pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PAS232214**
Facility Type	**Storm Water**	APS ID	**792912**
Major / Minor	**Minor**	Authorization ID	**1213537**

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

Applicant and Facility Information

Applicant Name	**American Rock Salt Co. LLC (ARSC)**	Facility Name	**Scranton Salt Storage Facility**
Applicant Address	PO Box 190	Facility Address	201 West Elm Street
	Mount Morris, NY 14510-0190		Scranton, PA 18512
Applicant Contact	Raissa Luna (Env Engr)	Facility Contact	Chip Pascuzzo (Stockpile Mgr.)
Applicant Phone	(585) 991-6851	Facility Phone	(585) 749-6700
Client ID	112334	Site ID	766048
SIC Code	5169	Municipality	Scranton City
SIC Description	Wholesale Trade - Chemicals And Allied Products, Nec	County	Lackawanna
Date Application Received	December 27, 2017	EPA Waived?	No
Date Application Accepted	March 12, 2018	If No, Reason	IW facility.
Purpose of Application	Renewal of Individual IW Stormwater NPDES Permit		

Summary of Review

This is an **0.140 MGD Individual IW (Minor without ELG) NPDES Permit Renewal** for a (~95,000 tons storage capacity) Rock salt storage and distribution facility (in operation since 2013) discharging to the Lackawanna River (CWF; Stream Code No. 28374; Natural Trout Reproduction; Impaired due to urban runoff/storm sewers and CSOs for Pathogens plus AMD for pH, AMD metals (aluminum, iron, manganese), siltation, and flow regime modification).

- **Revised Application**:
  - Received 12/9/2021 via On-Base: On-Base Reference No. 38597
  - Updated 2025 NPDES Permit Application information: Public Upload# 334908
  - It was originally permitted as an Individual IW Stormwater NPDES permit, but now reclassified for reasons discussed below.
- **Reclassification as an IW (minor without ELG) NPDES Permit (from IW Stormwater NPDES Permit)**: The facility impoundment is a wastewater treatment impoundment that accepts contaminated stormwater (direct contact with salt product on the Salt Storage Pad and Railcar Unloading Area) for treatment prior to discharge to the waters of the Commonwealth. The Impoundment provides limited treatment, i.e. solids can settle prior to valve-controlled releases from the Impoundment's top stratified water layers (with discharge monitored at IMP# 101, which then combines with IMP# 201 flow from drainage area around the Salt Pad prior to discharge to Outfall No. 001 on the Lackawanna River). However, the Impoundment effluent quality shows the impoundment has been unable to adequately remove dissolved substances (TDS, Chlorides, etc.) to meet the IW Stormwater General Permit PAG-03 2,000 mg/l Chlorides benchmarks (factor of 10 discrepancy) for salt pile industrial category IW stormwater (despite implemented stormwater BMPs). The PAG-03 benchmark value represents a DEP statewide BPJ for an industrial category indicator chemical (for other expected industrial category pollutants) to identify contamination. In practical terms, dissolved substances have not been adequately settling out & normal evaporation has been concentrating any received dissolved substances in the Impoundment (making it "saltier" like the Dead Sea). Dissolved substances may stratify in the Impoundment, but simply have not been settling to the extent of larger solids (TSS) particles. The

Approve	Deny	Signatures	Date
X		James D. Berger (signed) James D. Berger, P.E. / Environmental Engineer	August 5, 2025
X		Amy M. Bellanca (signed) for Edward Dudick, P.E. / Environmental Engineer Manager	8-5-25

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effluent high concentrations have potential for causing Chapter 93 Water Quality exceedances (per TMS below) and potential for cumulative synergistic impacts. (Internet sources note that high chlorides concentrations and high sodium or other salt ion (like sodium) concentrations can have assorted impacts.)

- **Rock Salt**: Estimated to contain 75 PPM/Ton of Sodium Ferrocyanide (YPS) in the PPC Plan.
- **Implementation of Existing Stormwater BMPs**: The Department noted the potential reclassification of the Impoundment as wastewater impoundment and inquired as to whether the Impoundment was being operated as designed and any proposed steps to reduce the high concentrations in the discharge. The 2025 NPDES Application Response Letter (Response for Question 2) indicated no change in facility design, operations or stormwater BMPs since original 2013 WQM permit. The 2025 NPDES Application Response Letter (Response to Item 5) indicates that they also implemented the PAG-03 BMPs and supplemental "Salt Institute Voluntary Salt Storage Guidelines for Distribution Stockpiles" per the previous Individual IW Stormwater NPDES Permit. To address the elevated chloride and other constituent concentrations (including free cyanide), ARSC is evaluating further corrective actions, which may include:
  - Enhancing operational controls to minimize runoff contact with salt-handling areas.
  - Reviewing processes or source contributions to high constituent levels.
  - Increasing inspection frequency and maintenance of existing stormwater BMPs.

  NOTE: Given previous implementation of salt industrial category BMPs, the only clearly effective way for the impoundment discharge to meet the existing 2,000 mg/l Chlorides benchmark (PAG-03 statewide DEP BPJ industrial category indicator of contamination) might be either enclosing the active salt storage/loading/unloading areas to prevent stormwater contact with the salt materials (source separation) and/or enhancing impoundment treatment to effectively treat dissolved substances. Should ARSC succeed in consistently meeting the PAG-03 benchmarks by other enhanced BMPs, the Department would consider reverting the permit to an Individual IW Stormwater Permit.
- **6/28/2013 WQM Permit No. 3513403 information**:
  - Only the stormwater that comes into contact with the salt on the pad and in the rail unloading bay was to go to the impoundment. Stormwater from the open/uncovered area of the pad and the rail car unloading area will go the impoundment. All other site stormwater including the stormwater shed by the salt pile tarping system was to go through monitoring point 201 and then to the Lackawanna River.
  - The impoundment is designed to contain a 100-year storm event with a working volume of 243,000 gallons. The impoundment will have a double liner system consisting of a 60-mil primary liner, a 220-mil geonet transmissivity layer, and a 40-mil secondary liner. The total thickness of the liner system is 320-mil. A sump will be provided to collect samples from the geonet transmissivity layer.
  - The permittee shall visually inspect the impoundment double liner leak detection water level indicator weekly. A sample shall be collected and analyzed for salinity within 24 hours if the water level in the stand-pipe triggers the water level indicator. **NOTE**: Per 2025 NPDES application Response Letter (response to Question 3): No discharges were observed from the Lined Pond Leak Collection and Recovery System during the reporting period (3-years). If any flow was present, it was collected and returned to the lined pond for proper management. There were not uncontrolled discharges from the line pond through emergency spillways during the reporting period.
  - The Impoundment shall be equipped with an effluent control mechanism to enable it to be drained when necessary to minimal levels during or shortly after a storm while stream flow is high. The impoundment discharges through a 3-inch ball valve and discharge orifice (monitoring point 101) to a 24-inch PE pipe line to Outfall 001 on the Lackawanna River. **NOTE**: The facility was permitted to discharge up to 0.140 MGD based on an estimated 2-year storm event standard volume/elevation in the Impoundment, via use of valved discharges. The previous NPDES permit contains a special condition in Part C that limits the discharge flow to 0.14 MGD.
  - Salt Storage Pad construction will consist of Jersey barriers recessed into a bituminous pad. All joints seams between the Jersey barriers and between Jersey barriers and the bituminous pad will be sealed. The pad will be sloped to 1-inch drains that will carry any salt laden stormwater to the impoundment. The facility will utilize industry specific tarping system that will minimize the exposure of the salt pile to stormwater. The Tarps will be installed as the salt pile is built and then removed as the pile is dispersed. As the salt pile is dispersed, only the pile face will be exposed. The tarps are secured by sandbags attached to the tarps by straps and on the apron surrounding the pad. The apron surrounding the pad is paved and sloped to drain away from the pad. The stormwater coming off the covered salt pile onto the apron should not have been exposed to the salt. This storm water along with other non-pad area stormwater will go to Monitoring Point 201 and then to the Outfall 001.) **NOTE**: Per 2025 NPDES application Response Letter (Response to Question 2): In 2021, the

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drainage area associated with Outfall 201 was regraded and paved to divert runoff into a lined stormwater pond. Since 2022, no discharge has occurred from Outfall 201. A stone swale, located at the northeast end of the asphalt pad (outside the jersey barriers), now diverts clean stormwater through a discharge pipe bypassing the impoundment. No sampling has been conducted at Outfall 201 since that time.

- The available non-impoundment IMP# 201 discharge EDMR data (see compliance section) showed high TDS (15,200 mg/l), Chlorides (10,100 mg/l) and Osmotic Pressure (410 mOs/kg) confirmed need to redirect perimeter swale flow to the Impoundment and/or other stormwater BMP enhancement.
- The new stone culvert/pipe (bypassing the impoundment) has become the relocated Outfall/IMP No. 201. In practical terms, any flows not going to the WQM-permitted Impoundment remain IW stormwater subject to permit requirements (including monitoring). The burden falls on the permittee to show that the stormwater is "clean", given wind dispersion, potential truck releases, etc.

▪ Other WQM permit application commitments:

- ARSC will sweep the impoundment to remove accumulated sediment on a periodic basis per DE Report Section 2.5.
- ARSC will record Scranton/WB Airport weather station rainfall events.

○ **Impoundment Effluent Discharge Quality**: See below. The PAG-03 benchmarks for COD and Chlorides are exceeded by a factor of ten (10) with correspondingly high concentrations of other parameters. In practical terms, Impoundment discharge quality raises potential for exceedances of the Chapter 93 Water Quality Standards and potential for synergistic & cumulative impacts (whole effluent toxicity).

