pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0002895**
Facility Type	**Storm Water**	APS ID	**563641**
Major / Minor	**Minor**	Authorization ID	**1264173**

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

Applicant and Facility Information

Applicant Name	**Allegheny Energy Supply Co. LLC**	Facility Name	**Mitchell Power Station**
Applicant Address	341 White Pond Drive	Facility Address	50 Electric Way
	Akron, OH 44320		Courtney, PA 15067
Applicant Contact	William Cannon	Facility Contact	Same as Applicant
Applicant Phone	(724) 838-6018	Facility Phone	Same as Applicant
Client ID	95418	Site ID	260402
SIC Code	4911	Municipality	Union Township
SIC Description	Trans. & Utilities - Electric Services	County	Washington
Date Application Received	August 1, 1996	EPA Waived?	No
Date Application Accepted	August 1, 1996	If No, Reason	Former Major Facility

Purpose of Application: NPDES renewal permit coverage

Summary of Review

The Department received an updated renewal NPDES permit application from Allegheny Energy Supply Co. LLC for its Mitchell Power Station on December 8, 2017. The Current NPDES permit has been administratively extended since 1996. The current permit includes two ash disposal sites that are being split from the renewed permit and being covered by their own permits. The Mitchell Power Station is a decommissioned coal and oil-fired electric generating station with an SIC code of 4911 (Electric Services) and an NAICS Code of 221112 (Fossil Fuel Electric Power Generation). The Permit is being rerated, changing the facility type from a Major Industrial Waste Facility to an Industrial Waste Stormwater Facility.

The Mitchell Power Station decommissioned on October 9, 2013. When the power station was active the scrubber sludge and collected ash were conveyed to the Mitchell FGD Landfill (PA0255335) and the Mingo Landfill (PA0255343). The current permit covers the discharges from the corresponding coal ash landfills, but these discharges are being removed from this permit to be covered by their own permits. The current permit covers the discharge of treated process wastewater, sewage, stormwater, coal ash disposal area leachate, untreated non-contact cooling water, and intake screen backwash. Since the decommission of the power station in 2013, the only remaining discharge from the site is stormwater. Two cooling water intake structures located on the Monongahela River have been disabled and are no longer capable of withdrawal.

The remaining site has 14 stormwater outfalls that discharge to either the Monongahela River, designated in 25 PA Code Chapter 93 as a Warm Water Fishery; or to the Courtney Municipal Separate Storm Sewer System, which then discharges to the Monongahela River.

Outfall 001 previously discharged cooling water but now consist only of stormwater from roof drains and paved road way.

Outfall 002 discharges roof and road area stormwater runoff.

Approve	Deny	Signatures	Date
X		Adam Olesnanik / Environmental Engineering Specialist	2-12-20
✓		Michael E. Fifth / Environmental Engineer Manager	2/13/2020

Summary of Review

Outfall 003 previously discharged intake screen backwash and limited stormwater but now discharges stormwater only from the riverside deck area.

Outfall 004 previously consisted of discharges from the wastewater treatment lagoons, but the discharge now consists entirely of collected stormwater treated by the lagoon system. The two treatment lagoons, which are plumbed in series, served to treat “coal pile runoff, service water, metal cleaning wastewater, low volume waste, and transport water. Water treatment chemicals are no longer used. All sediments were dredged from these lagoons in conjunction with the station closure. Current sediment loads are very low. As such, the remaining life of these lagoons prior to the next cleaning should be evaluated. Outfall 004 currently receives the collected stormwater runoff from the sump serving the former power station coal pile area and IMPs 016, 021, 022, 023, 024 and 025. However, as described below, Outfall 004 will no longer receive this discharge.

Outfall 008 is an emergency overflow discharge point for the sump serving the former power station coal pile area and stormwater from IMPs 016, 021, 022, 023, 024 and 025. This sump pumps the collected water to the treatment lagoon before discharging to the Monongahela River via Outfall 004. However, based on Allegheny Energy’s proposal, instead of pumping the collected stormwater to the treatment lagoons, Outfall 008 will discharge the collected stormwater directly to the Monongahela River and no longer be an emergency overflow discharge outfall. There will be no monitoring requirements at the IMPs that go to Outfall 008, as all the discharges to Outfall 008 are stormwater. These IMPs were originally new stormwater outfalls from an amendment application but the permit was never modified to reflect this change. These outfalls were later re-routed to the sump and became internal monitoring points.

Outfall 010 discharges the combined flows of the landfill Outfall 007 unnamed tributary and paved surface stormwater runoff area around the station’s lagoons.

Outfall 011 discharges stormwater from the paved area surrounding the former coal unloading area.

Outfall 013 discharges stormwater from the area near the lime silo into the Courtney MS4.

