



Application Type	Amendment, Major
Facility Type	Industrial
Major / Minor	Minor

**NPDES PERMIT FACT SHEET
STATEMENT OF BASIS
INDIVIDUAL INDUSTRIAL WASTE (IW)
AND IW STORMWATER**

Application No.	PA0205044 A-1
APS ID	1123187
Authorization ID	1502197

Applicant and Facility Information

Applicant Name	Allied Waste Systems of Pennsylvania, LLC	Facility Name	Imperial Landfill
Applicant Address	PO Box 47 11 Boggs Road Imperial, PA 15126-0047	Facility Address	11 Boggs Road Imperial, PA 15126-0047
Applicant Contact	Shawn Meenihan	Facility Contact	***same as applicant***
Applicant Phone	(724) 908-5488	Facility Phone	***same as applicant***
Applicant Email	SMeenihan@RepublicServices.com	Facility Email	***same as applicant***
Client ID	246284	Site ID	238922
SIC Code	4953 (NAICS 562212)	Municipality	Findlay Township
SIC Description	Solid Waste Landfill	County	Allegheny
Date Application Received	October 4, 2024	EPA Waived?	Yes
Date Application Accepted	October 10, 2024	If No, Reason	
Purpose of Application	NPDES permit amendment to add Outfall 013 from Sedimentation Pond No. 1.		

Summary of Review

Allied Waste Systems of Pennsylvania, LLC (AWS)—a subsidiary of Republic Services, Inc.—submitted an application dated September 9, 2024 and received by the Department of Environmental Protection (DEP) on October 4, 2024 to modify NPDES Permit PA0205044 for the Imperial Landfill to add a new outfall. The current NPDES permit took effect on March 1, 2021 and expires on February 28, 2026.

The Imperial Landfill is a solid waste disposal facility that accepts municipal solid waste, construction and demolition debris, certain non-hazardous industrial wastes, and asbestos (as a special handling waste). The site consists of a solid waste permit area of 440.5-acres that includes a permitted 166.4-acres waste disposal footprint. The disposal area consists of a state-of-the-art double-lined geosynthetic system and includes a leachate management system and a landfill gas collection and control system. Leachate

AWS seeks to add Outfall 013 to the permit for discharges from newly constructed Sedimentation Pond No. 1 that collects storm water runoff from the Western Highwall Borrow Area. Sedimentation Pond. No. 1 has a four-foot diameter corrugated metal riser with a three-foot diameter barrel pipe outlet. The riser discharges to the end of a riprap-lined emergency spillway such that both the principal spillway and emergency spillway share the same outfall. The pond is an indirect discharge in the vicinity of the headwaters of an unnamed tributary to Raccoon Creek colloquially named “Potato Garden Run”.

The current NPDES permit authorizes five outfalls from four Sedimentation Basins: A, B, C, and D and three outfalls from other areas of the site. Outfall 001 is for the principal and emergency spillways from Sedimentation Basin B; Outfalls 002 and 004 are for the principal and emergency spillways from Sedimentation Basin A, respectively; Outfalls 005 is for the principal and emergency spillways from Sedimentation Basin C; and Outfall 006 is for the principal and emergency spillways from Sedimentation Basin D. In 2017, DEP issued a Water Quality Management permit to authorize modifications to the outfall structures of Sedimentation Basins B, C, and D. The modifications resulted in the co-location of those basins' principal and emergency spillways outfalls, so the emergency spillway outfalls at Outfalls 003, 007, and 008 were consolidated into other

Approve	Deny	Signatures	Date
✓		Ryan C. Decker Ryan C. Decker, P.E. / Environmental Engineer	October 29, 2024
X		Michael E. Fifth Michael E. Fifth, P.E. / Environmental Engineer Manager	November 1, 2024

Summary of Review

outfalls. All the sedimentation basins receive non-contact storm water runoff (i.e., not contacting waste). Sedimentation Basin B also receives groundwater from a low-level interceptor and groundwater underdrain. The groundwater does not contact disposed waste.