Constituent	2025 Application Update-reported Average (mg/l unless indicated otherwise)*	EDMR Data (6/2024- 5/2025) (mg/l unless indicated otherwise)*	PAG-03 Appendix K Benchmark (mg/l unless indicated otherwise)	Most Stringent Chapter 93 WQS or Chapter 95 TBEL*
Chemical Oxygen Demand (COD)	**1,460 (1 sample)**	-	**120** (not Appendix K)	-
TDS	**29,800 (24 samples)****	**8,370 – 25,000**	-	750 mg/l max, and 500 mg/l monthly
TSS	86 (24 samples)**	13 - 54	100	-
Chloride	**21,220 (24 samples)****	**5,580 – 17,900**	**2,000**	250 mg/l (PWS)
Free Cyanide	**0.250 (24 samples)****	0.027 – **0.224**	-	0.004 (THH)
Osmotic Pressure	**1,070 mOs/kg (24 samples)****	71 – **1410 mOs/kg**	-	50 milliosmoles per kg (mOs/kg) max
pH	6.1 SU (24 samples)	**5.6** – 8.8 SU	9 SU	**6.0** – 9.0 SU except where acid rain might occur
Oil & Grease	<3.8 (24 samples)	-	-	30 max
BOD5	<2.2 (1 sample)	-	30 (not Appendix K)	-
TN	5.5 (1 sample)	-	-	-
TP	<0.10 (1 sample)	-	-	-
Ammonia-N	0.029 (1 sample)	-	-	NA – concentrations too low for limits to apply
Nitrate-Nitrite as N	1.83 (1 sample)	-	-	10 max
TKN	3.7 (1 sample)	-	-	-
Aluminum	0.029 (1 sample)	-	-	0.750
Iron	0.44 (1 sample)	-	-	1.500
Manganese	0.074 (1 sample)	-	-	1.000

*SOP No. BCW-PMT-032 Section III.D states: In general, if actual stormwater concentrations exceed 100 times the most stringent Chapter 93 criterion (or a lesser amount for large industrial areas that drain to small streams), or exceed 100 mg/L for pollutants without criteria, the application manager should consider applying effluent limits for the applicable parameters and/or the implementation of BMPs with compliance schedules as necessary to achieve the limits or

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otherwise reduce stormwater concentrations.
**2025 NPDES Permit Application Attachment 4-reported annual maximum values:

Constituent	2021	2022	2023	2024
TDS (mg/l)	75,300	33,600	27,299	7,790
TSS (mg/l)	78	386	106	54
Chloride (mg/l)	45,100	31,900	15,800	5,310
Free Cyanide (mg/l)	0.870	0.591	0.525	0.27
Osmotic Pressure (mOSm/kg)	1,340	1,560	813	451

TMS Output (using 2025 NPDES Permit application and most recent 12-month EDMR data): The Toxic Management Spreadsheet (TMS) was used to ballpark concentrations of concern and potential daily max/IMAX limits for the intermittent (1 day per month or less frequent) impoundment discharges and site stormwater discharges at the permitted 0.140 MGD impoundment discharge flow. The facility Application and EDMR data did not show that the resulting daily max/IMAX limits would be exceeded, allowing for their incorporation in terms of the daily max and IMAX limits to protect the public health, safety, welfare, and environment.

- The Osmotic Pressure AFC (Acute Fish Criterion) WQS addresses short-term excursions above the Chapter 93 WQS (15-minute maximum allowable criteria compliance time at design flow conditions per DEP Technical Guidance policy No. 386-0100-001 “Water Quality Toxic Management Strategy”). Therefore, the AFC-based daily max/IMAX WQBEL applies here.
- The Free Cyanide THH WQS is meant to protect human health and is based upon a 12-hours maximum allowable criteria compliance time at design flow conditions per DEP Technical Guidance policy No. 386-0100-001 “Water Quality Toxic Management Strategy”. Per Chapter 16.32 & 16.51, the THH is based on a threshold level toxic effect which includes systemic effects when concentration reaches the threshold values. Therefore, the daily max Human Health-based daily max/IMAX WQBEL applies here.
- Whole Effluent Toxicity (WET) Testing is not recommended at this time, in the absence of evidence of negative impacts at the Outfall No. 001 location (i.e. fish kills, etc.).

☑ ***Recommended WQBELs & Monitoring Requirements***

No. Samples/Month: 4

	Mass Limits		Concentration Limits						
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments
Free Cyanide	0.43	0.67	368	574	919	µg/L	368	THH	Discharge Conc ≥ 50% WQBEL (RP)
Osmotic Pressure	XXX	XXX	1,032	1,610	2,581	mOs/kg	1,032	AFC	Discharge Conc ≥ 50% WQBEL (RP)

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- TDS consideration per original 2013 NPDES Permit Fact Sheet: Total Dissolved Solids (TDS) data in the application showed an average concentration of 77,527 mg/l from similar facilities. As calculated in the application the average annual daily load to be 4,362 lbs./day from the 2.76-acre storage pad area. This value is less than the 5,000 lbs./day annual average threshold for requiring a variance per 95.10(a)(7). The facility will be required to monitor the discharge for TDS daily when discharging. Because the proposed TDS load is 87 percent of the 5,000 lb/day threshold, a special condition was added to Part C of the permit. Should the TDS annual average daily load exceed 5,000 lbs./day the condition indicates that the Department may open the permit to determine if treatment requirements for TDS must be imposed pursuant to 25 PA Code 95.10. Flow is required to measured daily when discharging in order to calculate TDS mass loadings. **NOTE**: In practical terms, the Chapter 95.10 annual average trigger requirement means the high daily max loadings (1 or 2 days per month) are averaged out. See Effluent limitations section for related comments.

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Detailed Facility Description: This is a ~10-acre rock salt storage & distribution facility with railcar unloading area, salt storage pad, retention basin, and Truck Scale/scalehouse & access roads. The site consists of a 2.76 acres salt storage pad with associated Impoundment, Railcar Unloading Area, truck scales, and access roads on a ~10-acre property.
The application noted 1,077,905 SF facility (15% impervious) was estimated to contain a 133,225 SF salt storage pad and 9,43,905 SF sheet flow/surrounding area.

- **Onsite Stored Materials:** Sodium Chloride and Sodium Ferrocyanide (YPS, an anticaking additive mixed into the salt at the mining source, prior to arrival onsite). **NOTE**: Per the PAG-03 Appendix K, 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). Change in salt type and/or other forms of anti-skid/deicing materials (coal ash, etc.) would require NPDES Permit Part A.III.C.2 (Planned Changes in Waste Stream) notifications prior to management onsite.
- **Railcar Unloading Area**: Behind the salt storage area is the rail storage and unloading area. The facility has a ~40 car, 2,400-ton storage capacity for railcar unloading per DEP Inspection Report. Salt is unloaded from the railcars through a hoper under the railroad tracks directly onto a conveyor belt constructed in a sealed under track concrete pit. The hopper pit is inspected and cleaned daily and includes a drain for stormwater that connects to the conveyance system. The facility can also (rarely) receive rock salt by truck on the Salt Storage Pad itself.
    - The salt is unloaded from railcars through a hopper under the railroad tracks directly onto a conveyor belt constructed in a "under track" concrete pit. The salt is moved by horizontal conveyors and a stacking conveyor for storage. The unloading pit has a pipe to the Impoundment. The salt is generally received during a 4-month period (June through October, historically drier months upfront per original permitting documents) until enough have been accumulated for later seasonal usage. Salt can be delivered to replace used volumes at other times.
- **~95,000-ton Rock Salt Storage Pad**: The ~95,000-ton rock salt storage facility stores salt in a continuous 35-feet high pile, which is subdivided into 10,000-ton subpiles. The rock salt storage area is paved and fashioned to direct all stormwater to either the collection and conveyance system or flow directly to the retention basin. Most of the salt pile is covered by impervious tarp. The paved storage area is bordered by jersey barriers set into the pavement to ensure stormwater catchment. Stormwater inlets are located around the salt storage area, all connected to a common conveyance system leading to the retention basin.
    - **Pad Size**: 220 by 600 feet (120,000 SF) or 2.75 acres. Bituminous paved with covering tarps anchored to sand bags and attached to the perimeter concrete jersey barriers. The internal joints are sealed with drainage directed to surface stormwater inlets and piped to the lined impoundment.
    - **Pad Activities**:
        - ARSC contracts with a company to cover the pile in tarps that are anchored with sandbags and attached to the perimeter concrete Jersey barriers.
        - ARSC uncovers enough of the pile to meet current demand.
    - **Construction**:
        - Pad construction consists of Jersey barriers recessed into a bituminous pad. All joints seams between the Jersey barriers and between Jersey barriers and the bituminous pad was to be sealed. The pad will be sloped to internal pad 15-inch drains that will carry any salt-laden stormwater to the impoundment.
        - The facility utilizes industry specific tarping system that minimizes the exposure of the salt pile to stormwater. The Tarps will be installed as the salt pile is built and then removed as the pile is dispersed. As the salt pile is dispersed, only the pile face will be exposed. The tarps are secured by sand bags attached to the tarps by straps and on the apron surrounding the pad.
        - The pad's outside asphalt "apron" would receive tarp cover runoff & salt spillage, but the original apron design detail did not specify any grading or curb to capture the salt or IW Stormwater prior to reaching perimeter swales. Any overflow from the apron would flow into the pad's perimeter swales directing runoff to Stormwater Outfall No. 201. **NOTE**: The permittee indicates redirection of much of this area to the Impoundment since 2021.
            - The original narrative indicated the apron was sloped to drain away from the pad, but ARSC personnel indicated they may have modified some of the apron to drain inward (toward the pad) during the 1/5/2022 Site Visit (to capture any salt spillage and tarp runoff). They added

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some asphalt curbing along portions of the apron (collecting runoff), which is a BMP enhancement (allowing capture of salt and IW stormwater).
- They paved the ~1,300 LF swale area between the pad and Impoundment in 2021 (adding a curb around the receiving inlet (located off the pad), redirecting surface runoff to the Impoundment per narrative, but original design was for the outside swale to direct runoff to Outfall No. 201. Without updated grading plans or inlet/piping design detail, it is unclear what drainage area water is being directed to the Impoundment or the stormwater controls.

- The entrance to the pad was to have had a berm to ensure separation of stormwater from inside the pad area and external stormwater per original application.