Outfall 014 discharges stormwater from roof drains into the Courtney MS4.

Outfall 015 discharges stormwater from the lime silo area.

Outfall 017 discharges stormwater from parking and plant areas.

Outfall 019 was previously the stormwater emergency overflow from the aboveground storage tanks secondary containment areas via oil/water separator, but this discharge has been eliminated. Outfall 019 now serves to direct off-site runoff under the station property to the Monongahela River.

Outfall 020 consist of substation area stormwater discharge to the Courtney MS4.

Multiple outfalls and IMPs have been removed, eliminated, or decommissioned due to no flow being produced and will not be included in the Draft permit. Outfalls 006 and 007 consist of landfill leachate and have been removed from the permit and will be covered by separate permits. Outfall 005 was sewage discharge from the site but has been eliminated. Outfall 012 was the discharge of stormwater from the area of the former truck scale but no longer exist and was sealed prior to station closure. IMP 101 and 201 discharged boiler blowdown and has been removed. IMP 102 was an emergency overflow for the neutralization basin and has been eliminated. IMP 104 consisted of discharges from an impoundment tank that consisted of metal cleaning wastes has been eliminated. IMP 111, 121, 301, 401, 501, 701, 801, and 901 consisted of non-contact cooling water and has been eliminated. IMP 601 consisted of solely stormwater to Outfall 001 but has been removed. IMP 131 in the current permit is a typographical error and should be IMP 141. IMP 141 has been removed because Outfall 001only receives stormwater; therefore, there is no need to have an internal monitoring point for this outfall.

For monitoring purposes, five representative outfalls will be used to sample the stormwater discharges from the site; Outfalls 001, 004, 008, 013, and 020. Outfall 001 will represent the outfalls the discharge stormwater from rooftops and paved areas; Outfalls 002, 003, 010 and 017. Outfall 004 will not represent any other outfalls. Outfall 008 will represent the outfalls that discharge stormwater from the former coal pile runoff basin; Outfall 011. Outfall 013 will represent the outfalls that discharge stormwater from the former lime silo area; Outfalls 014 and 015. Outfall 020 will represent Outfall 019

Public Participation

Summary of Review
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.	001 – 004, 008, 010, 011, 013 - 015, 017, 019 and 020	Design Flow (MGD)	0
Latitude	Varied, see Table 1	Longitude	Varied, see Table 1
Quad Name	Monongahela	Quad Code	1706
Wastewater Description:	Stormwater		
Receiving Waters	Monongahela River	Stream Code	37185
NHD Com ID	99409154	RMI	Varied, see Table 1
Drainage Area	5,320	Yield (cfs/mi^2)	0.103
Q_{7-10} Flow (cfs)	550	Q_{7-10} Basis	U.S Army Corp of Engineers
Elevation (ft)	727	Slope (ft/ft)	0.0001
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	PCB		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	PA American Water Co-Pittsburgh		
PWS Waters	Monongahela River	Flow at Intake (cfs)	550
PWS RMI	25.5	Distance from Outfall (mi)	3.63

Table 1: Outfall Locations

Outfalls	Latitude	Longitude	RMI
001	40º 13' 21"	-79º 58'09"	29.37
002	40º 13' 15"	-79º 58' 02"	29.51
003	40º 13' 20"	-79º 58' 07"	29.4
004	40º 13' 34"	-79º 58' 18"	29.13
008	40º 13' 12"	-79º 57' 58"	29.5
010	40º 13' 24"	-79º 58' 11"	29.5
011	40º 13' 04"	-79º 57' 52"	29.32
013	40º 13' 11"	-79º 58' 04"	29.5
014	40º 13' 12"	-79º 58' 03"	29.5
015	40º 13' 11"	-79º 58' 06"	29.5
017	40º 13' 22"	-79º 58' 09"	29.37
019	40º 13' 27"	-79º 58' 14"	29.26
020	40º 13' 14"	-79º 58' 09"	29.5

Other Comments:

USGS StreamStats report for the drainage area of the point on the Monongahela River where the Mitchell Power Station is discharging is in Attachment A.

Development of Effluent Limitations

Outfall No.	001 – 004, 008, 010, 011, 013 - 015, 017, 019 and 020	**Design Flow (MGD)**	0
Latitude	Varied, see Table 1	**Longitude**	Varied, see Table 1

Wastewater Description: Stormwater

Technology-Based Effluent limitations:

Outfalls 001 – 004, 008, 010 – 015, 017, 019 and 020 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because each outfall discharges stormwater. The SIC code for the site is 4911 (Steam Electric Generating Facilities) and corresponding appendix that would apply to the facility is Appendix H of the PAG-03. The proposed monitoring requirements are shown in Table 2 below.