Outfall 009 discharges storm water from a concrete containment structure with open-top residual waste dumpsters for public waste drop-off; Outfall 010 discharges storm water runoff from a maintenance garage; and Outfall 011 discharges storm water runoff from the facility entrance

All leachate from the Imperial Landfill is collected, pretreated by the landfill's new onsite pretreatment plant (permitted by a May 12, 2017 minor modification to Solid Waste Permit #100620), and discharged to Moon Township Municipal Authority's sewer system.

Initial Effluent Characterization

At the time the amendment application was submitted, there were no discharges from Outfall 013. Therefore, effluent limits developed for Outfall 013 are based on other available data and certain assumptions.

To ensure the permit appropriately regulates discharges from Outfall 013, Part C Condition I.E. is added to the permit, which requires AWS to perform an initial effluent characterization for Oil and Grease, Biochemical Oxygen Demand 5-day (BOD5), Chemical Oxygen Demand (COD), Total Suspended Solids, Total Dissolved Solids, Total Nitrogen, Total Phosphorus, pH, Ammonia-Nitrogen, Total Aluminum, Total Barium, Total Chromium, Total Iron, Total Lead, Total Manganese, Total Magnesium, Total Zinc, Total Phenolics, and Total Organic Carbon at Outfall 013 and to submit the results to DEP within 60 days of sample collection. DEP will review the results to determine whether any changes to the terms and conditions of the amended NPDES permit are necessary.

Other than the new requirements for Outfall 013 and the initial effluent characterization requirement, all other terms and conditions of the amended permit remain unchanged.