- **Impoundment**: In addition to the above information: Stockpile manager reported discharge to Outfall 101 is manually carried out during qualifying rain events following facility procedure of monitoring levels in the retention basin. Over each monthly reporting period, the facility will normally only discharge during a rain event if the retention basin level has risen significantly. Each discharge normally empties the retention basin to the standpipe's level. The retention basin is not normally cleaned due to small amounts of sediment buildup at the bottom and to avoid disturbing the sediment causing high TSS. Outfall/Internal Monitor Point 101 discharges to Outfall No. 001 on the Lackawanna River.
  - **Basin Design & dewatering**: See Treatment Plant section for additional details and information
  - **Operation of Impoundment**: Per 3/7/2013 ARSC Consultant (Michael Tucci of IES Engineers) E-mailed Design Engineer Report Attachment A Section 3.0 Operational Flexibility and Reliability:
    - Impoundment Pond:
      - Working capacity: 243,000 gallons.
      - Top of Berm Elevation: 719 Feet Elevation (476,100-gallon capacity)
      - Bottom Elevation: 713 Feet Elevation (zero capacity)
    - Planned discharges: ARSC was to open the impoundment valve when the water level reaches **715.94 Feet (which is the 2-year storm water surface elevation) to drain down to the 3-inch orifice elevation of 714.84 Feet. This volume is estimated at 91,000 gallons**. **NOTE:**
      - ARSC has apparently been discharging only when the impoundment water level at 3.60 feet (716.60 Feet Elevation). As the emergency spillway is at 716.66 Feet Elevation, any precipitation event might cause "non-emergency" discharges at this operating level.
      - The WQM application technical consultant estimated that 1,999,518 gallons overtopped the concrete weir in 2020 with 133 precipitation events in 2020 (discounting evaporation), resulting in the need for only 6 manual release (despite 37.22 inches (3.10 feet) of precipitation in 2020 per PAWC Scranton Chapter Report Spreadsheet summary of monthly precipitation). ~2.9-inches of rainfall was estimated as the 2-year/24-hour storm precipitation by one PENNDOT publication.
      - Redirection of part of the perimeter swale to the Impoundment increases the volume going to the Impoundment.
    - Hydrostatic Head measurement: ARSC will permanently mark the 2-year water surface elevation with 0.10 feet gradations on the inlet box to allow the outflow volume to be calculated. ARSC will record the water levels and time of day upon opening and shutting the valve in order to calculate the volume.
    - Discharge Volume will be calculated by: V (volume) = Q (from impoundments in CFS)(Beginning discharge time minus ending discharge time in seconds)(7.48 gal/1 cubic feet). **NOTE:** They could identify the impoundment storage volume compared to water level elevation (in 0.1 foot increments) to allow for direct calculation of discharged volumes (as long as the water level is below the emergency spillway elevation).
    - Flow Rate will be calculated by: Q (CFS) = (Coefficient of discharge, 0.62 for a sharp-edged entrance)(Area of cross-section of orifice in feet)([(2)(32.2 ft/sec^2 gravitational constant)(beginning hydrostatic head minus ending hydrostatic head in feet)]$^{0.5}$. **NOTE:** If they know the volume (as determined per above note), then they can divide by the time of the manually controlled discharge to identify the daily discharge rate. This calculation does not cover emergency spillway discharges (not discharged by the control orifice).
    - Precipitation: ARSC records rainfall events from Scranton-WB International Airport weather station. ARSC proposed to use the monthly TDS concentration to calculate the TDS loading rate. (365 day/year)

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- **Access Road/Truck Scale & office/Fueling Area**: Onsite vehicle fueling takes place by the truck scale house. The ARSC sheet flow stormwater drainage area along the access road (drainage area Outfall No. 002) would drain through the adjacent Mining area to reach the Lackawanna River.
- **Adjacent Mining Activities**: Application indicates the 10-acre facility is leased from CSY Inc. with CSY holding an active Mining Permit No. 35840203 (former Baker Stripping Mine Operation No. 1). Active mining operations noted in adjacent areas during 1/5/2022 site visit. E-maps indicated Coal Mining Operation: Refuse Reprocessing with Mining Stormwater GP and S Other ID: PAM111103.
- **DEP Inspection Report-listed Site BMPs include**:
  - Weekly inspection of facility yard, inlets, and salt storage tarps
  - Filter socks located at all inlets
  - Spill kit containing socks and quick-dry material located in the electrical/storage unit near salt storage
  - Old rubber belts reused as mats to catch spilled salt in the railcar unloading area
  - Cobble implemented on railway side of the facility to catch sediment before reaching the inlet
- **Updated IMP/Outfall Information**:
  - **Outfall 001 (Discharge to Lackawanna River with sampling manhole downstream of Outfall Nos. 101 and 201 sampling points)**: Receives discharges from Impoundment (Outfall/IMP No. 101) and area surrounding Pad (Outfall No. 201) with sampling point near the two IMPs, then 24-inch PE pipeline to discharge point on the Lackawanna River. Not monitored in previous NPDES permit term.
    - Sampling point does not receive Access Road/Scales drainage.
    - The combined IMP Nos. 101 and original IMP 201 area would be ~143,925 SF out of the overall site (943,870 SF; 21.67 acre) stormwater drainage area.
  - **Outfall/IMP 101 (Wastewater impoundment receiving Pad containment discharge, ultimately discharging to Outfall No. 001):** Impoundment discharge with drainage includes runoff from the rock salt storage pad and rail car unloading area, plus redirected salt pad perimeter area. The impoundment discharges intermittently during the year.
    - Application indicated 133,225 SF (3.06 acres) drainage area (including additional ~1,300 LF paved swale area directed to pond). Annual Stormwater Inspection Reports indicated an estimated 125,300 SF drainage area (including railcar unloading area), not discounting any tarp runoff area to the surrounding perimeter swale captured in IMP No. 101).
    - IMP/Outfall No. 101 orifice pipeline discharge does not address any emergency spillway discharges in terms of volumes or discharges at times when the orifice discharge is not manually opened & being sampled.
  - **Outfall/IMP No. 201 (Swale stormwater drainage area immediately surrounding the salt storage pad, ultimately discharging to Outfall No. 001):** Monitored annually (grab sampling) in previous permitting, but not monitored since 2021 (after some perimeter swale flow was redirected to Impoundment & other stormwater redirected to a stone swale/pipe). Application-provided "Additional Information for Reporting of Stormwater Discharge Monitoring" forms noted 201 samples were not taken, without explanation of circumstances preventing sampling on the forms.
    - The stone swale/pipe (bypassing the Impoundment) would be an available concentrated point of stormwater discharge (i.e. relocated Oufall/IMP No. 201 monitoring location)
    - 2018 Annual Stormwater Inspection Reports estimated 10,700 SF drainage area for this Outfall. This drainage area was estimated as 9,000 SF in other Annual Stormwater Inspection Reports.
    - Annual SW Inspection Reports also noted poly liner added to southeast swale, creating an impervious surface, but this was replaced by paving. Swale along north side indicated unpaved. They paved ~1,300 LF (~13,000 SF) in September 2021 of the perimeter swale.
    - IMP/Outfall No. 201 sampling point did not address any emergency spillway discharges.
  - **Newly Defined Stormwater Outfall No. 002 (Sheet Flow drainage area for Access Roads/trailer office/scales/Rail Spur and any other area not covered by Outfall No. 201 perimeter swales):** This ~7 acres drainage area is a sheet flow/infiltration area subject to stormwater permit condition including annual inspections, BMPs and PPC Plan.
    - No existing or proposed stormwater monitoring point. Flow does not go to Outfall No. 001 sampling point. NPDES Permit Part C.II.F.2 addresses monitoring upon Department request.
    - Overall site plan topographic map (from original permitting) shows the access road was partially an existing dirt road and partly new access road to scales and facility, with drainage directed away from Outfall No. 001 (toward either entrance point or River by grades and any existing roadway stormwater controls). Mining-disturbed topography may mean water infiltrates prior to reaching river. Area would also receive any windblown salt not captured in the Outfall No. 201.

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IMP/Outfall	Drainage Area	% Impervious	Description
001	1,077.906 SF	15	Discharge to Lackawanna River. Stormwater runoff from rock salt storage pad, transfer areas, and support areas (including access roads and scale)
101	133.335 SF	100	IMP (Basin discharge sampling point) for Stormwater runoff from rock salt storage pad and transfer areas
201	~9,000 SF	0	IMP for area immediately adjacent to Salt Storage Pad (excluding area re-routed to Impoundment)
002	~7 acres	0	Sheet flow area containing access roads and truck scales/office/refueling area.

Permit Conditions: Some important changes since the previous NPDES Permit are flagged below.

Parts A & B:

- **General**: Updated Individual IW (Minor without ELG) NPDES Part A, B, and C template conditions due to facility reclassification and other template updating.
- **Part A.I.A (Outfall No. 001)**: Rainfall monitoring & reporting mandatory to allow for comparison with future Impoundment discharges. Monitoring upon request only for all other wastewater and IW stormwater parameters (based on Outfall/IMP No. 101 requirements).
    - Part A.I.B (Outfall/IMP No. 101) Impoundment discharge is the existing NPDES Permit point of compliance.
    - Includes Chapter 95.2 permit limits for Oil & Grease and references Part C benchmark requirements for pH, COD, TSS, and Chlorides.
    - See Part C.II.F.2 for optional monitoring.
    - They can do composite samples for daily max limit reporting.
- **Part A.I.B (Outfall No. 002)**: This is a new sheet flow stormwater drainage area for access roads and scale area, for use upon request only, in event of a spill, leak or other release.
    - Includes Chapter 95.2 permit limits for Oil & Grease and references Part C.II.F & G benchmark requirements for pH, COD, TSS, and Chlorides.
    - Footnote requires monitoring and reporting of a minimum of one sample in the period July through October (Saltpile build-up period) and one sample must be collected during the period January through March 31 (which is based on a PAG-03 Appendix K sampling requirement).
    - See Part C.I.F.2 for l monitoring. There are internet guidance available on how to conduct stormwater sheet flow monitoring (if needed).
- **Part A.I.C: (Outfall/IMP No. 101)**: This is the wastewater impoundment discharge monitoring point and discharge point of compliance.
    - New limits for Free Cyanide and Osmotic Pressure per Reasonable Potential Analysis. Chapter 95.2 limits for pH and Oil & Grease.
    - Additional PAG-03 Appendix K (Salt Pile) parameter (Total Nitrogen, TKN, Nitrate-Nitrite as N, and TP) monitoring added. Chemical Oxygen Demand (COD) monitoring per Reasonable Potential Analysis with PAG-03 benchmark.
    - Valve-controlled basin discharge requirement for sampling within 5-minutes of start of controlled discharge in footnote. They can do composite samples for daily max limit reporting.
    - Benchmark requirements for COD and TSS referenced in lieu of permit limits.
    - Annual Average TDS loading reporting requirement added. See Part C.I.F condition on how to compute annual average.
- **Part A.I.D (Outfall/IMP No. 201)**: The case has not been made for deleting this stormwater outfall as of yet.
    - Expanded to include Part C benchmark requirements (pH, COD, TSS, Chlorides) and Chapter 95.2 Oil & Grease limits.