Table 2: PAG-03 Appendix (H) Monitoring Requirements

Parameters	Mass (lb/day)		Concentration (mg/l)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX
Total Suspended Solids (TSS) (mg/L)	XXX	XXX	XXX	XXX	Report	XXX
Oil and Grease (mg/L)	XXX	XXX	XXX	XXX	Report	XXX
Total Iron (mg/L)	XXX	XXX	XXX	XXX	Report	XXX

Water Quality-Based Effluent limitations:

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharges from Outfalls 001 – 004, 008, 010, 011, 013 - 015, 017, 019 and 020 are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Anti-Backsliding

Effluent limits in the current permit will not be retained at Outfall 001 because the discharge type has changed to solely stormwater and no longer discharges process wastewater.

There are no effluent limits for Outfall 002 in the current permit. An internal monitoring point to Outfall 002 included effluent limitations and monitoring requirements, but this monitoring point has been removed. The discharge type at Outfall 002 has changed to solely stormwater and no longer discharges process wastewater

In the current permit Outfall 003 has monitoring requirements for the discharge flow because it was the intake screen backwash. The site no longer withdraws water; therefore, will no longer need to backwash the intake. The discharge type has changed to solely stormwater, so flow monitoring will not be imposed at Outfall 003.

Outfall 004 no longer receives process wastewater and only discharges stormwater. Allegheny Energy dredged the two wastewater treatment lagoons in conjunction with station closure, removing historical process wastewater sediment. The DMR data and the application analytical data show that the discharge from Outfall 004 is well below the current limits in the permit. Therefore, the current limits and monitoring requirement at this outfall have been removed. The effluent limits for Outfall 004 in the current permit are displayed below in Table 3.

Table 3: Current Effluent limitations at Outfall 004

Parameters	Mass (lb/day)		Concentration (mg/l)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Flow (mgd)	Report	Report	XXX	XXX	XXX	XXX
Total Suspended Solids (TSS) (mg/L)	201	671	XXX	30	100	XXX
Oil and Grease (mg/L)	100	201	XXX	15	20	30
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX

In the current permit Outfall 008 is an emergency overflow for the wastewater treatment lagoon sump that collects the former coal pile area stormwater runoff, as well as, other stormwater runoff from the site. The former coal pile area is now re-vegetated, and no coal piles remain on site. Outfall 008 is no longer an emergency overflow and only discharges stormwater runoff. Therefore, the current limits and monitoring requirement at this outfall have been removed. The effluent limitations in the current permit at Outfall 008 are displayed in Table 4 below.

Table 4: Current Effluent limitations at Outfall 008

Parameters	Mass (lb/day)		Concentration (mg/l)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
Flow (mgd)	Report	Report	XXX	XXX	XXX	XXX
Total Suspended Solids (TSS) (mg/L)	XXX	XXX	XXX	XXX	XXX	50.0
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX

There are no limits imposed in the current permit at Outfalls 010, 011, 013 – 015, 017, 019 and 020.

Final Effluent Limitations

Due to the elimination of process wastewaters; and in accordance with the Department's rationale provided in this Fact Sheet, effluent limitations are not proposed. Monitoring Requirements for 001 – 004, 008, 010, 011, 013 - 015, 017, 019 and 020 are displayed in Table 5 below. As discussed previously in this Fact Sheet, representative sampling of the stormwater discharges will be conducted at Outfalls 001, 004, 008, 013 and 020. The monitoring frequency imposed at these outfalls will reflect what is required in the PAG-03 general permit, semi-annual monitoring. A Part C condition is included in the Draft permit stating that in the event that stormwater discharge concentrations for a parameter exceeds the benchmark values in the Part C condition at the same outfall for two or more consecutive monitoring periods, the permittee shall develop a corrective action plan to reduce the concentrations of the parameters in stormwater discharges.

Table 5: Proposed Effluent Monitoring Requirements at Outfalls 001 – 004, 008, 010, 011, 013 - 015, 017, 019 and 020

Parameters	Mass (lb/day)		Concentration (mg/l)			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX
Total Suspended Solids (TSS) (mg/L)	XXX	XXX	XXX	XXX	Report	XXX
Oil and Grease (mg/L)	XXX	XXX	XXX	XXX	Report	XXX
Total Iron (mg/L)	XXX	XXX	XXX	XXX	Report	XXX

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	PENTOXSD for Windows Model (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Toxics Screening Analysis 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: USGS StreamStats

Attachment A

Mitchell Power Station StreamStats Report

Mitchell Power Station StreamStats Report

Region ID: PA
Workspace ID: PA20180531150845758000
Clicked Point (Latitude, Longitude): 40.22049, -79.96502
Time: 2018-05-31 11:09:03 -0400

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	5320	square miles
ELEV	Mean Basin Elevation	1826.6	feet