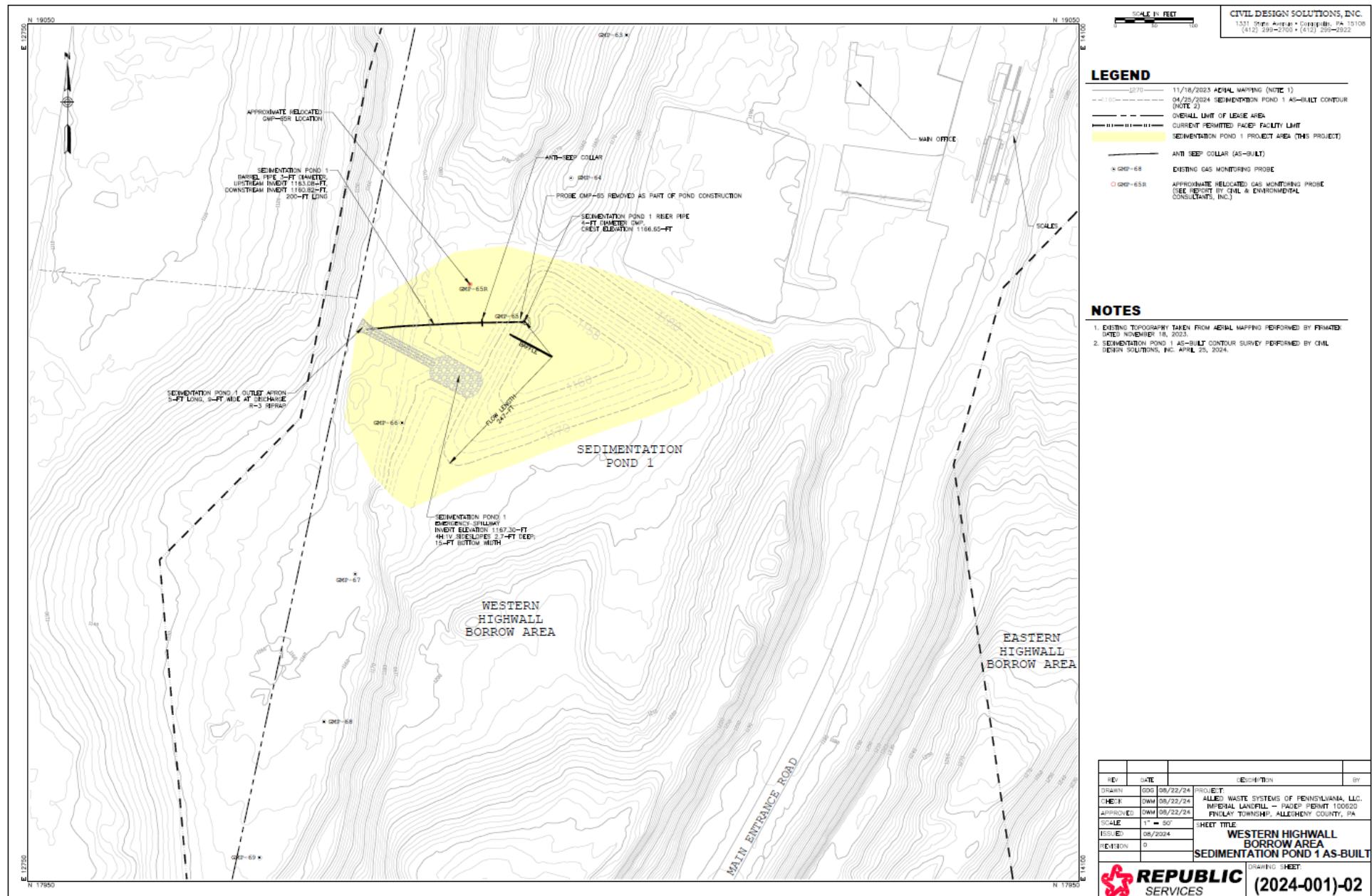
Public Participation

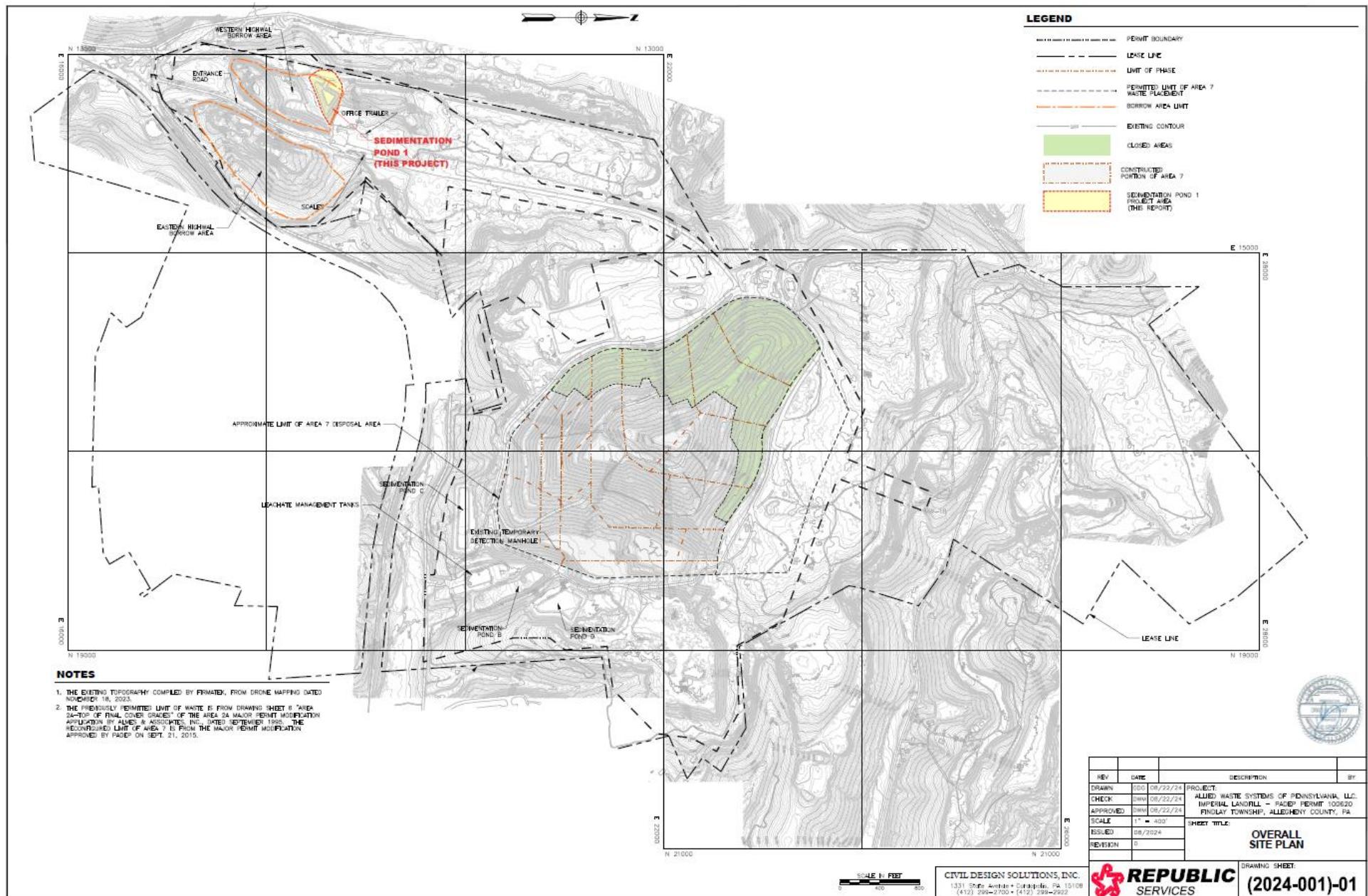
DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested 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.	013	Design Flow (MGD)	Variable
Latitude	40° 26' 23.20"	Longitude	-80° 17' 26.30"
Quad Name	Clinton	Quad Code	1503
Wastewater Description:	Principal and emergency spillway discharges of storm water runoff from the Western Highwall Borrow Area collected in Sedimentation Pond 1		
Receiving Waters	Unnamed Tributary to Raccoon Creek ["Potato Garden Run"]	Stream Code	33756
NHD Com ID	99687508	RMI	6.4
Drainage Area		Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)		Q ₇₋₁₀ Basis	0.0
Elevation (ft)		Slope (ft/ft)	
Watershed No.	20-D	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Metals		
Source(s) of Impairment	Abandoned Mine Drainage		
TMDL Status	Final (April 9, 2003) Final (April 7, 2005)	Name	Potato Garden Run, Raccoon Creek Watershed
Background/Ambient Data		Data Source	
pH (SU)			
Temperature (°F)			
Hardness (mg/L)			
Other:			
Nearest Downstream Public Water Supply Intake		Midland Borough Municipal Authority	
PWS ID	5040038	PWS Withdrawal (MGD)	7.2
PWS Waters	Ohio River	Flow at Intake (cfs)	5,880
PWS RMI	944.8	Distance from Outfall (mi)	