Summary of Review

  - Footnote requires monitoring and reporting of a minimum of one sample in the period July through October (Saltpile build-up period) and one sample must be collected during the period January through March 31 (which is based on a PAG-03 Appendix K requirement). See also Part C.II.F.2.
  - Annual Average TDS loading reporting requirement added. See Part C.I.F condition on how to compute annual average.
- **Part A.I.E (Outfall/IMP No. 301)**: This is the Impoundment Leachate Detection Zone monitoring point. It shall be monitored annually for water elevation in the standpipe, pH, TDS, Osmotic Pressure, Free Cyanide, Total Sodium, and Chloride for leak detection purposes. Annual sampling to determine if the primary liner is leaking.
- **Part A.I Additional Requirements**: The Outfalls 001/101 effluent limitations were determined using an effluent discharge rate of 0.140 MGD.
- **Part A.II (Definitions for Bypass) and Part B.I.F (Bypassing)**: See the notification requirements in event of any discharge from the Impoundment's emergency spillway.
- **Part A.III.C.2 (Planned Changes to Waste Stream)**: The facility was permitted for rock salt (specifically sodium chloride). Should the type of salt change or other deicing/antiskid material be managed onsite, the Part A.III.C.2 notification requirements would apply. 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 term "salt" does not cover coal ash, incinerator ash, etc.
- **Part A.III.E (Annual Fee)**: Upon final permit action, the facility will be reclassified as IW Minor without ELG Permit category. (Same annual fee amount as Individual IW Stormwater NPDES permit).

Part C Special Conditions:

- **Part C.I.A through D: New** Standard IW permit conditions (necessary property rights; residual management; relation to WQM permit discharge requirements; ELG/BAT requirements)
- **Part C.I.E: New** definition for "salt" from PAG-03 Appendix K. NPDES Permit Part A.III.C.2 notification requirements would pertain if non-salt materials (coal ash, etc.) or other types of salt were stored or used onsite.
- **Part C.I.F**: **Modified** Total Dissolved Solids (TDS) Annual Average Daily Load calculation methodology (to clarify requirements). This condition provides guidance on how to calculate this value and requirements triggered if Chapter 95.10(c) threshold is ever exceeded.
- **Part C.I.G**: **New** Impoundment marking condition (for minimum 2-feet freeboard per permit and Chapter 91.34) and original WQM permit application-identified 2-year storm event elevation (trigger for dewatering).
- **Part C.I.H**: **New** Osmotic Pressure definition
- **Part C.I.I**: Existing condition limiting discharge to 0.140 MGD.
- **Part C.I.J**: Existing condition modified to include maintenance of constructed salt pad perimeter asphalt swale.
- **Part C.II**: Requirements Applicable to Stormwater Outfalls:
  - **Part C.II.A**: List of stormwater outfalls (001 which receives 201 flow; 201 which is the salt storage pad perimeter area; 002 which is a sheet flow area for access roads/scale)
  - **Part C.II.B**: Annual IW Stormwater Report requirements
  - **Part C.II.C**: BMPs including:
    - Incorporation of effective PAG-03 Salt Pile BMPs (with Attachment 2 provided for quick reference of 2023 PAG-03 requirements). Please note the next PAG-03 renewal might contain new or modified BMPs that would become effective whenever the next statewide PAG-03 became effective.
    - Incorporation of previous NPDES Permit Part I.E Stormwater BMPs conditions
    - Incorporation of previous NPDES Permit Part II ARSC commitments/practices such as following Voluntary Salt Institute BMPs and Minimum BMP implementation schedule. See Attachment 2 for the previous NPDES Permit-listed Salt Institute BMPs.
    - **New** Self-inspection Report requirements to document any release outside secondary containment and BMP condition/status
  - **Part C.II.D**: Routine Inspection requirements
  - **Part C.II.E**: PPC Plan requirement
  - **Part C.II.F**: Stormwater Monitoring Requirements including:
    - **Part C.II.F.2**: This standard condition requires installation of monitoring points structures upon Department notice.
    - **Part C.II.F.7**: This standard condition identifies Benchmark values
    - **Part C.II.F.8**: **New** valve-controlled impoundment discharge requirements (from PAG-03 permit)
    - **Part C.II.F.9**: **New** DEP TQL requirements (from PAG-03 permit) with Free Cyanide TQL added.

Summary of Review

- **Part C.II.G (Corrective Action Plan (CAP) requirements**): Standard CAP requirements in event of consecutive benchmark exceedances at the same outfall/IMP.
- **Part C.III (Wastewater Impoundment Cleaning):** In addition to Part A.I.A, Part A.I.C, and Part C.I.B requirements, these requirements would pertain to any wastewater impoundment clean-outs due to wastewater/sludge accumulation.
- **Attachment 1:** Salt Institute Voluntary Salt Storage Guidelines (from previous NPDES Permit)
- **Attachment 2**: Quick reference 2023 PAG-03 Appendix K BMPs (which might be superseded by next IW Stormwater General Permit PAG-03 BMP requirements referenced in Part C conditions).

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, 101, 002, 201	Design Flow (MGD)	0.140 MGD (101 and 001) Zero (201,002) - SW only
Latitude	41º 23' 47.95" (001) 41º 23' 47.04" (101) 41º 23' 47.04" (201) 41º 23' 50.00" (002)	Longitude	-75º 40' 37.16" (001) -75º 40' 37.22" (101) -75º 40' 37.22" (201) - 75º 40' 50.00" (002)
Quad Name	Scranton	Quad Code	0740 (3.21.4)
Wastewater Description:	IW Stormwater and Wastewater (Impoundment discharge): 001 Impoundment only: IMP 101 IW Stormwater only: 002 and 201		

Receiving Waters	Lackawanna River (CWF, MF)	Stream Code	28374
NHD Com ID	65630575	RMI	9.26 (previous Fact Sheet)
Drainage Area	239 square miles	Yield (cfs/mi^2)	0.0824
Q_{7-10} Flow (cfs)	19.7	Q_{7-10} Basis	USGS PA Streamstats
Elevation (ft)	~682 (guestimate)	Slope (ft/ft)	-
Watershed No.	5-A	Chapter 93 Class.	CWF, MF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired		
Cause(s) of Impairment	FLOW REGIME MODIFICATION, METALS, PATHOGENS, pH, SILTATION		
Source(s) of Impairment	ACID MINE DRAINAGE, COMBINED SEWER OVERFLOWS, URBAN RUNOFF/STORM SEWERS		
TMDL Status	Final	Name	Lackawanna River Watershed

Background/Ambient Data:		Data Source
		Sample ID: 2063388 Sequence Number: 4 Monitoring Point ID: 15684 (~0.2 miles upstream)
pH (SU)	7.3	Date Collected: 7/20/2016
Temperature (°F)	-	See above
Hardness (mg/L)	-	See above
TSS (mg/l)	6	See above
Sulfates (mg/l)	56.6	See above
Aluminum (ug/l)	<500.0	See above
Manganese (ug/l)	71.0	See above
Total Iron (ug/l)	331.0	See above

Nearest Downstream Public Water Supply Intake		Pittston (old E-maps information indicating authorized PAW PWS intake).	
PWS Waters	Susquehanna River	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	>9 miles

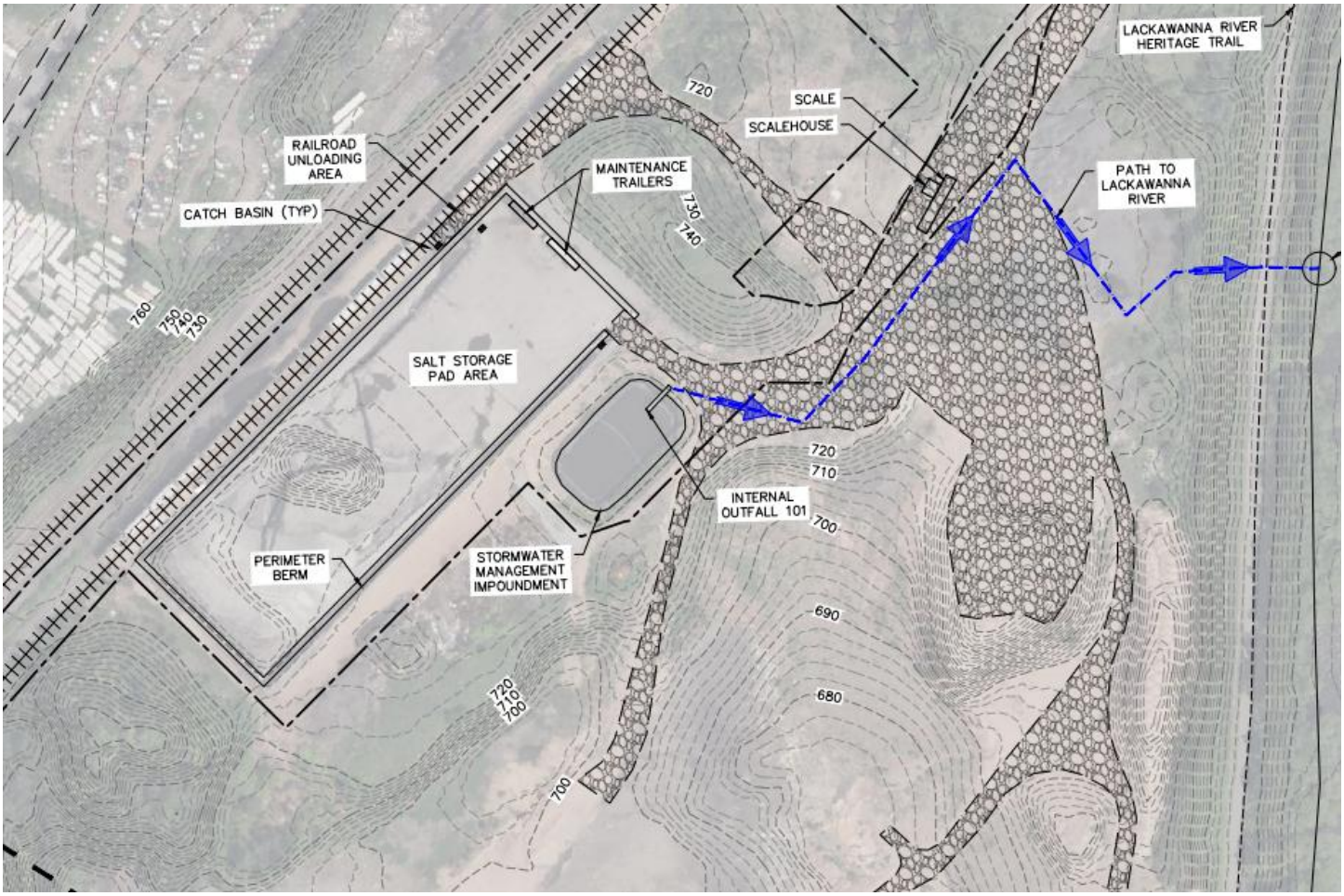
Changes Since Last Permit Issuance: Lackawanna River is now classified as Natural Trout Reproduction stream.

