pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0002437**
Facility Type	**Industrial**	APS ID	**1060365**
Major / Minor	**Minor**	Authorization ID	**1391023**

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

Applicant and Facility Information

Applicant Name	**Lindy Paving Inc.**	Facility Name	**Neville Terminal - Shenango Parcel**
Applicant Address	2340 2nd Avenue	Facility Address	200 Neville Road
	Pittsburgh, PA 15219-3106		Pittsburgh, PA 15225-1620
Applicant Contact	Ryan Mitchell	Facility Contact	***same as applicant***
Applicant Phone	(412) 281-4389	Facility Phone	***same as applicant***
Applicant Email	Ryan.Mitchell@lindypaving.com	Facility Email	***same as applicant***
Client ID	27160	Site ID	260982
SIC Code	2951	Municipality	Neville Township
SIC Description	Manufacturing - Asphalt Paving Mixtures and Blocks	County	Allegheny
Date Application Received	March 24, 2022	EPA Waived?	Yes
Date Application Accepted		If No, Reason	
Purpose of Application	Renewal of an NPDES permit for discharges of stormwater from a salt, aggregate, and product storage site.		

Summary of Review

On March 24, 2022, on behalf of Lindy Paving, Inc. (Lindy), CSC, Inc. submitted an application to renew NPDES Permit PA0002437 for storm water discharges from the Shenango Parcel of Lindy's Neville Terminal. The previous permit expired on May 31, 2022 with an application due date of December 2, 2021. By letter dated February 18, 2022, pursuant to a request from CSC, Inc. on behalf of Lindy, DEP granted an extension until March 31, 2022 for Lindy to submit the renewal application. Since the application was eventually received before March 31, 2022, the application was timely, and the terms and conditions of the permit were administratively extended past the expiration date.

Lindy uses the Shenango Parcel for salt and aggregate storage, product storage (e.g., jumbo concrete blocks), and storage of reclaimed asphalt pavement. Asphalt production occurs at Lindy's adjacent Neville Terminal (NPDES Permit PAR706126).

As much as 100,000 tons of salt are stored at the Shenango Parcel on an existing concrete pad (approximately 120-feet by 375-feet; approximately 44,400 sq. feet) in a "pit" area. The area is partially walled—full walls on two sides and partial walls on two sides. The partially walled sides have ramps allowing for truck traffic as well as loading/unloading. The bottom of the "pit" is paved with asphalt (i.e., 100% impervious). The salt pile is covered with tarps except when adding or removing salt (10-foot sections of tarp are added or removed as needed).

The NPDES permit currently authorizes discharges from three outfalls: 001, 007, and 008. Monthly reporting requirements for Total Suspended Solids, Total Dissolved Solids, Chloride, and pH will remain in effect at Outfall 001. Semi-annual reporting requirements for COD and Oil and Grease and monthly reporting requirements for Total Suspended Solids, Total Dissolved Solids, and pH also will remain in effect at Outfalls 007 and 008. Semi-annual reporting requirements related to legacy contaminants from the former Neville Coke Plant will be removed from the renewed permit.

Approve	Deny	Signatures	Date
✓		Ryan C. Decker, P.E. / Environmental Engineer	January 10, 2023
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	January 24, 2023

Summary of Review

Conditions from Appendix K (relating to Salt Storage and Distribution sites) of the Department's "PAG-03 NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity" will be maintained in the renewed permit, including requirements for Best Management Practices to minimize the potential mobilization of salt from the stockpile to waters of the Commonwealth via storm water runoff.

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.	001	Design Flow (MGD)	Variable
Latitude	40° 29' 52.00"	Longitude	-80° 04' 31.00"
Quad Name	Pittsburgh West	Quad Code	1505
Wastewater Description:	Storm water runoff from a salt storage pile, pavement grassy areas, processed concrete, and soil embankment		
Receiving Waters	Ohio River (WWF)	Stream Code	32317
NHD Com ID	99684474	RMI	975.78
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxins, Pathogens, Polychlorinated Biphenyls (PCBs)		
Source(s) of Impairment	Sources Unknown		
TMDL Status	Final	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Moon Township Municipal Authority		
PWS ID	5020011	PWS Withdrawal (MGD)	5.2
PWS Waters	Ohio River	Flow at Intake (cfs)	2,365
PWS RMI	969.36	Distance from Outfall (mi)	6.42

Changes Since Last Permit Issuance: Materials are now stored in the runoff area.

Other Comments:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	007	Design Flow (MGD)	Variable
Latitude	40° 29' 39.00"	Longitude	-80° 04' 42.00"
Quad Name	Pittsburgh West	Quad Code	1505
Wastewater Description:	Storm water runoff from asphalt paved areas along the facility entrance road near the former guard house and vehicle scale		
Receiving Waters	Ohio River (WWF) (back channel)	Stream Code	32317
NHD Com ID	134396130	RMI	975.63
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxins, Pathogens, PCBs		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final, 04/09/2001	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Moon Township Municipal Authority		
PWS ID	5020011	PWS Withdrawal (MGD)	5.2
PWS Waters	Ohio River	Flow at Intake (cfs)	2,365
PWS RMI	969.36	Distance from Outfall (mi)	6.27

Changes Since Last Permit Issuance: None

Other Comments:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	008	Design Flow (MGD)	Variable
Latitude	40° 29' 36.00"	Longitude	-80° 04' 42.00"
Quad Name	Pittsburgh West	Quad Code	1505
Wastewater Description:	Storm water runoff from asphalt paved areas along the facility entrance road near the former guard house and vehicle scale		
Receiving Waters	Ohio River (WWF) (back channel)	Stream Code	32317
NHD Com ID	134396130	RMI	975.63
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxins, Pathogens, PCB		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final, 04/09/2001	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Moon Township Municipal Authority		
PWS ID	5020011	PWS Withdrawal (MGD)	5.2
PWS Waters	Ohio River	Flow at Intake (cfs)	2,365
PWS RMI	969.36	Distance from Outfall (mi)	6.27

Changes Since Last Permit Issuance: None

Other Comments:

Figure 1. Lindy Paving Neville Terminal, Shenango Parcel Site Overview and Adjoining Properties

Image Source and Date: Google Earth Pro; 11/2021. Annotations by DEP.