Changes Since Last Permit Issuance: New outfall

Other Comments:





Development of Effluent Limitations

Outfall No.	013	Design Flow (MGD)	Variable
Latitude	40° 26' 23.20"	Longitude	-80° 17' 26.30"
Wastewater Description: Principal and emergency spillway discharges of storm water runoff from the Western Highwall Borrow Area collected in Sedimentation Pond 1			

Outfall 013 is the discharge point for the principal spillway and emergency spillway of Sedimentation Pond 1 for runoff from the 353,750 sq. ft. Western Highwall Borrow Area.



Sedimentation Pond No. 1 is a new sedimentation pond for a soil borrow area at the Imperial Landfill. Industrial activities in the borrow area will include earthmoving. Sediment is the primary pollutant of concern associated with earthmoving. There will be no waste disposal activities in the Outfall 013 drainage area. However, the Western Highwall Borrow Area is part of a DEP Abandoned Mine Land Inventory Site (Potato Garden Run #1) and is located within the areal extent of former bituminous surface mine permit 2666BSM8 for Aloe Coal Company Russell No. 2 (12/22/1966).

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

Storm water discharges from the Imperial Landfill are not subject to Federal Effluent Limitations Guidelines (ELGs). The Landfills Point Source Category ELGs under 40 CFR Part 445 do not regulate storm water discharges from municipal solid waste landfills. Therefore, case-by-case TBELs are developed pursuant to DEP's best professional judgement in accordance with 25 Pa. Code § 92a.48(a)(3) and 40 CFR § 125.3(c)(2) (incorporated by reference into DEP's regulations by 25 Pa. Code § 92a.3(b)(4)).