Other Comments:

- **Other local discharges**:

  - The PA AMERICAN WATER COMPANY SCRANTON WWTP (No. PA0026492) outfall No. 001 is ~1.28 miles downstream of the facility location, with CSOs upstream and downstream. AMD dischargers upstream.
  - There is an active mining operation on the other side of the facility access road, between leased portion of site and Lackawanna River
- **Outfall No. 001**: Lackawanna River previously estimated at 66.5 feet wide and 0.88 feet deep at Outfall No. 001 per permitting files. Sampling point manhole receives Outfalls No. 101 and 201 discharges in manhole, before piping to Outfall No. 001 at the River. Stormwater Outfall No. 201 receives flow from Salt Pad perimeter swales.
- **Outfall No. 002**: ~7-acre Sheet flow drainage area for site access roads, office trailer/scales, rail spurs. Drainage would flow through adjacent active mining area before reaching River.
- **Stream Impairment Causes**:
  - Pathogens: Facility is not expected to be source of pathogens.
  - AMD Metals: Module 1 information indicated low AMD metal concentrations, not requiring monitoring or limits in the site discharge.
  - Toxics: New permit limits will protect the waters of the Commonwealth from site impacts.

Aerial Photo excerpt from site plan for context:


LACKAWANNA RIVER HERITAGE TRAIL
SCALE
SCALEHOUSE
RAILROAD UNLOADING AREA
MAINTENANCE TRAILERS
PATH TO LACKAWANNA RIVER
CATCH BASIN (TYP)
SALT STORAGE PAD AREA
INTERNAL OUTFALL 101
PERIMETER BERM
STORMWATER MANAGEMENT IMPOUNDMENT
720
730
740
760
750
710
700
690
680

Treatment Facility Summary

Treatment Facility Name: ARSC Scranton Salt Storage Facility

WQM Permit No.	Issuance Date	Scope
3513403	**6/28/2013**	Authorized construction of dual membrane stormwater treatment impoundment (with a controlled discharge) to capture runoff from a rock salt storage pile and rail car unloading area. The double liner system consists of a 60 mil primary liner, a 220 mil geonet transmissivity layer (with sump to allow for sampling), and 40 mil secondary liner. The discharge is through a 3-inch ball valve and discharge orifice (Outfall 101) and then be discharged to the Lackawanna River. A "Leak Collection and Recovery System (LCRS)" consisting of the geonet draining to sumps with piezometers (no outlet) was designed to detect primary liner leakage.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Leachate and Storm Water	Settlement	Impoundment	NA	See below.

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
NA*	NA	NA	NA	NA

*WQBEL-based 0.140 MGD daily discharge limit from original NPDES permitting from intermittent discharges from the IW Impoundment.

Changes Since Last Permit Issuance: They have increased the Impoundment influent drainage area by lining ~1300 LF part of the perimeter area and redirecting it to the wastewater impoundment per narrative, but no supporting documentation. They estimated the new drainage area going to the Impoundment as ~13,000 SF.

Other Comments: In addition to the Background Information above:

Water Elevation Discharge Level in the Impoundment:

- **The facility has been delaying discharges**: "ARSC will open the valve when the water level reaches 715.94 ft, which is the 2-year storm water elevation, to drain down to the 3" orifice elevation of 714.64 ft. This volume is estimated at 91,000 gallons". (3/13/2013 IESI Letter submitted during NPDES permitting with attached excerpt from the WQM Permit Application Design Engineer Report submitted with the Part II WQM Permit Application). **Instead, the facility has apparently discharged when the water level approaches the emergency spillway elevation (at 716.6 Feet elevation whereas the emergency spillway elevation is 716.66 Feet per original WQM Permitting).**
    - This operational practice increase potential for unauthorized emergency spillway releases. Any emergency spillway release would not be authorized by the WQM/NPDES Permits except during actual emergency.
    - The Application estimated that as much as 1,999,518 gallons overtopped the concrete weir (i.e. discharge to emergency spillway) in 2020 with 133 precipitation events in 2020, resulting in the need for only 6 manual release (via Outfall/IMP 101). This is a larger discharge than the reported permitted wastewater impoundment discharges of that year.
    - This operational practice reduced the number of discharges from the impoundment to the ~6/year that that they are reporting: 7 discharges up to August 2021; 6 discharges in 2020 (January, February, April, June, August, November), 9 discharges in 2019; 8 discharges in 2018; and 4 discharges in 2017. For a simple visual comparison, the nearby PAW Scranton WWTP' 2020 Chapter 94 Report's summarized precipitation data shows the site monthly rainfall amounts (2016 – 2020). 2017 should have had at least 8 discharges, not 4, if they had followed the original permitted operating plan. Some months would have required 2 discharges per month. Several months of accumulated rainfall would have exceeded the 2.9-

inch threshold, triggering discharge requirements. 2020 had a total of 37.44-inches, which is equivalent to 12.9 two-year storm events (2.9-inch each).

- **NPDES Permit Part C.I.E.2**: "The Impoundment is required to maintain a low pond elevation to allow for assimilation of the next storm event and to allow for adequate detention time to allow for solids settlement". Being near or at an emergency spillway elevation is not a "low pond elevation".

- **Local Stormwater data (from nearby PAW Scranton WWTP Chapter 94 Report)**: Given the original NPDES/WQM permitting operational plan, the facility should have been discharging whenever ~2.9 inches of total precipitation (cumulative) occurred. This would have resulted in the originally expected 1/month average Impoundment discharge throughout the year (variable due to precipitation received each month with limited evaporation). This expected approximately monthly discharge rate would have meant less concentration by evaporation.

Total Monthly Precipitation for Past Five Years (Inches)

Month	2016	2017	2018	2019	2020
January	1.79	3.25	2.68	4.1	2.67
February	4.01	2.98	4.33	1.84	2.56
March	1.78	5.45	2.82	2.75	2.85
April	2.69	2.99	3.67	4.58	3.73
May	2.55	3.66	5.75	5.52	2.14
June	1.59	3.88	2.16	5.91	4.02
July	4.08	5.81	6.97	7.38	4.8
August	3.07	2.75	10.59	5.58	4.49
September	3.0	1.72	7.43	1.21	3.03
October	2.6	2.92	4.95	6.36	3.38
November	2.08	1.07	6.54	1.69	0.25
December	2.06	1.68	3.19	2.47	3.52

- **Impoundment Elevations and Storage Capacities**:
  - 712.50 Feet: Discharge Outlet Structure invert.
  - 713 Feet: Bottom of Primary liner
  - 714 Feet: 46,174-gallon storage
  - 714.40 Feet: Influent pipe invert into Impoundment.
  - **714.64 Feet**: 3-inch discharge orifice elevation & beginning of 0.10-foot gradations on inlet box to measure water levels.
  - 715 Feet: 100,950-gallon storage
  - **715.94 Feet:** Estimated 2-year storm elevation (2.9 inches in 24 hours per original permitting). This is the elevation where they originally planned to open the valve to discharge, drawing down the water level to 3-inch orifice elevation. The discharge volume was estimated to be 91,000 gallons. At that point, the impoundment could handle another 2-year storm event without emergency discharges.
  - 716 Feet: 164,769-gallon storage
  - **716.60 Feet:** This is the 3.60 Feet level at which the facility was proposing to discharge from the impoundment (once per month frequency estimated). It is only 0.06 feet (0.72 inches) from the emergency spill way elevation, i.e. no storage capacity to handle even a minimal rain event (factoring in expected pad runoff) without discharging to the emergency spillway, which should only be used in an emergency.
  - **716.66 Feet:** Top of emergency spill-way elevation (top of grate – emergency spillway inlet). The Application estimated ~129,500 gallon storage capacity between orifice valve and top of emergency spillway grate elevation. They reported discharge volumes of this magnitude via EDMR.
  - **717 Feet:** 238,545-gallon storage (2 feet minimum freeboard elevation if lined berms at 719 Feet) but not accounting for emergency spillway discharging.
  - 717.42 Feet: 100-year storm event Water Surface Elevation but not accounting for emergency spillway discharging.
  - 718 Feet: 329,883-gallons storage but not accounting for emergency spillway discharging
  - 719 Feet: Top of berm per WQM Permit Table 1 footnote, with theoretical storage capacity of 476,100 gallons (not accounting for emergency spillway discharging).

- **"Leak Collection and Recovery System (LCRS)" Issues**: They have not been sampling the impoundment underdrain. This permit will include a minimum annual monitoring & reporting requirement to ensure the impoundment liner system is properly maintained.

Compliance History

DMR Data for Outfall 101 (from June 1, 2024 to May 31, 2025)

Parameter	MAY-25	APR-25	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24
Flow (MGD) Average Monthly	**0.13**	**0.13**				**0.13**	**0.13**			**0.13**		
Flow (MGD) Daily Maximum	**0.13**	**0.13**				**0.13**	**0.13**			**0.13**		
pH (S.U.) Minimum	**5.9**	8.8				6.8	6.3			5.6		
pH (S.U.) Maximum	5.9	8.8				6.8	6.3			**5.6**		
TSS (lbs/day) Average Monthly	14	21				28	59			23		
TSS (lbs/day) Daily Maximum	14	21				28	59			23		
TSS (mg/L) Average Monthly	**13**	**19**				**26**	**54**			**21**		
TSS (mg/L) Daily Maximum	13	19				26	54			21		
Total Dissolved Solids (lbs/day) Annual Average						12021						
Total Dissolved Solids (lbs/day) Average Monthly	12685	27105				12685	14420			9075		
Total Dissolved Solids (lbs/day) Daily Maximum	12685	27105				12685	14420			9075		
Total Dissolved Solids (mg/L) Average Monthly	**11700**	**25000**				**11700**	**13300**			**8370**		
Total Dissolved Solids (mg/L) Daily Maximum	**11700**	**25000**				**11700**	**13300**			**8370**		
Osmotic Pressure (mOs/kg) Average Monthly	**1410**	576				382	71			295		
Osmotic Pressure (mOs/kg) Daily Maximum	**1410**	576				382	71			295		

Oil and Grease (mg/L) Average Monthly	< 3.8	< 3.7				< 4.1	< 3.7			< 3.7		
Oil and Grease (mg/L) Daily Maximum	< 3.8	< 3.7				< 4.1	< 3.7			< 3.7		
Free Cyanide (mg/L) Average Monthly	**0.202**	**0.224**				**0.0764**	**0.027**			**0.0273**		
Free Cyanide (mg/L) Daily Maximum	**0.202**	**0.224**				**0.0764**	**0.027**			**0.0273**		
Chloride (lbs/day) Average Monthly	7947	19407				8446	12685			6050		
Chloride (lbs/day) Daily Maximum	7947	19407				8446	12685			6050		
Chloride (mg/L) Average Monthly	**7330**	**17900**				**7790**	**11700**			**5580**		
Chloride (mg/L) Daily Maximum	**7330**	**17900**				**7790**	**11700**			**5580**		

DMR Data for Outfall 101 (from May 1, 2024)

Parameter	MAY-24
Flow (MGD) Average Monthly	**0.129999**
Flow (MGD) Daily Maximum	**0.129999**
pH (S.U.) Minimum	6.4
pH (S.U.) Maximum	6.4
TSS (lbs/day) Average Monthly	41
TSS (lbs/day) Daily Maximum	41
TSS (mg/L) Average Monthly	38
TSS (mg/L) Daily Maximum	38
Total Dissolved Solids (lbs/day) Annual Average	
Total Dissolved Solids (lbs/day) Average Monthly	16588
Total Dissolved Solids (lbs/day) Daily Maximum	16588
Total Dissolved Solids (mg/L) Average Monthly	**15300**
Total Dissolved Solids (mg/L) Daily Maximum	**15300**
Osmotic Pressure (mOs/kg) Average Monthly	**451**

Osmotic Pressure (mOs/kg) Daily Maximum	**451**
Oil and Grease (mg/L) Average Monthly	< 3.8
Oil and Grease (mg/L) Daily Maximum	< 3.8
Free Cyanide (mg/L) Average Monthly	**0.01**
Free Cyanide (mg/L) Daily Maximum	**0.01**
Chloride (lbs/day) Average Monthly	9877
Chloride (lbs/day) Daily Maximum	9877
Chloride (mg/L) Average Monthly	**9110**
Chloride (mg/L) Daily Maximum	**9110**

DMR Data for Outfall 101 (from July 1, 2020 to June 30, 2021)

Parameter	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20
Flow (MGD) Average Monthly	**0.144756**	0.119044	0.129999	0.122621		0.115243		0.13			0.115243	
Flow (MGD) Daily Maximum	**0.144756**	0.119044	0.129999	0.122621		0.115243		0.13			0.115243	
pH (S.U.) Minimum	6.1	6.3	5.8	8.5		6.1		6.1			8.1	
pH (S.U.) Maximum	6.1	6.3	5.8	8.5		6.1		6.1			8.1	
TSS (lbs/day) Average Monthly	37	47	64	41		21		39			51	
TSS (lbs/day) Daily Maximum	37	47	64	41		21		39			51	
TSS (mg/L) Average Monthly	31	47	59	40		22		36			53	
TSS (mg/L) Daily Maximum	31	47	59	40		22		36			53	
Total Dissolved Solids (lbs/day) Annual Average							**661**					

Total Dissolved Solids (lbs/day) Average Monthly	**22334**	**22140**	**45753**	**19431**		**14705**		**28839**			**22298**	
Total Dissolved Solids (lbs/day) Daily Maximum	**22334**	**22140**	**43753**	**19431**		**14705**		**28839**			**22298**	
Total Dissolved Solids (mg/L) Average Monthly	**18500**	**22300**	**42000**	**19000**		**15300**		**26600**			23200	
Total Dissolved Solids (mg/L) Daily Maximum	**18500**	**22300**	**42000**	**19000**		**15300**		**26600**			23200	
Osmotic Pressure (mOs/kg) Average Monthly	**604**	746	1340	594		354		799			728	
Osmotic Pressure (mOs/kg) Daily Maximum	**604**	746	1340	594		354		799			728	
Oil and Grease (mg/L) Average Monthly	< 3.8	< 3.8	< 3.8	< 4.8		< 3.9		< 3.7			7.5	
Oil and Grease (mg/L) Daily Maximum	< 3.8	< 3.8	< 3.8	< 4.8		< 3.9		< 3.7			7.5	
Free Cyanide (mg/L) Average Monthly	**0.057**	**0.033**	**< 0.2**	**0.987**		**0.096**		**0.03**			**0.011**	
Free Cyanide (mg/L) Daily Maximum	**0.057**	**0.033**	**< 0.2**	**0.987**		**0.096**		**0.03**			**0.011**	
Chloride (lbs/day) Average Monthly	**17385**	**18963**	**48897**	**12272**		**6997**		**18323**			**14100**	
Chloride (lbs/day) Daily Maximum	**17385**	**18963**	**48897**	**12272**		**6997**		**18323**			**14100**	
Chloride (mg/L) Average Monthly	**14400**	**19100**	**45100**	**12000**		**7280**		**16900**			13552	
Chloride (mg/L) Daily Maximum	**14400**	**19100**	**45100**	**12000**		**7280**		**16900**			13552	

DMR Data for Outfall 201 (from July 1, 2020 to June 30, 2021)

Parameter	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20
pH (S.U.) Daily Maximum							6.0					
TSS (mg/L) Daily Maximum							39					

Total Dissolved Solids (mg/L) Daily Maximum							**15200**					
Osmotic Pressure (mOs/kg) Daily Maximum							**445**					
Oil and Grease (mg/L) Daily Maximum							< 3.8					
Free Cyanide (mg/L) Daily Maximum							**0.009**					
Chloride (mg/L) Daily Maximum							**10100**					

Compliance History

Inspection History:

FACILITY NAME	INSP PROGRAM	INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	# OF VIOLATIONS
AMERICAN ROCK SALT SCRANTON STORAGE FACILITY	WPCNP	2560036	10/24/2024	Routine/Partial Inspection	No Violations Noted	0
AMERICAN ROCK SALT SCRANTON STORAGE FACILITY	WPCNP	2231813	01/05/2022	Routine/Complete Inspection	No Violations Noted	0
AMERICAN ROCK SALT SCRANTON STORAGE FACILITY	WPCNP	3859251	12/30/2016	Routine/Partial Inspection	No Violations Noted	0
AMERICAN ROCK SALT SCRANTON STORAGE FACILITY	WPCNP	2465614	01/29/2016	Routine/Partial Inspection	No Violations Noted	0
AMERICAN ROCK SALT SCRANTON STORAGE FACILITY	WPCNP	2433458	12/17/2015	Compliance Evaluation	No Violations Noted	0
AMERICAN ROCK SALT SCRANTON STORAGE FACILITY	WPCNP	2208846	10/27/2014	Routine/Complete Inspection	No Violations Noted	0
AMERICAN ROCK SALT SCRANTON STORAGE FACILITY	WPCNP	2327585	12/23/2013	Routine/Complete Inspection	No Violations Noted	0
AMERICAN ROCK SALT SCRANTON STORAGE FACILITY	WPCNP	3397383	10/01/2013	Compliance Evaluation	No Violations Noted	0

- 2022 Inspection Report noted:
  - The facility is required to place marking(s) on the impoundment liner indicating the required 2-foot of freeboard.
  - Mr. Pazcuzzo (Stockpile Mgr) stated that the impoundment inlet and outlet is inspected periodically. Solids are also checked periodically. The sludge in the impoundment was never sampled.

- Fugitive salt was observed on the surface of the ground in and around the rail spur unloading area. See photo #2 of this inspection report. The facility should consider improvements to offloading procedures to control and minimize the potential for the release of salt onto the surface of the ground. This area should be inspected following offloading procedures and any fugitive salt should be cleaned up immediately.
  Fueling of onsite vehicles is conducted adjacent to the scale house. Mr. Pascuzzo stated that a contractor is utilized for fueling purposes. Inspector observed two (2) areas of surface staining that appeared to be of a petroleum nature on the surface of the ground at the time of inspection. The areas of concern should be cleaned up, and the contaminated soil disposed of properly. Spill prevention measures should be implemented during the fueling process to minimize the potential for spills. Any future spills should be promptly addressed.

Other Comments:

- **Impoundment Operation:**
  - The facility discharge has had high concentrations, indicating that the Impoundment has not adequately treated the Salt Pad/Railcar Unloading area's salt-contaminated stormwater runoff. Enhanced stormwater BMPs may still be required onsite.
  - They had a 2020 emergency spillway release and are not discharging at the original Design Engineer-recommended elevation (estimated to result in ~90,000 GPD release about 1/month). See Treatment Section for details.
- **Previous NPDES Permit Part C.IV.C:** June 2021 discharge exceeded the permit condition limitation of daily maximum not exceeding 0.140 MGD.
- **Previous NPDES Permit Part C.IV.A (Annual TDS loadings):** Ops indicates dispute about reporting of TDS total annual average loading. In part this was a result of the original NPDES permit TDS annual average daily load calculation and reporting methodology that was not adjusted to account for the intermittent discharges.
  - The Part A and Part C.I.E have been modified to better calculate and report the Annual TDS Loadings.
  - See Effluent Sections for TDS calculations and historical discharge data.
- **Failure to monitor Outfall/IMP 201:** They modified the Outfall/IMP No. 201 drainage area in 2021, but failed to sample any remaining stormwater at this monitoring point thereafter. Eliminating a stormwater outfall's monitoring would have required written Department authorization (NPDES Permit amendment). The 2025 NPDES Permit application indicates they installed a stone swale/pipe for "clean stormwater" (not rerouted to the Impoundment) which is essentially where they should have been monitoring & reporting.

Compliance History: 8/1/2025 WMS query (Open Violations by Client Number) indicated no open violations, but see above comments.

Permit: PAS232214
Client ID: 112334
Client: All

Open Violations: 0

No data was found using the criteria entered. Please revise your choices and try again.