Figure 2. Lindy Paving Neville Terminal, Shenango Parcel – Site Characteristics

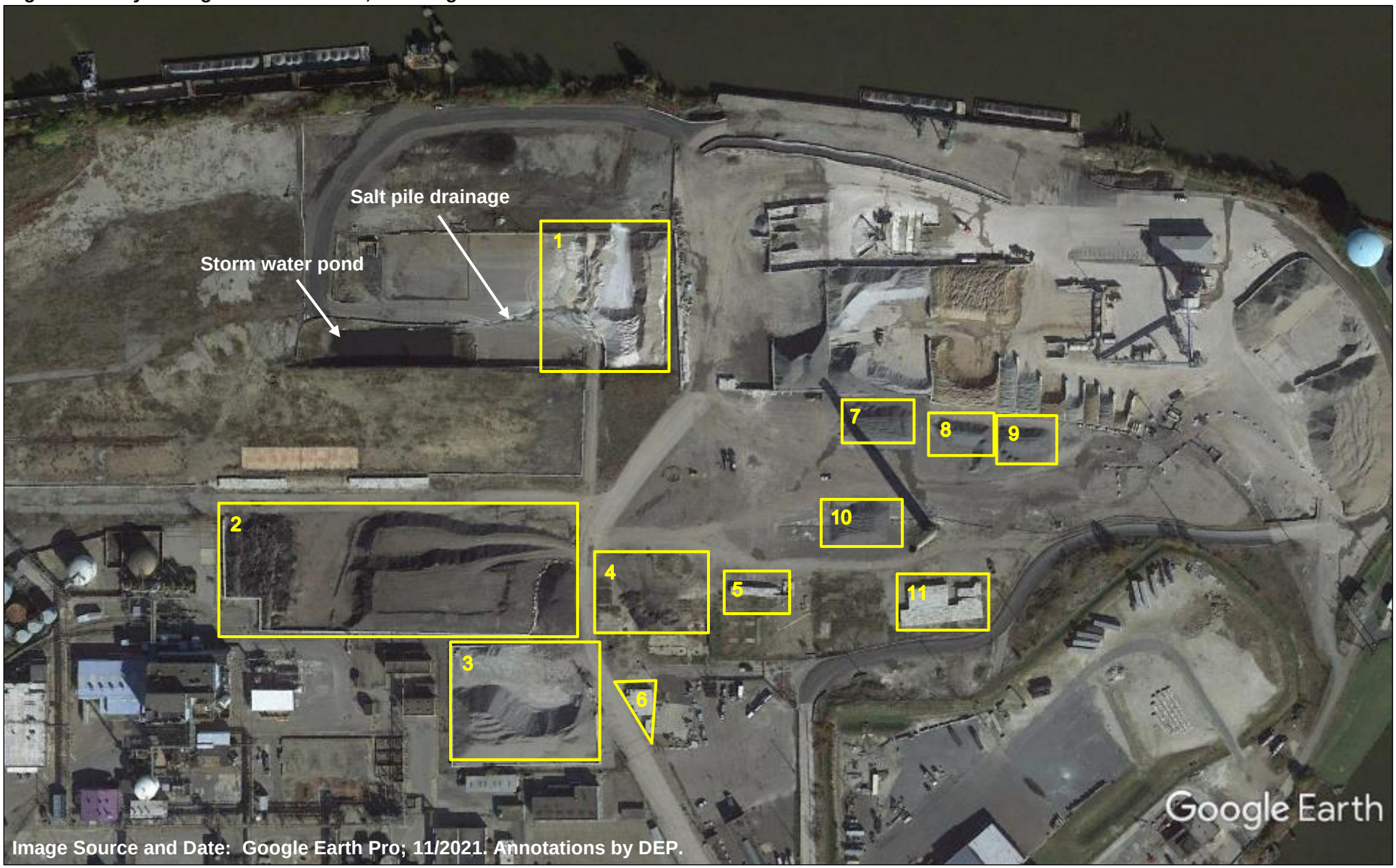

Image Source and Date: Google Earth Pro; 11/2021. Annotations by DEP.

1. Rock Salt
2. Reclaimed Asphalt Pavement (RAP)
3. Limestone #8
4. General existing site material (to be scrapped to flatten the area)
5. Concrete Jumbo Block
6. Concrete Jumbo Block
7. Limestone #57
8. Limestone #1
9. Limestone #3
10. Limestone #67
11. Concrete Jumbo Block

Compliance History

DMR Data for Outfall 001 (from December 1, 2021 to November 30, 2022)

Parameter	NOV-22	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21
Flow (MGD) Daily Maximum	0.00000 613	0.00000 667	0.00000 640	0.00000 832	0.00001 286	0.00001 756	E	0.00001 920	0.00002 000	0.00002 526		0.00002 118
pH (S.U.) Daily Maximum	8.00	8.1	7.6	7.7	8.0	8.0	E	8.1	8.1	8.3		7.7
COD (mg/L) Daily Maximum						< 0.01						< 0.01
TSS (mg/L) Daily Maximum	1.1	< 0.01	< 0.01	< 0.01	78	0.80	E	56	42	86		< 0.01
Total Dissolved Solids (mg/L) Daily Maximum	280	200	240	230	170	160	E	160	130	170		140
Oil and Grease (mg/L) Daily Maximum						< 0.01						< 0.01
Ammonia (mg/L) Daily Maximum						< 0.01						< 0.01
Total Arsenic (mg/L) Daily Maximum						< 0.01						< 0.01
Total Cadmium (mg/L) Daily Maximum						< 0.01						< 0.01
Total Chromium (mg/L) Daily Maximum						< 0.01						< 0.01
Total Copper (mg/L) Daily Maximum						< 0.01						0.0034
Total Cyanide (mg/L) Daily Maximum						< 0.01						< 0.01
Total Iron (mg/L) Daily Maximum						0.0930						0.1800
Total Lead (mg/L) Daily Maximum						< 0.01						< 0.01
Benzo(a)Pyrene (mg/L) Daily Maximum						< 0.01						< 0.01
Chloride (mg/L) Daily Maximum	25	20	24	24	16	19	E	18	20	22		16
Naphthalene (mg/L) Daily Maximum						< 0.01						< 0.01
Total Phenolics (mg/L) Daily Maximum						0.0130						< 0.01

DMR Data for Outfall 007 (from December 1, 2021 to November 30, 2022)

Parameter	NOV-22	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21
Flow (MGD)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000	0.00000		0.00000
Daily Maximum	395	429	430	462	682	529	E	702	524	670		472
pH (S.U.)												
Daily Maximum	8.3	8.2	8.0	8.1	8.0	8.2	E	8.1	8.0	8.3		8
COD (mg/L)												
Daily Maximum						< 0.01						83
TSS (mg/L)												
Daily Maximum	1.4	< 0.01	< 0.01	8.1	180	9.0	E	47	51	97		17
Total Dissolved Solids (mg/L)												
Daily Maximum	180	180	220	210	140	150	E	240	140	150		290
Oil and Grease (mg/L)												
Daily Maximum						< 0.01						< 0.01
Ammonia (mg/L)												
Daily Maximum						< 0.01						< 0.01
Total Arsenic (mg/L)												
Daily Maximum						< 0.01						0.0021
Total Cadmium (mg/L)												
Daily Maximum						< 0.01						< 0.01
Total Chromium (mg/L)												
Daily Maximum						< 0.01						0.0046
Total Copper (mg/L)												
Daily Maximum						0.0023						0.0061
Total Cyanide (mg/L)												
Daily Maximum						< 0.01						0.0190
Total Iron (mg/L)												
Daily Maximum						0.3700						0.9600
Total Lead (mg/L)												
Daily Maximum						< 0.01						0.0019
Benzo(a)Pyrene (mg/L)												
Daily Maximum						< 0.01						< 0.01
Chloride (mg/L)												
Daily Maximum	25	15	35	36	8.2	6.9	E	19	22	22		73
Naphthalene (mg/L)												
Daily Maximum						< 0.01						< 0.01
Total Phenolics (mg/L)												
Daily Maximum						0.0110						< 0.01

DMR Data for Outfall 008 (from December 1, 2021 to November 30, 2022)