Other sedimentation pond outfalls at the Imperial Landfill are subject to TBELs for TSS, iron, manganese, and pH based on 40 CFR Part 434, Subpart B – Coal Preparation Plants and Coal Preparation Plant Associated Areas. While the Imperial Landfill is not a coal preparation plant or coal preparation plant associated area, receiving waters for the Imperial Landfill (including Potato Garden Run that ultimately will receive storm water discharges from Outfall 013) are impaired by metals from acid mine drainage, and overburden materials in the vicinity are coal-impacted as indicated by the historical permitted bituminous surface mine area. Consistent with DEP's previous regulation of similar discharges from the Imperial Landfill

(and DEP's previous case-by-case TBEL evaluation), discharges from Outfall 013 will be subject to the most stringent of the following:

Table 1. 40 CFR § 434.22(a) – BPT Coal Prep Plants and Coal Prep Plant Associated Areas

Pollutant	Average of daily values for 30 consecutive days (mg/L)	Maximum for any 1 day (mg/L)
Total Iron	3.5	7.0
Total Manganese	2.0	4.0
TSS	35.0	70.0
pH	Within the range of 6.0 to 9.0 at all times	

Table 2. 40 CFR § 434.23(a) – BAT Coal Prep Plants and Coal Prep Plant Associated Areas

Pollutant	Average of daily values for 30 consecutive days (mg/L)	Maximum for any 1 day (mg/L)
Total Iron	3.5	7.0
Total Manganese	2.0	4.0

There have been no discharges from Sedimentation Pond No. 1 to date, so there are no effluent characterization data available to identify other parameters of concern. Other storm water discharges near the site's waste disposal areas are monitored for various other constituents. For screening purposes—notwithstanding that Sedimentation Pond No. 1 stands apart from the landfill proper—monitoring and reporting for Flow, Chemical Oxygen Demand, and Ammonia-Nitrogen also will be required at Outfall 013 pursuant to 25 Pa. Code § 92a.61(h). The additional parameters are based on those identified in Appendix C – Landfill and Land Application Sites of DEP's "PAG-03 NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity". In addition, a condition will be added to Part C of the permit requiring AWS to perform an initial effluent characterization (once there is a discharge from Outfall 013), for the following parameters: Oil and Grease, Biochemical Oxygen Demand 5-day (BOD5), Chemical Oxygen Demand (COD), Total Suspended Solids, Total Dissolved Solids, Total Nitrogen, Total Phosphorus, pH, Ammonia-Nitrogen, Total Aluminum, Total Barium, Total Chromium, Total Iron, Total Lead, Total Manganese, Total Magnesium, Total Zinc, Total Phenolics, and Total Organic Carbon.

Flow monitoring will be required pursuant to 25 Pa. Code § 92a.61(h) and limits for pH are imposed pursuant to 25 Pa. Code §§ 92a.48(a)(2) and 95.2(1). The pH limits from 95.2(1) are the same as those imposed based on 40 CFR § 434.22(a).

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

Generally, DEP does not develop numerical WQBELs for storm water discharges. Pursuant to 25 Pa. Code § 96.4(g), mathematical modeling used to develop WQBELs must be performed at Q₇₋₁₀ low flow conditions. Precipitation-induced discharges generally do not occur at Q₇₋₁₀ design conditions because the precipitation that causes a storm water discharge will also increase the receiving stream's flow and that increased stream flow will provide additional assimilative capacity during a storm event.

Even though no mathematical modeling is performed, the 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.

Potato Garden Run and Raccoon Creek Watershed TMDLs

There is a Final TMDL for the Potato Garden Run watershed dated April 9, 2003 and a Final TMDL for the Raccoon Creek Watershed (of which the Potato Garden Run watershed is a part) dated April 7, 2005. 40 CFR § 122.44(d)(1)(vii)(B) requires that, when developing WQBELs, the permitting authority shall ensure that effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation (WLA) for the discharge prepared by the State and approved by EPA pursuant to 40 CFR § 130.7.