Development of Effluent Limitations

Outfall No.	002 and 201	**Design Flow (MGD)**	0 (stormwater only)
Latitude	41º 23' 50.00" (002) 41º 23' 51.13" (201)	**Longitude**	-75º 40' 50.00" (002) -75º 40' 47.45" (201)
Wastewater Description:	Stormwater		

Permit Limits and/or Monitoring Requirements: Stormwater-only, changes bolded. IMAX instead of Daily Max for grab sampling. Original Application information (2020 sampling) for Outfall/IMP 201. No Outfall No. 002 sheet flow data available.

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
pH	**Report –** Report SU	**IMIN - IMAX**	**Benchmark requirements referenced (9 SU)**. Application data (201): 6.4 SU (1 sample) EDMR data (201): 6.0 – 7.5 SU Application Table Summary: 6.0 – 8.42 SU
TSS	Report	**IMAX**	**Benchmark requirements referenced (100 mg/l).** Application data (201): **610 mg/l** (1 sample) in 2021 sampling (after pad apron/swale asphalt lining) EDMR data (201): <4.0 – 47 mg/l. Application Table Summary: **Up to 211 mg/l in 2015.**
Chloride	Report	**IMAX**	**Benchmark requirements referenced (2000 mg/l).** Application sampling data: **21,200 mg/l (1 sample) in original renewal application;** 339 mg/l (1 sample) in 2021 after pad apron/swale asphalt lining). **It is expected removal of perimeter swale area (salt from tarp) would reduce any future IMP 201 sampling concentrations.** EDMR data (201): 1550 – **43,900 mg/l**. **3 of 4 annual sampling concentrations >2000.0 mg/l.** Application Table Summary: **Up to 257,000 mg/l in 2015.**
Total Dissolved Solids	Report Lb/d Report Report	Annual Average Annual Average **IMAX**	Existing monitoring requirement Loadings relevant to Chapter 95.10 threshold for additional treatment/limits. Application sampling (201): **29,800 mg/l (1 sample) in original renewal application; 738 mg/l (1 sample) in 2021 sampling.** EDMR data (201): 100 – **70,500 mg/l.** Application Table Summary: **Up to 283,992 mg/l in 2015.**
Osmotic Pressure	Report (mOs/kg)	**IMAX**	**Existing monitoring requirement** Application data (201): 1070 mOs/kg (1 sample) in original renewal application; 17 mOs/Kg (1 sample) in 2021 after pad apron/swale asphalt lining) EDMR data (201): 77 – 1910 mOs/kg
Oil & Grease	**30.0**	**IMAX**	**New Chapter 95.2 limit.**

			Application data (201): <3.8 mg/l (1 sample) in original renewal application; <4.1 mg/l in 2021 sampling. EDMR data (201): <4.8 – 4.8 mg/l Application Table Summary: Up to <5.3 mg/l or unspecified ND level.
Free Available Cyanide	Report	**IMAX**	Existing monitoring requirement. Application data (201): **0.250 mg/l (1 sample) in original renewal application; <0.002 mg/l (1 sample) in 2021 after pad apron/swale asphalt lining.** EDMR data (201): 0.009 – **3.0 mg/l** **Application Table Summary: Up to 3.00 mg/l (2017)**
BOD5	Not needed	-	Not needed per application data. Application data (201): <2.2 mg/l (1 sample) in original renewal application; 3.8 mg/l after pad apron/swale asphalt lining.
COD	**Report**	**IMAX**	**New monitoring requirement due to high application values for Impoundment discharge and greater than 120 mg/l general statewide PAG-03 BPJ TBEL benchmark (based on benchmark) due to high application values.** Benchmark referenced. Application data (201): **190 mg/l (1 sample).**
Total Nitrogen (Total Kjehldahl Nitrogen + Nitrate-Nitrite measured in same sample)	**Report**	**IMAX**	**New monitoring requirement (PAG-03 minimum statewide requirement)** Application data (201): 5.5 mg/l (1 sample) in original renewal application; 3.8 mg/l in 2021 sampling. Nitrate-Nitrite-N: 1.83 mg/l TKN: 3.7 mg/l Ammonia: 3.9 mg/l
Total Phosphorus	**Report**	**IMAX**	**New monitoring requirement (PAG-03 minimum statewide requirement)** Application data (201): <0.10 mg/l

Comments:

Outfall No. 002: Newly defined ~7 acre sheet flow drainage area to address facility access roads, scales/trailer office, rail spur, and any salt windblown outside of No. 201 stormwater swales. Drainage area based on 10-acre leased area minus area drainage addressed by Salt Storage Pad and Impoundment discharge. No monitoring except upon Department request (Part C.II.F). All other permit conditions apply to this drainage area. For purposed of Annual TDS load calculations, the Outfall No. 201 is considered as representative for a conservative TDS calculation and other constituents (in the absence of any known Outfall No. 002 drainage area-specific releases).
Outfall No. 201: The 2017 Annual Stormwater Inspection Report indicated a 10,700 SF drainage area, 100% unpaved. This information might be outdated due to 2020 perimeter swale paving (~1300 LF). For purposes of this permit, it is assumed that No. 201 is representative of Outfall No. 002 in terms of effluent quality in the absence of better data.

Outfall No.	Area Drained (ft^2)	Latitude	Longitude	Description

002	301,890 (6.94 acres)	40° 23' 50"	-75° 40' 50"	Sheet flow drainage area including trailer office, access road, scale and any other stormwater area not draining to Outfall No. 201 or Impoundment. Upslope rail lines act to limit the total drainage area. **Outfall No. 201 discharges are presumed to be representative for this drainage area in absence of any known Outfall No. 002 area releases**.
201	9,000*	41° 23' 51.13"	-75° 40' 47.45"	Storage Pad's outside apron and Stormwater swale contiguous to Storage Pad.

*Reduced due to redirection of pad perimeter swale segment flow to Impoundment.

Mass loading Reporting: To clarify total TDS loadings, Annual Average load reporting added. See modified Part C condition for method of calculation.

Application Outfall No. 201 Annual Sampling Data Summarization: Historic information (with presumed future lower concentrations due to diversion of Salt Pad asphalt perimeter drain flow to Impoundment):

Year & estimated event discharge (gallons)	TDS (mg/l)	TSS (mg/l)	Chloride (mg/l)	Free Cyanide (mg/l)	Osmotic Pressure (mOSm/kg)
2013; 2,101 gal	6,336	6	**4,146**	0.11	250
2014; 9,939 gal	**40,865**	22	**27,250**	0.37	1,370
2015; 7,671 gal	**283,992**	211	**257,000**	0.26	**9000**
2016; 2,501 gal	**84,800**	85	**99,100**	0.12	2,230
2017; no value given	2,380	10	1,550	**3.00**	77
2018; 11,740 gal	**70,500**	47	**43,900**	0.201	1,910
2019; 2,068 gal	**14,500**	4.0 RL	**7,900**	0.132	423
2020; 15,200 gal	**15,200**	39	**10,100**	0.009	445
2021 **(after 1300 LF of swale paved and redirected to impoundment)**; no value given	396	35	172	<0.002	<10

Development of Effluent Limitations

Outfall No.	101 and 001	**Design Flow (MGD)**	101: 0.140 Impoundment discharge; 001: 0.140 MGD Impoundment & IW stormwater
Latitude	41º 23' 50.43" (101) 41º 23' 48.00" (001)	**Longitude**	-75º 40' 48.00" (101) -75º 40' 38.00" (001)
Wastewater Description:	101: Wastewater (from Impoundment) 001: Wastewater from No. 101 and IW Stormwater		

Permit Limits and/or Monitoring Requirements: Changes bolded: **Outfall 001 requires precipitation reporting, with other reporting upon request only. Outfall/IMP No. 101 is the compliance monitoring point for the Impoundment discharges.**

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
Precipitation	**Report inches** **Report inches**	**Total Annual** **Total Monthly**	**New Outfall No. 001 reporting requirement to ball-park number of Impoundment discharges required @ ~7.42 cm or ~2.9 inches per 2-year/24-hour storm event (PENNDOT Publication 584 Table 7A-4(a) for Region 3 of PA).**
Flow	Report **0.140**	Monthly Average Daily Max	Existing permit limit now in Part A also. EDMR data: 0.056 – **0.144756 MGD**
pH	**6.0 – 9.0 SU**	**IMIN** - IMAX	**Chapter 95.2 limits incorporated.** Old Application data: 6.1 SU (1 sample) EDMR data: **5.8** – 8.5 (2020) SU Old Application Summary Tables: **5.6 (2019)** – **9.8** (2020) SU 2025 Application: See Intro Section table.
TSS	**Report lb/d** **Report lb/d** **Report lb/d** **Report lb/d**	**Monthly Average** **Daily Max** **Monthly Average** **IMAX**	**Part C benchmark requirements referenced in lieu of permit limits. Previously daily max reported only.** Old Application data: 76.0 Old EDMR data: 86 mg/l (1 sample) Old Application Summary Tables: Up to 76 mg/l (2014) 2025 Application: See Intro Section table.
Chloride	**Report lb/d** **Report lb/d** **Report** **Report**	**Monthly Average** **Daily Max** **Monthly Average** **IMAX**	Existing monitoring requirement. Old Application data: **21,220 mg/l (1 sample)** EDMR data: 5,526 lbs/d – 48,897 lb/d **5,750 – 45,100 mg/l** Application Summary Tables: Up to 56,160 mg/l (2014) 2025 Application: See Intro Section table.
Total Dissolved Solids	**Report lb/d** Report lb/d Report lb/d **Report** Report Report	**Annual average** Monthly Average Daily Max **Annual average** Monthly Average **IMAX**	Existing monitoring requirement moved to Part A reporting. Loadings relevant to Chapter 95.10 threshold for additional TDS treatment/limits. **See Part C.I.E.** Old Application data: **29,800 mg/l (1 sample)** EDMR data: **16,300 – 63,900 mg/l.** **8,612 – 69,280 lb/d (monthly average reported, 1 discharge day per month)** Old Application Summary Tables: Up to 69,972 mg/l (2014)

			Old Annual Average: 661 lb/d (1/1/2019) – 1,143 lb/d (1/1/2020) 2025 Application: See Intro Section table.
Osmotic Pressure	**1,610** mOs/kg **2,581** mOs/kg	Daily Max **IMAX**	**New WQBEL per Reasonable Potential Analysis.** Old Application data: **1070 mOs/kg (1 sample)** Old EDMR data: 294 – **1,880 mOs/kg** Old Application Summary Tables: 2,295 mOs/kg (2014) 2025 Application: See Intro Section table.
Oil & Grease	**30.0**	**IMAX**	**Chapter 95.2 limit for existing monitoring requirement.** Old Application data: <3.8 mg/l Old EDMR data: 1.9 – 7.5 mg/l 2025 Application: See Intro Section table.
Free Available Cyanide	**Report Lbs/d** **0.67 Lbs/d** **Report** **0.574** **0.919**	**Monthly Average** **Daily Max** **Average Monthly** Daily Max **IMAX**	**New WQBEL per Reasonable Potential Analysis.** Old Application data: **0.250 mg/l** Old EDMR data: 0.002 – **0.987 mg/l** Old Application Summary Tables: **Up to 1.21 mg/l (2018)** 2025 Application: See Intro Section table.
COD (Chemical Oxygen Demand)	**Report lb/d** **Report lb/d** **Report** **Report**	**Monthly Average** **Daily Max** **Monthly Average** **IMAX**	**New monitoring due to high COD reported in application.** 2025 Application data: **1460 mg/l**
Total Nitrogen (Total Kjehldahl Nitrogen + Nitrate-Nitrite as N measured in same sample)	**Report**	**IMAX**	**New standard monitoring requirement (PAG-03 and IW)** Old Application data: 5.5 mg/l • Nitrate-Nitrite-N: 1.83 mg/l • TKN: 3.7 mg/l • Ammonia-N: 3.9 mg/l 2025 Application: See Intro Section table.
Total Phosphorus	**Report**	**IMAX**	**New standard monitoring requirement (PAG-03 and IW)** Old Application data: <0.10 mg/l 2025 Application: See Intro Section table.