Parameter	NOV-22	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21
Flow (MGD)	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000	0.00000		0.00000
Daily Maximum	389	421	447	498	667	560	E	664	550	646		462
pH (S.U.)												
Daily Maximum	8.2	8.2	8.0	8.0	8.1	8.2	E	8.1	8.1	8.3		8
COD (mg/L)												
Daily Maximum						< 0.01						83
TSS (mg/L)												
Daily Maximum	2.2	0.9	0.7	3.7	170	9.8	E	50	52	83		30
Total Dissolved Solids (mg/L)												
Daily Maximum	180	190	220	190	150	150	E	270	140	150		300
Oil and Grease (mg/L)												
Daily Maximum						< 0.01						< 0.01
Ammonia (mg/L)												
Daily Maximum						< 0.01						< 0.01
Total Arsenic (mg/L)												
Daily Maximum						< 0.01						0.0022
Total Cadmium (mg/L)												
Daily Maximum						< 0.01						< 0.01
Total Chromium (mg/L)												
Daily Maximum						< 0.01						0.0053
Total Copper (mg/L)												
Daily Maximum						0.0029						0.0069
Total Cyanide (mg/L)												
Daily Maximum						< 0.01						0.0190
Total Iron (mg/L)												
Daily Maximum						0.3900						1.4000
Total Lead (mg/L)												
Daily Maximum						< 0.01						0.0027
Benzo(a)Pyrene (mg/L)												
Daily Maximum						< 0.01						< 0.01
Chloride (mg/L)												
Daily Maximum	25	15	34	41	8.0	7.7	E	18	23	24		75
Naphthalene (mg/L)												
Daily Maximum						< 0.01						< 0.01
Total Phenolics (mg/L)												
Daily Maximum						0.0120						< 0.01

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	Variable
Latitude	40° 29' 52.0"	**Longitude**	-80° 04' 31.0"

Wastewater Description: Storm water runoff from a salt storage pile, pavement grassy areas, processed concrete, and soil embankment

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

There are no Federal Effluent Limitations Guidelines that apply to discharges from this facility. Therefore, pursuant to 25 Pa. Code § 92a.61(h) and DEP's policy for permitting storm water discharges associated with industrial activities described in Section III of DEP's "Standard Operating Procedure (SOP) for Clean Water Program – Establishing Effluent Limitations for Individual Industrial Permits" [SOP No. BCW-PMT-032, Version 1.6], minimum monitoring requirements and BMPs described in the PAG-03 "NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity" will be applied to the Shenango Parcel's storm water discharges.

As explained in the introductory section of this Fact Sheet and as shown in Figure 2, Lindy Paving uses the Shenango Parcel for salt and aggregate storage, product storage (e.g., jumbo concrete blocks), and storage of reclaimed asphalt pavement.

Requirements Relating to Salt Storage

Appendix K of the PAG-03 applies to Existing Salt Storage and Distribution Sites. The appendix is not tied to a specific SIC Code. Section I of Appendix K regarding applicability of the appendix states the following:

> The requirements in Appendix K apply to stormwater discharges from Existing Salt Storage and Distribution Sites with large and/or small stockpiles, regardless of SIC Code, where the discharges do not enter a municipal separate storm sewer system (MS4) that is covered by an NPDES permit.
>
> The term "existing" refers to sites that are used for roadway deicing material storage or distribution as of September 24, 2016. The term "salt" is inclusive of solid chemical products stored and utilized for the principal purpose of deicing roadways for public safety (including but not limited to sodium chloride, magnesium chloride, calcium chloride, calcium magnesium acetate, potassium acetate, and mixtures thereof). The terms "large stockpile" and "small stockpile" refer to sites that are designed for storage of at least 3,000 tons of salt and less than 3,000 tons of salt, respectively.

Salt storage at the Shenango Parcel began in 2021 and the site is not served by an MS4. Therefore, the Shenango Parcel is not an "existing" salt storage site. In addition, Section II of Appendix K states the following:

> This General Permit does not cover the following discharges:
>
> A. Discharges from new salt storage and distribution sites. New salt storage and distribution sites with large stockpiles must apply for and obtain an individual NPDES permit (or other DEP approval), whether or not such sites are co-located with other industrial activities, unless such discharges will be covered by an MS4 NPDES permit. New salt storage and distribution sites with small stockpiles are not required to seek permit coverage under an individual NPDES permit if the BMPs specified in Section IV of this appendix are implemented and maintained, unless otherwise notified by DEP in writing that permit coverage or other DEP approval is required.

The Shenango Parcel would be considered a "new" salt storage site since the site is not an "existing" salt storage site, Consequently, the site is not eligible for coverage under the PAG-03. Shenango's salt storage pile exceeds the 3,000-ton threshold and is therefore a "large stockpile" for which Lindy is required to seek coverage under an individual NPDES permit.

Notwithstanding the site's ineligibility for coverage under the PAG-03, to ensure that there is baseline consistency across the state for all salt storage facilities that discharge storm water associated with their industrial activities, the monitoring requirements in Section III of Appendix K of the PAG-03 will be imposed at Outfall 001 and the Sector-Specific BMPs in Section IV of Appendix K of the PAG-03 will be imposed in the permit. The Appendix K monitoring requirements are shown in Table 1. At a minimum, DEP considers it reasonable for new salt storage piles to be subject to the same requirements as existing salt storage piles.

Table 1. PAG-03 Appendix K – Minimum Monitoring Requirements

Parameter	Measurement Frequency	Sample Type	Benchmark Values
pH (S.U.)	1 / 6 months	Grab	XXX
Total Suspended Solids (TSS) (mg/L)	1 / 6 months	Grab	100
Total Dissolved Solids (mg/L)	1 / 6 months	Grab	XXX
Chloride (mg/L)	1 / 6 months	Grab	2,000

The benchmark values listed in Table 1 are not effluent limitations and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for two consecutive monitoring periods, the permittee must submit a corrective action plan within 90 days of the end of the monitoring period triggering the plan. That requirement and the benchmark values will be specified in a condition in Part C of the permit.

The Sector-Specific BMPs from Section IV of PAG-03, Appendix K are as follows:

IV. SECTOR-SPECIFIC BMPs

In addition to the BMPs contained in Part C II of the General Permit, the permittee shall implement, at a minimum, all of the following BMPs that are applicable to the processes in place at the facility for which coverage under this General Permit is approved. The following BMPs apply to salt stockpiles only and not stockpiles of antiskid materials (e.g., stone, sand, cinders, etc.) that may be present on-site unless DEP determines that such materials are causing or contributing to pollution, in which case the BMPs shall be implemented upon receipt of written notification from DEP in accordance with a schedule provided by DEP or an approved alternate schedule.

A. Surface and Cover.

1. *The permittee shall store salt stockpiles and conduct loading/unloading activities on a synthetic, impermeable surface (i.e., < 10^{-7} cm/sec).*
2. *Salt stockpiles must be covered under permanent, structural cover wherever feasible. If stockpiles are not covered under permanent, structural cover, stockpiles must be covered by materials including but not limited to tarpaulin, polyethylene, polyurethane, polypropylene, or hypalon with sufficient strength to prevent tearing. When loading and unloading is not being performed, the entire stockpile must be covered at all times. Upon completion of loading or unloading activities, stockpiles must be recovered as soon as possible.*

B. Material Management.

1. *Remove covering at the working face just high enough to load out the day's shipment. This will minimize moisture absorption and secure the cover if wind direction shifts toward the working face.*
2. *Maintain the working face perpendicular to the long axis of the pile by loading alternately left/right and right/left.*
3. *Avoid creating a horseshoe-shaped working face that results from removing the center of the pile and leaving extended edges or aprons.*
4. *Maintain adequate cover at the lower edge or toe of the working face to permit maximum possible resealing of the edge of the cover when operations are completed for the day. Take care to avoid cover damage caused by cascading salt from the upper section of the working face.*
5. *Establish and maintain the working face at the downwind end of the stockpile whenever operationally feasible.*
6. *Clean up material spills from loading/unloading areas at the end of the work day.*

C. Stormwater Management

1. *Utilize site grading, curbs, or berms to prevent run-on to and direct runoff from salt storage surfaces.*
2. *If stormwater collection ponds or basins are installed and utilized, such ponds shall contain a synthetic liner and be managed to limit discharges to only those times where surface water flows are elevated.*
3. *The permittee shall recycle collected stormwater that may have come into contact with salt materials when determined by the permittee to be feasible.*

Lindy also will be required to 1) maintain the impermeable pad in a condition that prevents the transfer of salt into groundwater; 2) repair or replace damaged stockpile cover materials; and 3) remove any salt residue from uncovered areas. The Appendix K conditions listed above will be modified to include those additional requirements. Weekly visual inspections will be required to evaluate the effectiveness of the site's BMPs (refer to the "Routine Inspections" requirements in Part C of the permit).

Requirements Relating to Other Material Storage

Lindy has storage piles at the Shenango Parcel consisting of various grades of limestone and reclaimed asphalt pavement (RAP). Large concrete blocks also are stored at the site. Storm water discharges from asphalt paving facilities are subject to Appendix M of the PAG-03.

Asphalt production is not performed at the Shenango Parcel, but similar constituents may be present in runoff from non-salt storage areas. In an article reviewing available literature on leaching from RAP, Chad J. Spreadbury, et al. from the Department of Environmental Engineering Sciences at the University of Florida observed the following:

> This review examined 17 studies (41 RAP sources total) reporting leaching from RAP (14 of these for metals, 9 of these for PAHs). The leaching pathway was extensively focused on in this study as direct exposure was not deemed a significant pathway of concern in the literature, which the authors attributed to limited physical contact with RAP with human receptors (although these were briefly reviewed and were not found to exceed beyond roadside/urban soils and other conventionally used aggregates). Potential leaching risks cited by authors of the reviewed literature were limited aside from elevated naphthalene concentrations reported by Norin and Strömvall (2004). However, the different risk-based thresholds and leaching approaches (i.e., material preparation, leaching solutions) used in these studies made comparisons challenging. To evaluate potential environmental impacts, the authors compared reported leachate concentrations to US EPA RSLs for tapwater. The following constituents exceeded these limits: for metals, arsenic (7 RAP sources), lead (13 RAP sources), antimony (8 RAP sources), and manganese (5 RAP sources); for PAHs, naphthalene (6 RAP sources), dibenzo(a,h)anthracene (6 RAP sources), benzo(a)anthracene (5 RAP sources), benzo(a)pyrene (4 RAP sources). [1]

DEP does not have information on the characteristics of runoff from Lindy's RAP storage pile because the area is flat and does not appear to drain to any of the outfalls included in the permit. The monitoring requirements of Appendix M will not be imposed at Outfall 001, but the following sector-specific BMPs from Appendix M of the PAG-03 will be included in the permit.

- Provide for secondary containment around asphalt and petroleum product tanks; install leak detection and high-level overflow devices.
- Practice good housekeeping by periodically removing dust and spilled materials from throughout the site.
- Divert stormwater run-on from aggregate storage areas and design piles to minimize erosion and control runoff.
- Only perform vehicle washing in dedicated areas; collect wash water from storm drainage separately.
- Complete truck wheel washing if necessary to avoid off-site material tracking.
- Utilize dust control agents.
- Use biodegradable truck release materials.
- Wash trucks using biodegradable washing materials or wash trucks indoors.
- Use silt fences or rock filters around piles or sediment basins to control turbidity in runoff.
- Ensure that vegetated drainage ditches and swales are properly seeded and any accumulated materials in them have been removed at least annually.

Treatment requirements for new and expanding mass loadings of Total Dissolved Solids (TDS)

Salt-bearing storm water runoff from the new salt stockpile would represent a new mass loading of TDS to the Ohio River. 25 Pa. Code § 95.10 regulates new and expanding mass loadings of TDS but exempts various types of facilities and discharge loadings. Among those exemptions is "New and expanding discharge loadings of TDS equal to or less than 5,000 pounds per day, measured as an average daily discharge over the course of a calendar year, otherwise known as the annual average daily load." The BMPs required by the amended permit should limit the discharge of salt from the site and if there are any discharges, they should be intermittent. Consequently, the site is unlikely to exceed the 5,000 pounds per day threshold and should be exempt from treatment requirements on that basis.

[1] Chad J. Spreadbury, Kyle A. Clavier, Ashley M. Lin, Timothy G. Townsend, A critical analysis of leaching and environmental risk assessment for reclaimed asphalt pavement management, *Science of The Total Environment*, Volume 775, 2021, 145741, ISSN 0048-9697, https://doi.org/10.1016/j.scitotenv.2021.145741.

Nevertheless, DEP will include a benchmark of 2,000 mg/L for TDS based on the 2,000 mg/L effluent standard in § 95.10(c) for new and expanding TDS discharges—in addition to the benchmarks imposed pursuant to Appendix K of the PAG-03. As explained above, the benchmark values are not effluent limits and exceedances do not constitute permit violations but exceeding the 2,000 mg/L benchmark for TDS (or chloride) would suggest that BMPs are not functioning as designed.

Existing Monitoring Requirements

To the extent that effluent limits are necessary to ensure that storm water Best Management Practices (BMPs) are adequately implemented, DEP's Permit Writers' Manual recommends that effluent limits be 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 BMPs provide inadequate pollution control. Table 2 summarizes the semi-annual results reported at Outfall 001 on DMRs after the renewed permit took effect on June 1, 2017.

Table 2. Semi-Annual DMR Results for Outfall 001 (2nd Half of 2017 through 1st Half of 2022)

Parameter	2nd Half 2017	1st Half 2018	2nd Half 2018	1st Half 2019	2nd Half 2019	1st Half 2020	2nd Half 2020	1st Half 2021	2nd Half 2021	1st Half 2022
Ammonia-N	0.71	0.71	1.18	<0.5	<0.5	<0.5	<0.01	<0.01	<0.01	<0.01
Arsenic, Total	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	0.001	<0.01	<0.01
Benzo(a)Pyrene	0.013	<0.015	<0.003	<0.003	<0.003	<0.003	<0.01	<0.01	<0.01	<0.01
Cadmium, Total	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01
COD	147	38.6	52.4	48.3	20.6	<20	<0.01	<0.01	<0.01	<0.01
Chromium, Total	0.004	0.003	0.003	0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01
Copper, Total	0.01	0.06	0.003	0.003	0.001	0.001	<0.01	0.003	0.0034	<0.01
Cyanide, Total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	<0.01	<0.01	<0.01
Iron, Total	1.15	0.28	1.03	0.69	0.34	0.5	0.321	1.2	0.18	0.093
Lead, Total	0.011	0.002	0.002	0.012	<0.001	0.001	<0.01	0.002	<0.01	<0.01
Naphthalene	0.015	<0.015	<0.003	0.007	<0.003	<0.003	<0.01	<0.01	<0.01	<0.01
Oil and Grease	<5.0	26.5	<5	<5	<5	<5	<0.01	<0.01	<0.01	<0.01
pH (S.U.)	7.96	7.87	7.91	7.89	7.75	7.87	7.74	7.6	**See Table 3**	
Phenolics, Total	<0.01	<0.01	<0.01	<0.01	<0.01	0.014	<0.01	0.016	<0.01	0.013
TSS	81	194	12	25.5	10.2	13.3	11	36	**See Table 3**	

All results are reported in units of mg/L except pH, which is reported in standard units.

Table 3. Monthly DMR Results for Outfall 001 (June 2021 through October 2022) under PA0002437 A-1

Parameter	Jun '21	Jul '21	Aug '21	Sep '21	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22	Oct '22
Chloride	<0.01	2.7	27	91	21	18	16	†	22	20	18	E††	19	16	24	24	20
pH (S.U.)	7.6	8	7.6	7.6	7.7	7.9	7.7	†	8.3	8.1	8.1	E††	8	8	7.7	7.6	8.1
TDS	<0.01	130	190	190	180	150	140	†	170	130	160	E††	160	170	230	240	200
TSS	36	57	6.6	8.5	9.4	0.8	<0.01	†	86	42	56	E††	0.8	78	<0.01	<0.01	<0.01

All results are reported in units of mg/L except pH, which is reported in standard units.

† No discharge.

†† 'E' No Discharge Indicator (NODI) Code: "All samples or results were not available due to analytical equipment failure or because sample collection was overlooked or samples could not be collected for a parameter during the reporting period."

Based on the results in Table 2, monitoring and reporting will be discontinued for all legacy parameters that were maintained in the permit when it was amended in 2021 to account for the change in site activities from Shenango/DTE to Lindy Paving. The parameters with discontinued monitoring and reporting are ammonia-nitrogen, total arsenic, benzo(a)pyrene, total cadmium, COD, total chromium, total copper, total cyanide, total iron, total lead, naphthalene, oil and grease, and phenolics.

In addition, based on the data summarized in both Tables 2 and 3, BMPs appear to be controlling pollutants at Outfall 001. Therefore, no numerical TBELs are imposed.

001.B. Water Quality-Based Effluent Limitations (TBELs)

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 Q_{7-10} low flow conditions. Precipitation-induced discharges generally do not occur at Q_{7-10} design conditions because the precipitation that causes a storm water discharge

will increase the receiving stream's flow and that increased stream flow will provide additional assimilative capacity during a storm event.

Furthermore, at the Outfall 001 flow rates reported by Lindy Paving—on average, 0.00001977 MGD (0.013729 gpm) based on flow rates reported from June 2021 through October 2022—Outfall 001's storm water discharges are unlikely to impact the river. The $Q_{7\text{-}10}$ of the Ohio River is 4,730 cfs with Outfall 001's discharges representing just 0.001% of the river's $Q_{7\text{-}10}$ flow. Any potential impacts would be less likely during storm events when the Ohio River's flow is greater than 4,730 cfs.

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.

Ohio River Use Impairments

The Ohio River has two use impairments: 1) recreational use impairment caused by pathogens (listed in 2004); and 2) fish consumption use impairment caused by PCBs, chlordane, and dioxins (listed in 1996). There is a final TMDL addressing PCBs and chlordane dated April 9, 2001. There is no final TMDL for the recreational use impairment.

Given the site's characteristics, storm water discharges from Lindy's Shenango Parcel are not expected to contain PCBs, chlordane, and dioxins, so Lindy is not expected to contribute to the Ohio River's fish consumption use impairment. However, to ensure the permit reflects the requirements of the Ohio River TMDL with its 'zero' wasteload allocations for PCBs and chlordane, the following narrative limitation will be included as a condition in Part C of the permit.

> There shall be no point source discharges of Polychlorinated Biphenyls (PCBs) or Chlordane to the Ohio River.

The condition does not impose monitoring obligations on Lindy. However, it does allow DEP (or Lindy) to analyze effluent samples for PCBs and chlordane at DEP's discretion to determine whether Lindy complies with the TMDL. The condition also allows DEP to require Lindy to implement corrective actions to comply with the permit condition and, by extension, the TMDL's wasteload allocations if PCBs and chlordane are detected in point source discharges from the Shenango Parcel.

There should be no contribution of pathogens to the river from the Shenango Parcel other than natural sources (e.g., bird droppings), so Lindy is not expected to contribute to the Ohio River's recreational use impairment. No requirements are imposed in the permit relating to that impairment.

001.C. Effluent Limitations and Monitoring Requirements for Outfall 001

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61, effluent limits applicable at Outfall 001 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized below.

Table 3. Effluent Limits and Monitoring Requirements for Outfall 001

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	—	Report	—	—	—	25 Pa. Code § 92a.61(h)
Total Suspended Solids	—	—	—	Report	—	PAG-03, Appendix K; 25 Pa. Code § 92a.61(h)
Total Dissolved Solids	—	—	—	Report	—	PAG-03, Appendix K; 25 Pa. Code § 92a.61(h)
Chloride	—	—	—	Report	—	PAG-03, Appendix K; 25 Pa. Code § 92a.61(h)
pH	—	—	—	Report	—	PAG-03, Appendix K; 25 Pa. Code § 92a.61(h)

The parameters with monitoring requirements imposed pursuant to Appendix K of the PAG-03 will require 1/month grab sampling. As explained by DEP in the Fact Sheet and Fact Sheet Addendum for the 2021 permit amendment, monthly monitoring is required for salt storage parameters because salt handling is typically seasonal and semi-annual monitoring is not frequent enough to collect data to evaluate the effectiveness of salt storage BMPs.

Development of Effluent Limitations

Outfall Nos.	007 and 008	**Design Flow (MGD)**	Variable
Latitude	40° 29' 39.00" / 40° 29' 36.00"	**Longitude**	-80° 4' 42.00" / -80° 4' 42.00"

Wastewater Description: Storm water runoff from asphalt paved areas along the facility entrance road near the former guard house and vehicle scale

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

On Module 1 of the NPDES permit renewal application, Lindy Paving identified storm water Outfalls 007 and 008 as outfalls that are not exposed to industrial activities. The application instructions pertaining to 'no exposure' outfalls states that 'no exposure' certifies there are no industrial sources of pollutants in the drainage area of the outfall and the applicant believes there is no potential for pollution.

Standalone "no exposure" certifications approved by DEP require applicants to review a detailed list of potential exposure pathways when making a certification. In general, the same standard of review (or a more stringent standard of review) should apply to a site with industrial discharges or storm water discharges that are exposed to industrial activities in combination with discharges that are not exposed to industrial activities. That is, if a site already has industrial discharges or storm water discharges that are exposed to industrial activities, then greater scrutiny is warranted to ensure that storm water discharges from "non-exposed" areas are segregated from exposed areas so that a permit's more relaxed regulation of storm water discharges from "non-exposed" areas does not allow pollution to go undetected. Notably, EPA only allows no exposure certifications on a facility-wide basis. DEP's No Exposure Certification checklist is reproduced below.

Are any of the following materials or activities exposed to precipitation now, or will be exposed to precipitation within the next five years? Indicate Yes or No by checking the corresponding box for each item.

Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water.	☐ Yes	☐ No
Materials or residuals on the ground or in stormwater inlets from spills/leaks.	☐ Yes	☐ No
Materials or products from past industrial activity.	☐ Yes	☐ No
Material handling equipment (except adequately maintained vehicles).	☐ Yes	☐ No
Materials or products during loading/unloading or transporting activities.	☐ Yes	☐ No
Materials or products stored outdoors (except final products intended for outside use, e.g., new cars, where exposure to stormwater does not result in the discharge of pollutants).	☐ Yes	☐ No
Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers.	☐ Yes	☐ No
Materials or products handled/stored on roads or railways owned or maintained by the discharger.	☐ Yes	☐ No
Waste material (except waste in covered, non-leaking containers, e.g., dumpsters with lids).	☐ Yes	☐ No
Application or disposal of process wastewater (unless otherwise permitted).	☐ Yes	☐ No
Particulate matter or visible deposits of residuals from roof stacks/vents not otherwise regulated, i.e., under an air quality control permit, and evident in the stormwater outflow.	☐ Yes	☐ No

NOTE – An applicant is not eligible for No Exposure Certification if any of the answers to questions in the table above are "Yes". See additional eligibility requirements contained in the No Exposure Instructions (3800-PM-BCW0083f).

Outfalls 007 and 008 are not located near Lindy's salt stockpile, aggregate storage piles, or product storage areas, which are industrial areas that are exposed to storm water. The outfalls' catch basins are located along the entrance road to the site near the former guard house and truck scale. Therefore, potential pollutant sources for Outfalls 007 and 008 generally are limited to vehicles that could track excess materials onto the roadway. Also, as explained in Section 001.A of this Fact sheet, the site currently is permitted based on the potential for legacy contaminants from materials or products from past industrial activity (cokemaking). The pre-existing and/or potential pollutant sources would not disqualify Lindy from certifying no exposure for discharges from Outfalls 007 and 008 provided that 1) vehicles traveling along the entrance road are well-maintained to limit pollutant sources on the road; 2) impacts from past industrial activities have been mitigated; and 3) pollutant concentrations in the discharges are low.

As stated above, EPA only allows no exposure certifications on a facility-wide basis. DEP allows no exposure certifications on an outfall-by-outfall basis when the no exposure certification is accompanied by corroborating effluent analytical results at each outfall. The application requires permittees to sample storm water discharges for a short list of general chemistry parameters. According to Module 1 of the application, DEP considers the following benchmark values for those parameters to be indicative of No Exposure conditions. An exceedance of one or more of these benchmark values does not automatically disqualify a facility from seeking and obtaining No Exposure Certification approval.

- Oil and Grease (mg/L): ≤ 5.0
- BOD5 (mg/L): ≤ 10
- COD (mg/L): ≤ 30
- TSS (mg/L): ≤ 30
- Total Nitrogen (mg/L): ≤ 2.0
- Total Phosphorus (mg/L): ≤ 1.0
- pH (S.U.): 6.0 to 9.0 (unless precipitation pH is below 6.0)
- Total Iron (mg/L): ≤ 7.0

Lindy's application results for those pollutants and results for additional pollutants currently subject to monitoring under PA0002437 are summarized in the following tables. Application results are generally a summary of DMR results from a six month period preceding application submission except for CBOD5 (Lindy reported CBOD5 and not BOD5), Total Nitrogen, and Total Phosphorus, which do not require analyses under the current permit and which Lindy sampled separately to complete Module 1 of the application. Highlighted results exceed no exposure thresholds.

Table 4. Semi-Annual DMR Results for Outfall 007 (1st Half of 2018 through 1st Half of 2022)

Parameter	Avg. App. Result	1st Half 2018	2nd Half 2018	1st Half 2019	2nd Half 2019	1st Half 2020	2nd Half 2020	1st Half 2021	2nd Half 2021	1st Half 2022
Ammonia-N	0.1	16.23	1.53	<0.5	<0.5	<0.5	<0.01	0.19	<0.01	<0.01
Arsenic, Total	0.0018	0.004	<0.001	0.003	<0.001	<0.001	<0.01	0.0014	0.0021	<0.01
Benzo(a)Pyrene	<0.0023	0.091	<0.003	0.007	<0.003	<0.003	0.002	<0.01	<0.01	<0.01
Cadmium, Total	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01
CBOD5	<2.0	—	—	—	—	—	—	—	—	—
COD	49.5	547	49.8	<20	123	82.8	<0.01	16	83	<0.01
Chromium, Total	0.0036	0.044	0.007	0.007	0.002	0.003	<0.01	0.0025	0.0046	<0.01
Copper, Total	0.0047	0.17	0.014	0.032	0.012	0.006	0.0613	0.0032	0.0061	0.0023
Cyanide, Total	0.016	0.06	<0.01	<0.01	0.04	0.02	<0.01	0.032	0.019	<0.01
Iron, Total	0.89	9.51	1.04	0.4	0.84	0.89	0.0927	0.82	0.96	0.37
Lead, Total	0.0017	0.20	0.010	0.013	0.07	0.004	<0.01	0.0015	0.0019	<0.01
Naphthalene	<0.0023	0.022	<0.003	0.014	<0.003	<0.003	0.015	<0.01	<0.01	<0.01
Nitrogen, Total	<5.0	—	—	—	—	—	—	—	—	—
Oil and Grease	2.8	17.8	<5	<5	<5.0	<5	<0.01	5.5	<0.01	<0.01
pH (S.U.)	7.8	7.71	7.68	7.59	7.48	7.93	7.81	8.3	**See Table 5**	
Phenolics, Total	<0.01	<0.01	<0.01	<0.01	0.029	<0.01	<0.01	<0.01	<0.01	0.011
Phosphorus, Tot.	<0.10	—	—	—	—	—	—	—	—	—
TSS	61.6	685	<5	222	75.2	21.8	<0.01	110	**See Table 5**	

All results are reported in units of mg/L except pH, which is reported in standard units.

Table 5. Monthly DMR Results for Outfall 007 (June 2021 through October 2022) under PA0002437 A-1

Parameter	Jun '21	Jul '21	Aug '21	Sep '21	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22	Oct '22
Chloride	<0.01	1.9	4.2	7.9	2.7	140	73	†	22	22	19	E††	6.9	8.2	36	35	15
pH (S.U.)	8.3	7.8	8.7	7.9	7.9	8.1	8	†	8.3	8.0	8.1	E††	8.2	8.0	8.1	8.0	8.2
TDS	<0.01	130	63	120	180	410	290	†	150	140	240	E††	150	140	210	220	180
TSS	110	0.5	200	47	37	59	17	†	97	51	47	E††	9.0	180	8.1	<0.01	<0.01

All results are reported in units of mg/L except pH, which is reported in standard units.

† No discharge.

†† 'E' No Discharge Indicator (NODI) Code: "All samples or results were not available due to analytical equipment failure or because sample collection was overlooked or samples could not be collected for a parameter during the reporting period."

Table 6. Semi-Annual DMR Results for Outfall 008 (1st Half of 2018 through 1st Half of 2022)

Parameter	Avg. App. Result	1st Half 2018	2nd Half 2018	1st Half 2019	2nd Half 2019	1st Half 2020	2nd Half 2020	1st Half 2021	2nd Half 2021	1st Half 2022
Ammonia-N	0.1	9.41	1.88	0.69	<0.5	<0.5	<0.01	0.19	<0.01	<0.01
Arsenic, Total	0.0019	0.002	<0.001	<0.001	<0.001	<0.001	<0.01	0.0016	0.0022	<0.01
Benzo(a)Pyrene	<0.0023	<0.015	<0.003	0.005	<0.003	<0.003	0.00095	<0.01	<0.01	<0.01
Cadmium, Total	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01
CBOD5	<2.0	—	—	—	—	—	—	—	—	—
COD	50.5	284	39.4	201	67.6	47.2	42.9	18	83	<0.01
Chromium, Total	0.004	0.021	0.005	<0.001	0.001	<0.001	<0.01	0.0027	0.0053	<0.01
Copper, Total	0.0051	0.1	0.006	0.012	0.003	0.002	0.137	0.0032	0.0069	0.0029
Cyanide, Total	0.0255	0.01	<0.01	<0.01	<0.01	0.01	0.013	0.034	0.019	<0.01
Iron, Total	1.25	4.75	0.42	8.03	0.36	0.11	0.166	0.11	1.4	0.39
Lead, Total	0.0024	0.066	0.007	0.001	0.002	<0.001	<0.01	0.0021	0.0027	<0.01
Naphthalene	<0.0023	<0.015	<0.003	0.006	0.003	0.004	0.00062	<0.01	<0.01	<0.01
Nitrogen, Total	<5.0	—	—	—	—	—	—	—	—	—
Oil and Grease	<5.6	97.4	<5	<5	<5	<5	67.4	<0.01	<0.01	<0.01
pH (S.U.)	7.8	7.66	7.63	7.65	7.61	7.95	7.83	8.0	**See Table 7**	
Phenolics, Total	<0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.11	<0.01	<0.01	0.012
Phosphorus, Tot.	<0.10	—	—	—	—	—	—	—	—	—
TSS	39.2	242	9.0	112	28	19.0	10.0	73	**See Table 7**	

All results are reported in units of mg/L except pH, which is reported in standard units.

Table 7. Monthly DMR Results for Outfall 007 (June 2021 through October 2022) under PA0002437 A-1

Parameter	Jun '21	Jul '21	Aug '21	Sep '21	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22	Jun '22	Jul '22	Aug '22	Sep '22	Oct '22
Chloride	<0.01	2	1.6	2.4	2.5	140	75	†	24	23	18	E††	7.7	8.0	41	34	15
pH (S.U.)	8.0	7.8	9.0	7.9	7.9	8.1	8	†	8.3	8.1	8.1	E††	8.2	8.1	8.0	8.0	8.2
TDS	<0.01	130	32	130	120	410	300	†	150	140	270	E††	150	150	190	220	190
TSS	73	0.8	32	71	54	30	30	†	83	52	50	E††	9.8	170	3.7	0.7	0.9

All results are reported in units of mg/L except pH, which is reported in standard units.

† No discharge.

†† 'E' No Discharge Indicator (NODI) Code: "All samples or results were not available due to analytical equipment failure or because sample collection was overlooked or samples could not be collected for a parameter during the reporting period."

Based on the reported results, DEP does not agree that no exposure conditions exist at Outfalls 007 and 008. Results for TSS and COD exceed the no exposure thresholds for those pollutants semi-regularly. However, as with Outfall 001, monitoring and reporting will be discontinued for most of the legacy parameters that were maintained in the permit when it was amended in 2021 to account for the change in site activities from Shenango/DTE to Lindy Paving. The parameters with discontinued monitoring and reporting are ammonia-nitrogen, total arsenic, benzo(a)pyrene, total cadmium, total chromium, total copper, total cyanide, total iron, total lead, naphthalene, oil and grease, and phenolics.

Semi-annual monitoring and reporting will remain in effect for COD and Oil and Grease and monthly monitoring and reporting will remain in effect for pH and TSS.

Monthly monitoring for chloride based on Appendix K of the PAG-03 will be removed because the drainage areas for Outfalls 007 and 008 do not include salt storage. TDS monitoring will remain as an indicator pollutant.

SWO.B. Water Quality-Based Effluent Limitations (TBELs)

As explained in Section 001.B of this Fact Sheet, no mathematical modeling is performed to develop WQBELs for storm water discharges from Outfalls 007 and 008. Any impacts to the river would be negligible. 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.

SWO.C. Effluent Limitations and Monitoring Requirements for Outfalls 007 and 008

In accordance with 25 Pa. Code §§ 92a.12 and 92a.61, effluent limits imposed at Outfalls 007 and 008 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as described in Sections SWO.A and SWO.B, above. The applicable requirements are summarized in the table below.

Table 6. Effluent limits and monitoring requirements for Outfalls 007 and 008

Parameter	Mass (pounds)		Concentration (mg/L)			Basis
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant Maximum	
Flow (MGD)	—	Report	—	—	—	25 Pa. Code § 92a.61(h)
Total Suspended Solids	—	—	—	Report	—	25 Pa. Code § 92a.61(h)
Oil and Grease	—	—	—	Report	—	25 Pa. Code § 92a.61(h)
Chemical Oxygen Demand	—	—	—	Report	—	25 Pa. Code § 92a.61(h)
Total Dissolved Solids	—	—	—	Report	—	25 Pa. Code § 92a.61(h)
pH	—	—	—	Report	—	25 Pa. Code § 92a.61(h)

Monitoring frequencies and sample types from the previous permit will be maintained including 1/6 months grab sampling for COD and Oil and Grease and 1/month grab sampling for TSS, TDS, and pH. 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: Standard Operating Procedure (SOP) for Clean Water Program – Establishing Effluent Limitations for Individual Industrial Permits" [SOP No. BCW-PMT-032, Version 1.6
☐	Other:

ATTACHMENT A

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Appendices K and M

APPENDIX K

EXISTING SALT STORAGE AND DISTRIBUTION SITES

I. APPLICABILITY

The requirements in Appendix K apply to stormwater discharges from Existing Salt Storage and Distribution Sites with large and/or small stockpiles, regardless of SIC Code, where the discharges do not enter a municipal separate storm sewer system (MS4) that is covered by an NPDES permit.

The term "existing" refers to sites that are used for roadway deicing material storage or distribution as of September 24, 2016. The term "salt" is inclusive of solid chemical products stored and utilized for the principal purpose of deicing roadways for public safety (including but not limited to sodium chloride, magnesium chloride, calcium chloride, calcium magnesium acetate, potassium acetate, and mixtures thereof). The terms "large stockpile" and "small stockpile" refer to sites that are designed for storage of at least 3,000 tons of salt and less than 3,000 tons of salt, respectively.

II. SECTOR-SPECIFIC DISCHARGE PROHIBITIONS

This General Permit does not cover the following discharges:

A. Discharges from new salt storage and distribution sites. New salt storage and distribution sites with large stockpiles must apply for and obtain an individual NPDES permit (or other DEP approval), whether or not such sites are co-located with other industrial activities, unless such discharges will be covered by an MS4 NPDES permit. New salt storage and distribution sites with small stockpiles are not required to seek permit coverage under an individual NPDES permit if the BMPs specified in Section IV of this appendix are implemented and maintained, unless otherwise notified by DEP in writing that permit coverage or other DEP approval is required.

B. Discharges from new or existing salt storage and distribution sites that also store other non-salt and non-aggregate materials for deicing, including but not limited to coal ash and incinerator ash.

III. MONITORING REQUIREMENTS

The permittee must monitor and report analytical results for the pollutants listed below on Discharge Monitoring Reports (DMRs) for representative outfalls, subject to footnotes provided. The benchmark values listed below are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for two or more consecutive monitoring periods, the permittee shall take action in accordance with Part C V.I of this General Permit.

Pollutant	Monitoring Requirements [1],[2],[3],[4]		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Nitrogen (mg/L) [5]	1 / 6 months	Calculation	XXX
Total Phosphorus (mg/L)	1 / 6 months	Grab	XXX
pH (S.U.)	1 / 6 months	Grab	9.0
Total Suspended Solids (TSS) (mg/L)	1 / 6 months	Grab	100
Total Dissolved Solids (mg/L)	1 / 6 months	Grab	XXX
Chloride (mg/L)	1 / 6 months	Grab	2,000

Footnotes

(1) The permittee shall monitor the listed pollutants at representative outfalls that receive runoff (including discharges from stormwater collection ponds) from areas where salt is stored and handled. One sample must

be collected during the period October 1 – March 31 (to be submitted on a DMR due April 28) and one sample must be collected during the period April 1 – September 30 (to be submitted on a DMR due October 28).

(2) Permittees with large stockpiles shall monitor the listed pollutants in accordance with Footnote (1). Permittees with small stockpiles shall monitor the listed pollutants for the first year of General Permit coverage; if discharge concentrations are less than benchmark values identified above for both sample events, monitoring may be reduced to 1/year during the period October 1 – March 31 for the remainder of the General Permit term, otherwise monitoring must continue semiannually throughout the term.

(3) In accordance with Part C V.C, the permittee shall conduct additional monitoring if specified by DEP in the letter authorizing permit coverage or other correspondence.

(4) This is the minimum number of sampling events required. Permittees may optionally perform additional sampling.

(5) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

IV. SECTOR-SPECIFIC BMPs

In addition to the BMPs contained in Part C II of the General Permit, the permittee shall implement, at a minimum, all of the following BMPs that are applicable to the processes in place at the facility for which coverage under this General Permit is approved. The following BMPs apply to salt stockpiles only and not stockpiles of antiskid materials (e.g., stone, sand, cinders, etc.) that may be present on-site unless DEP determines that such materials are causing or contributing to pollution, in which case the BMPs shall be implemented upon receipt of written notification from DEP in accordance with a schedule provided by DEP or an approved alternate schedule.

A. Surface and Cover.

1. The permittee shall store salt stockpiles and conduct loading/unloading activities on a synthetic, impermeable surface (i.e., < 10^{-7} cm/sec).

2. Salt stockpiles must be covered under permanent, structural cover wherever feasible. If stockpiles are not covered under permanent, structural cover, stockpiles must be covered by materials including but not limited to tarpaulin, polyethylene, polyurethane, polypropylene, or hypalon with sufficient strength to prevent tearing. When loading and unloading is not being performed, the entire stockpile must be covered at all times. Upon completion of loading or unloading activities, stockpiles must be recovered as soon as possible.

B. Material Management.

1. Remove covering at the working face just high enough to load out the day's shipment. This will minimize moisture absorption and secure the cover if wind direction shifts toward the working face.

2. Maintain the working face perpendicular to the long axis of the pile by loading alternately left/right and right/left.

3. Avoid creating a horseshoe-shaped working face that results from removing the center of the pile and leaving extended edges or aprons.

4. Maintain adequate cover at the lower edge or toe of the working face to permit maximum possible resealing of the edge of the cover when operations are completed for the day. Take care to avoid cover damage caused by cascading salt from the upper section of the working face.

5. Establish and maintain the working face at the downwind end of the stockpile whenever operationally feasible.

6. Clean up material spills from loading/unloading areas at the end of the work day.

C. Stormwater Management

1. Utilize site grading, curbs, or berms to prevent run-on to and direct runoff from salt storage surfaces.

2. If stormwater collection ponds or basins are installed and utilized, such ponds shall contain a synthetic liner and be managed to limit discharges to only those times where surface water flows are elevated.

3. The permittee shall recycle collected stormwater that may have come into contact with salt materials wherever feasible.

APPENDIX M

ASPHALT PAVING, ROOFING MATERIALS AND LUBRICANTS

I. APPLICABILITY

The requirements in Appendix M apply to stormwater discharges associated with industrial activity from Asphalt Paving, Roofing Materials and Lubricants facilities as identified by the following SIC Codes: 2951, 2952, 2992, and 2999. Other facilities may be required to comply with this appendix if notified by DEP in writing.

Appendix M does not cover stormwater discharges from oil recycling facilities, which are covered under Appendix P, and stormwater discharges associated with fats and oils rendering, which are covered under Appendix I.

II. SECTOR-SPECIFIC DISCHARGE PROHIBITIONS

This General Permit does not cover the following discharges in this sector and an individual NPDES permit is required for such discharges:

A. Stormwater discharges from petroleum refining facilities, including those that manufacture asphalt or asphalt products, subject to effluent limitation guidelines in 40 CFR Part 419 (Petroleum Refining).

B. Runoff from asphalt emulsion facilities, subject to effluent limitation guidelines in 40 CFR Part 443.

III. MONITORING REQUIREMENTS

The permittee must monitor and report analytical results for the pollutants listed below on Discharge Monitoring Reports (DMRs) for representative outfalls, subject to footnotes provided. The benchmark values listed below are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for two or more consecutive monitoring periods, the permittee shall take action in accordance with Part C V.I of this General Permit.

Pollutant	Monitoring Requirements [1],[2]		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Nitrogen (mg/L) [3]	1 / 6 months	Calculation	XXX
Total Phosphorus (mg/L)	1 / 6 months	Grab	XXX
pH (S.U.)	1 / 6 months	Grab	9.0
Oil and Grease (mg/L)	1 / 6 months	Grab	30
Total Suspended Solids (TSS) (mg/L)	1 / 6 months	Grab	100

Footnotes

(1) In accordance with Part C V.C, the permittee shall conduct additional monitoring if specified by DEP in the letter authorizing permit coverage or other correspondence.

(2) This is the minimum number of sampling events required. Permittees may optionally perform additional sampling.

(3) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

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IV. SECTOR-SPECIFIC BMPs

In addition to the BMPs contained in Part C II of the General Permit, the permittee shall implement, at a minimum, all of the following BMPs that are applicable to the processes in place at the facility for which coverage under this General Permit is approved.

A. Provide for secondary containment around asphalt and petroleum product tanks; install leak detection and high-level overflow devices.

B. Practice good housekeeping by periodically removing dust and spilled materials from throughout the site.

C. Divert stormwater run-on from aggregate storage areas and design piles to minimize erosion and control runoff.

D. Only perform vehicle washing in dedicated areas; collect wash water from storm drainage separately.

E. Complete truck wheel washing if necessary to avoid off-site material tracking.

F. Utilize dust control agents.

G. Use biodegradable truck release materials.

H. Wash trucks using biodegradable washing materials or wash trucks indoors.

I. Use silt fences or rock filters around piles or sediment basins to control turbidity in runoff.

J. Ensure that vegetated drainage ditches and swales are properly seeded and any accumulated materials in them have been removed at least annually.