No WLAs were assigned to the Imperial Landfill's discharges by either the Potato Garden Run or Raccoon Creek Watershed TMDLs. Generally, the discharges from Imperial Landfill to those watersheds either do not discharge directly to surface waters or do not exhibit a reasonable potential to exceed water quality criteria because the concentrations of TMDL pollutants in the discharge are less than the most stringent water quality criteria. No TMDL WQBELs will be imposed at Outfall 013 since there are no effluent data to show that load reductions are necessary. However, monitoring for Total

Aluminum—the one TMDL pollutant that is not already subject to monitoring—will be added to the monitored parameter list to collect data on Outfall 013's effluent quality and load contributions to Potato Garden Run.

Based on as-built drawings included with the permit amendment application, Outfall 013 is located 300± feet away from the approximate headwaters of Potato Garden Run. It is likely that the effluent will infiltrate before reaching surface waters.

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

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61 and anti-backsliding requirements under 40 CFR § 122.44(l) (incorporated by reference in Pennsylvania regulations at 25 Pa. Code § 92a.44), effluent limits at Outfall 013 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements developed for this permit renewal. Applicable effluent limits are summarized in the table below.

Table 3. Effluent Limits and Monitoring Requirements for Outfall 013

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Quarterly	Maximum Daily	Average Quarterly	Maximum Daily	Instant Maximum	
Flow (MGD)	Report	Report	—	—	—	25 Pa. Code § 92a.61(h)
Total Suspended Solids	—	—	35.0	—	70.0	BPJ TBELs; 25 Pa. Code § 92a.48(a)(3); & 40 CFR §§ 125.3(c)(2) & 434.22(a)
Chemical Oxygen Demand	—	—	—	—	Report	PAG-03, Appendix C; 25 Pa. Code § 92a.61(h)
Ammonia-Nitrogen	—	—	—	—	Report	PAG-03, Appendix C; 25 Pa. Code § 92a.61(h)
Aluminum, Total	—	—	Report	—	Report	25 Pa. Code § 92a.61(h)
Iron, Total	—	—	3.5	—	7.0	BPJ TBELs; 25 Pa. Code § 92a.48(a)(3); & 40 CFR §§ 125.3(c)(2) 434.23(a)
Manganese, Total	—	—	2.0	—	4.0	BPJ TBELs; 25 Pa. Code § 92a.48(a)(3); & 40 CFR §§ 125.3(c)(2) 434.23(a)
pH	—	—	6.0 Instant. Min.	—	9.0	BPJ TBELs; 25 Pa. Code §§ 92a.48(a)(2) and 95.2(1); & 40 CFR §§ 125.3(c)(2) 434.22(a)

The sampling frequency and type for TSS, aluminum, iron, manganese, and pH will be 2/quarter using grab samples. COD and ammonia-nitrogen will require grab sampling 1/6 months. Flow must be measured 2/quarter at the time of sampling.

Since Outfall 013 is the discharge location for Sedimentation Pond No. 1's principal and emergency spillways, AWS must report if a discharge through Outfall 013 is discharging through the pond's emergency spillway, which would represent a pond that is at its design capacity.

Tools and References Used to Develop Permit	
<input type="checkbox"/>	WQM for Windows Model (see Attachment)
<input type="checkbox"/>	Toxics Management Spreadsheet (see Attachment)
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input checked="" type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	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, 386-2000-020, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	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, 386-2000-010, 3/1999.
<input type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input checked="" type="checkbox"/>	SOP: Standard Operating Procedure for Clean Water Program New and Reissuance Industrial Waste and Industrial Stormwater Individual NPDES Permit Applications, SOP No. BCW-PMT-001, February 5, 2024, Version 1.7.
<input checked="" type="checkbox"/>	SOP: Standard Operating Procedure for Clean Water Program Establishing Effluent Limitations for Individual Industrial Permits, SOP No. BCW-PMT-032, February 5, 2024, Version 1.7.
<input type="checkbox"/>	Other: