELs for storm water discharges. Pursuant to 25 Pa. Code § 96.4(g), mathematical modeling used to develop WQBELs must be performed at Q_{7-10} low-flow conditions. Precipitation-induced discharges generally do not occur at Q_{7-10} design conditions because the precipitation that causes storm water discharges also will increase the receiving stream's flow and that increased stream flow will provide additional assimilative capacity during a storm event.

Additionally, even if Outfall 010's storm water discharge was modeled, the reported pollutants concentrations are less than the most stringent water quality criteria and consequently to not exhibit a reasonable potential to cause or contribute to excursions above water quality criteria. Aluminum, iron, and manganese have five-year average concentrations of 0.07 mg/L, 0.1 mg/L, and 0.008 mg/L, respectively. The five-year maximum concentrations of those metals are 0.394 mg/L, 0.667 mg/L, and 0.0406 mg/L, respectively. All those concentrations are less than corresponding water quality criteria: 0.75 mg/L for aluminum; 1.5 mg/L for iron; and 1.0 mg/L for manganese.

Even though no mathematical modeling is performed, conditions in Part C of the permit will ensure compliance with water quality standards through a combination of best management practices including pollution prevention and exposure minimization, good housekeeping, erosion and sediment control, and spill prevention and response.

013.C. Effluent Limitations and Monitoring Requirements for Outfall 013

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61, effluent limits at Outfall 013 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized in the following table.

Table 15. Effluent Limits and Monitoring Requirements for Outfall 013

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	25 Pa. Code § 92a.61(d)(1)
Total Suspended Solids	—	—	—	Report	—	PAG-03, Appendix H; 25 Pa. Code § 92a.61
Oil and Grease	—	—	—	Report	—	
Iron, Total	—	—	—	Report	—	
pH (s.u.)	—	—	—	Report	—	

The sampling frequency and type for all parameters will be 1/6 months grab samples as established in Appendix H of the PAG-03 General Permit on which the monitoring requirements are based. Flow should be estimated at the time of sampling.

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
☐	Design Stream Flows, 391-2000-023, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other:

ATTACHMENT A

EPA 2015 Multi-Sector General Permit Benchmark Values

available acute ambient water quality criteria for priority toxic and non-priority pollutants in saltwater. These benchmark values reflect the toxicity of these metals in saline waters and replace the freshwater-based benchmark values in the 2008 permit. In some cases, the saltwater values represent significant changes in the benchmarks for facilities discharging into saline waters. The values for arsenic, copper, cyanide, and nickel are lowered by an order of magnitude. The values for cadmium and lead are increased by an order of magnitude, while the value for selenium is increased two orders of magnitude. Benchmark values for the other metals increase (mercury) or decrease (silver, and zinc) by smaller amounts.

The following table presents the permit's freshwater and saltwater benchmark values, and the source of those values. In most cases, EPA has not revised benchmarks since they were first published in the 1995 MSGP. However, eight of the ten benchmarks that were assigned the freshwater acute water quality criterion value as differentiated from the 2000 MSGP's value that was based on the method detection limit (MDL) (i.e., arsenic, cadmium, copper, cyanide, mercury, nickel, selenium, and silver) were lowered in the 2008 MSGP based on CWA section 302(a) EPA-recommended criteria. Excluding mercury and nickel, the benchmark values were changed from 3.18 times the MDL to the ambient acute water quality criteria value. Mercury and nickel benchmarks were revised based on EPA's updated acute aquatic life recommended criteria. In each case, at least one EPA-approved 40 CFR Part 136 analytical method exists with detection limits below these benchmark values.

MSGP Benchmark Values and Sources			
Pollutant	**MSGP Benchmark**	**MSGP Source**	**Different**
Aluminum (T) (pH 6.5 - 9)	00.75 mg/L	1	No
Beryllium (T)	0.13 mg/L	2	No
Iron (T)	1.0 mg/L	3	No
Biochemical Oxygen Demand (5 day)	30 mg/L	4	No
pH	6.0 – 9.0 s.u.	4	No
Chemical Oxygen Demand	120 mg/L	5	No
Total Phosphorus	2.0 mg/L	6	No
Total Suspended Solids	100 mg/L	7	No
Nitrate + Nitrite Nitrogen	0.68 mg/L	7	No
Magnesium (T)	0.064 mg/L	8	No
Turbidity	50 NTU	9	Yes
Antimony (T)	0.64 mg/L	12	No
Ammonia*	2.14 mg/L	13	No
Cadmium (T) Freshwater)† (Saltwater)	0.0021 mg/L 0.04 mg/L	1 14	Yes
Copper (T)* (Freshwater)† (Saltwater)	0.014 mg/L 0.0048 mg/L	1 14	Yes NA

MSGP Benchmark Values and Sources			
Pollutant	**MSGP Benchmark**	**MSGP Source**	**Different**
Cyanide (Freshwater) (Saltwater)	0.022 mg/L 0.001 mg/L	1 14	Yes
Mercury (T) (Freshwater) (Saltwater)	0.0014 mg/L 0.0018 mg/L	1 14	No; criteria updated^
Nickel (T) (Freshwater)† (Saltwater)	0.47 mg/L 0.074 mg/L	1 14	No; criteria updated^
Selenium (T)* (Freshwater) (Saltwater)	0.005 mg/L 0.29 mg/L	3 14	Yes
Silver (T)* (Freshwater)† (Saltwater)	0.0038 mg/L 0.0019 mg/L	1 14	Yes
Zinc (T) (Freshwater)† (Saltwater)	0.12 mg/L 0.09 mg/L	1 14	No; criteria updated^
Arsenic (T) (Freshwater) (Saltwater)	0.15 mg/L 0.069 mg/L	3 14	Yes NA
Lead (T)* Freshwater)† (Saltwater)	0.082 mg/L 0.21 mg/L	3 14	No

(T) Total recoverable

* New criteria are currently under development, but values are based on existing criteria.

† These pollutants are dependent on water hardness where discharged into freshwaters. The freshwater benchmark value listed is based on a hardness of 100 mg/L. When a facility analyzes receiving water samples for hardness, the permittee must use the hardness ranges provided in Table 1 in Appendix J of the 2015 MSGP and in the appropriate tables in Part 8 of the 2015 MSGP to determine applicable benchmark values for that facility. Benchmark values for discharges of these pollutants into saline waters are not dependent on receiving water hardness and do not need to be adjusted.

^ The values for these pollutants do not have a new basis. They are still based on the water quality criteria, but the "National Recommended Water Quality Criteria" was updated in 2002.

Sources:

1. "National Recommended Water Quality Criteria." Acute Aquatic Life Freshwater (EPA-822-F-04-010 2006-CMC)
2. "EPA Recommended Ambient Water Quality Criteria for Beryllium." LOEL Acute Freshwater (EPA-440-5-80-024 October 1980)
3. "National Recommended Water Quality Criteria." Chronic Aquatic Life Freshwater (EPA-822-F-04-010 2006-CCC)
4. Secondary Treatment Regulations (40 CFR 133)
5. Factor of 4 times BOD5 (5 day biochemical oxygen demand) concentration - North Carolina Benchmark
6. North Carolina stormwater Benchmark derived from NC Water Quality Standards
7. National Urban Runoff Program (NURP) median concentration
8. Minimum Level (ML) based upon highest Method Detection Limit (MDL) times a factor of 3.18

ATTACHMENT B

Demolition and Site Redevelopment Plan for the Hatfield's Ferry Power Station

Decker, Ryan

From: Cannon, William E <wcannon@firstenergycorp.com>
Sent: Monday, June 6, 2022 10:00 AM
To: Decker, Ryan
Cc: Fifth, Michael
Subject: [External] Hatfield's Ferry Demo and NPDES Permit
Attachments: Hatfield Demo - NPDES PAG-02 General Permit Application_2022-06-02 REDUCED.pdf

Follow Up Flag: Follow up
Flag Status: Completed

ATTENTION: This email message is from an external sender. Do not open links or attachments from unknown sources. To report suspicious email, forward the message as an attachment to CWOPA_SPAM@pa.gov.

Ryan,

Our last communication relative to Allegheny Energy Supply Company, LLC's (AESC) Hatfield's Ferry Power Station (Station) , NPDES Permit No. PA0002941 was on March 29, 2021. At that time I was able to inform you that North American Dismantling Corporation (NADC) had been contracted to demolish the Station and associated structures, with all work to be completed prior to March 1, 2024. I was also able to inform you of plans for Shallenberger Construction to remove and process the remaining coal fines/soils mixture from the former coal yard area.

At that time I was able to inform you that TetraTech had been contracted to prepare the site redevelopment plan. That plan has now been completed and a PAG-02 application submitted to the Greene County Conservation District (GCCD) on June 2nd. A courtesy reference copy of that application has been provided as an attachment. The Project Description appears on Page 83 of 116. Plan drawings start on Page 100 of 116.

Summarizing, asset removal and the deconstruction of structures is ongoing. However, no earth disturbances will occur prior to issuance of the PAG-02 (outside of the coal yard area, the drainage of which is fully controlled and monitored under the current NPDES permit). By the completion of the project the coal yard area will have been cleared, covered with topsoil, graded, vegetated, and all current industrial stormwater drainageways and sumps will have been removed. That approximately 34 acres will thereafter sheet flow to the Monongahela River at a minimum 0.5% slope.

Essentially all Station structures will be removed to a minimum of 2 feet below grade, filled with processed concrete clean fill (max 12" size), covered and vegetated. Although the current permit has quite a few outfalls which have been monthly reported as no flow since Station closure in 2013, Outfalls 002 (monitored at 502), 004, 010 and 013 continue to be monitored. By completion of the project all of these will have been sealed and eliminated. Certain existing paved areas and roadways will remain but all disturbed areas will be returned to meadow and will sheet flow toward the river. There will be a significant decrease in impervious area. Post construction stormwater management structures will be neither appropriate nor required. As work progresses inlets are and will continue to be protected by "witches hats", filter socks, and, as appropriate, pumped water filter bags. Monitoring of these outfalls continues per the current permit conditions.

The PAG-02 application as submitted June 2nd describes each of the actions above. What it does not describe is the elimination of Outfall 006. Simply put, the former coal yard and all other sumps currently drain to the former concrete ash settling/neutralization basin at the Station before being forwarded via pipeline to the process wastewater lagoons. As site restoration progresses and all of these sumps are removed, eventually the above-ground forwarding pipeline will also be removed. What will remain are the two lagoons. The ash settling basin and both lagoons were fully cleaned following station closure. One lagoon has sat empty since that time. Stormwater (only) has been forwarded to

the other. Because the volume of stormwater has been so significantly reduced compared to the stormwater/process water mix these lagoons received during Station operation, since closure, discharges from the one active lagoon have been forced to occur, with compliance samples collected, typically only one or two days per month.

AESC and its contractor NADC are currently investigating the option of breaching these lagoons. This would likely involve eliminating the internal berm between the lagoons, then reducing or eliminating the outer embankment of the river-side lagoon. The materials generated by this earthwork would be used to create an approximately 0.5% slope toward the Monongahela River. Drainage from this area would occur as sheet flow, either through a relatively wide breached area, or perhaps even along the entire approximately 400 foot length of the lagoon. Slope protection would be provided as appropriate and in a manner such that no work would be needed below the applicable 793-foot 100-year floodplain elevation. The lagoon discharge structures and Outfall 006 would be sealed and/or eliminated.

If it is concluded that the lagoons will not be breached, then obviously the Station portion of the greater property will continue to need an NPDES permit for Outfall 006, albeit one in which there is little more than a minor *potential* of a discharge. If the lagoons are to be "eliminated", there should no longer be any reason to continue an NPDES permit for the Station and it could be surrendered. In conversation with the GCCD, should we choose to eliminate Outfall 006, we should be able to apply for a modification of the current PAG-02 application (or eventual permit) to incorporate that additional work.

The question then becomes how to proceed relative to the existing and pending PA0002941 as AESC and its demolition contractor NADC work through this period. Both AESC and Energy Harbor would like to see the Station and landfill permits fully separated as can only occur upon a simultaneous issuance/reissuance of both. During a recent pre-application meeting with GCCD, I explained these circumstances to Permits Manager Zach Basinger and Agency Director Lisa Snyder, including that, upon submission of the PAG-02 application, my intent to was bring you up to date and to further discussion as to how we should each proceed. Director Snyder indicated a desire that GCCD be a participant in any upcoming meeting between Clean Water and AESC. To that end I ask the following: Upon consideration of today's update, please provide a short list of available dates and times when I may schedule a Teams call to include yourself (and other Department personnel you may deem appropriate), AESC, GCCD, and TetraTech, the Plan developer. Please, too, provide a suggestion as to meeting length based upon your assessment of the topics you feel needing discussion. Of course, by all means, feel free to give me a call should you have any preliminary questions you may wish to discuss prior to a scheduled meeting of the combined audience.

I appreciate your time, consideration, and assistance regarding this matter. Thanks,

FirstEnergy

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