Comments:

Outfall No. 001: Precipitation reporting mandatory. Other parameters upon request only**.** Revised Application failed to provide requested Outfall No. 001 sampling data. No monitoring was required in the previous NPDES Permit (that assumed the combined No. 101 and No. 201 discharges accounted for all facility discharging in the absence of any request for emergency spillway discharges). The sampling point is located in a manhole downstream of Outfall Nos. 101 and 102 sampling points.
Outfall No. 101 (Impoundment): This is the point of compliance for the Impoundment discharges.
Daily Max versus IMAX Limits: The PAG-03 has language allowing use of composite sampling to obtain daily max values. “The permittee may optionally collect composite samples in lieu of grab samples. The composite method may be either flow-weighted or time-weighted and performed manually or with the use of automated sampling equipment” to report a daily max value. This language has been incorporated in case the facility wishes to do composite sampling for the parameters with permit limits.

Reasonable Potential Analysis: See Intro Section for Toxic Management Screening (TMD) Spreadsheet and discussion of effluent quality.

- Free Cyanide and Osmotic Pressure: The new limits (Free Cyanide; Osmotic Pressure) in effect upon PED, as EDMR data shows the facility can comply. There is an existing Part C.II.C.5.c BMP requirement to discharge only when the Lackawanna River level is high (to ensure further dilution).
- TSS: Benchmark/CAP requirements for TSS in lieu of permit limits. The facility has been meeting the TSS benchmark. The incoming rock salt (sodium chloride) has an "anticaking" component (YPS, Sodium Ferrocyanide at 75 PPM/ton salt per Application). The facility indicates this additive is mixed into the salt per PENNDOT requirements at the source, with no additive added onsite (1/5/2022 Site Visit). This is why there was already a Free Cyanide monitoring requirement in the permit.
- Chemical Oxygen Demand (COD): COD is not a PAG-03 Appendix K (Salt pile) benchmark but application sample was at 1,400 mg/l. As this is a treated wastewater discharge, imposing the 120 mg/l COD benchmark would be inappropriate as it is not likely achievable without treatment. As a short-term (single day) intermittent discharge to a large stream, it is assumed aquatic life would move to avoid any short-term negative impact. In event of any documented negative impact, permit limits could be required. Reporting will be required.
- Chlorides: The facility impoundment discharge is not expected to meet the Statewide PAG-03 IW NPDES General Permit BPJ benchmark (2,000 mgl) without substantial site O&M/stormwater BMP changes, but there is no local Public Water Supply intake in range to be impacted by this discharge.
- TDS: The facility loadings remain below the Chapter 95.10(a)(7) annual average trigger levels for TDS limits. Application data showed an average concentration of 77,527 mg/l from similar facilities. The application calculated the average annual daily load to be 4,362 lbs/day from the 2.76 acre storage pad area, but that is for one or two discharge per month (averaging far lower over the calendar year).
- TN/TP: Monitoring & Reporting added per minimum statewide PAG-03 Appendix K requirements.

Old Application Impoundment Outfall No. 101 Grab Sampling Data Summarization (daily discharges of ≤0.140 MGD authorized by original permitting):

Year & # of discharge	TDS (mg/l)	TSS (mg/l)	Chloride (mg/l)	Free Cyanide (mg/l)	Osmotic Pressure (mOSm/kg)
2021, up to August; 7 discharges	15,300 – 42,200 Avg: 25,057	22 – 70 Avg: 44	7,280 – 45,100 Avg: 18,797	0.033 – 0.096 Avg: 0.07	354 – 1,340 Avg: 784
2020; 6 discharges	8,960 – 34,700 Avg: 22,160	16 – 62 Avg: 45	5,750 - 20,500 Avg: 15,092	0.004 – 0.219 Avg: 0.06	294 – 930 Avg: 704
2019; 9 discharges	17,300 – 62,000 Avg: 34,900	14 – 39 Avg: 37	11,900 - 37,300 Avg: 24,000	0.002 – 0.548 Avg: 0.25	548 – 1,830 Avg: 1,022
2018; 8 discharges	17,600 – 63,900 Avg: 36,375	7.0 – 71 Avg: 27	8,730 – 40,600 Avg: 21,004	0.032 – 0.698 Avg: 0.47	498 – 1,880 Avg: 1,038
2017; 4 discharges	6,550 – 43,500 Avg: 25,788	7 – 37 Avg: 24	6,690 – 41,200 Avg: 21,948	0.010 – 0.050 Avg: 0.02	204 – 996 Avg: 714

Application Communications Log:

8/4/2021: Technical Deficiency Letter issued 8/24, with response due by 10/25/2021 (extended to 12/9/2021).
8/24/2021: ARSC (Ms. Hinkson) e-mail asked what the next permitting step.
8/24/2021: DEP (Berger) E-mail noted next step was submittal of revised application and noted Department availability if they had specific questions
12/9/2021: Revised Application received via On-Base.
1/5/2022: Site Visit/Inspection: This engineer joined the DEP M&C section (Sandra Insalaco and Dave Golobek) on a site visit/inspection. See the future Inspection Report for details. In terms of highlights relevant to this NPDES Permit Renewal Application:

- ARSC: Sharon Hinkson (ARSC Quality & Environmental Scientist), Chip Pascuzzo (ARSC Stockpile Manager), and Dave Eaton (Environmental Compliance Coordinator) met us onsite and walked with us.
    - They noted the site services local DOTs and commercial salt users (Walmart, etc.).
    - They asked about the General Permit IW Stormwater PAG-03 Appendix K (Salt pile) chlorides benchmark. The Department told them they would have to ask Central Office about the chlorides benchmark origin. The PAG-03 was in the process of being renewed, and would likely be out for public comment if ARSC had any comments on the chloride benchmark value. The public and EPA can comment on a draft statewide GP. The PAG-03 represents the minimum statewide requirements, with Individual IW NPDES Permits addressing any additional site-specific considerations.
    - ARSC indicated potential problem with EDMR reporting, due to confusion between mg/l and ug/l units in previous reporting. The Department noted ARSC can revise incorrect EDMR reporting. **NOTE**: The only parameter with ug/l units was free cyanide.
- Wastewater Impoundment: Visible liner area looked intact (no visible damage).
    - Water level was high in pond. ARSC indicated it was letting water level come close to emergency spillway elevation (3.6 feet elevation) prior to manually releasing flow via control valve to drain down to 1.6 feet elevation. Chip noted there was a camera so that he could check water level electronically. Department noted that this was not per original permitting and permit conditions requiring discharge at a lower elevation than the emergency spillway.
    - Outfall/IMP No. 101 sampling point is in the Impoundment's discharge structure (reached by catwalk). They lift up a grate and lower a sampling bottle. The control valve for the manual discharge orifice was at that location. The LCRS piezometers were located on the discharge structure (one with water level indicator). The impoundment water level elevations are marked on the structure.
    - They have not sampled the LRSC sump for salinity. Water level in sump has not increased since start-up from 6-inches in the sump. Department noted that was not a guarantee of no leakage.
    - They have never removed any built-up impoundment residues. They check it annually and think there might be an inch or two of material. The material has too little salt value for recycling (too much stone). They noted that there were few places that could accept the salty impoundment water.
    - Department recommend that they mark the minimum 2-feet freeboard elevation (Chapter 91.35 requirement) to allow for an easy visual verification that the freeboard is present.
    - They noted they use oil socks to capture any oil release.
    - They are considering a floating baffle wall in the impoundment. Department said they could send in information for a determination for whether WQM permitting would be required.
- Salt Storage Pad:
    - They paved the swale on the impoundment side of the Pad in September. They said the previous swale liner needed replacement. It drains to the stormwater inlet, with a curb in that area.
    - They placed an asphalt curb on the rear end of the Pad along the apron curb (which is sloped to hold tarp runoff within the 3-foot wide apron).
    - They clarified that the jersey barriers are sealed to the bituminous pad, not the tarping.
    - They need to do maintenance on the apron on the side of the pad opposite of the impoundment. The apron asphalt was damaged. Water from tarped pile was draining toward rail spur (not being directed to stormwater outfall). They also need some additional sand bags on tarp lying on Apron in that area.
    - They were unsure if the pad bituminous material was impermeable (1×10^{-7} cm/sec). Department recommended that they check to see if the placed material met that spec or if it required a sealant to meet that spec.
    - The pad is wind-exposed. Department saw some salt/dust blown outside pad boundaries.
    - Some salt was seen accumulating near the outside swale inlet (railspur side).
    - The unused conveyor belts had not apparent wind-protection (other than the adjacent salt pile)
    - They have some storage trailers on the Salt Pad.
- Stormwater Outfall No. 201: Sampling is done at manhole.
- Railcar Spur (built by ARSC):

  - There was some salt spillage on the railcar spur. Chip indicated he would be placing down additional "belt" (i.e. conveyor belt) in the rail line to help capture any released salt from the railcar and facilitate cleaning.
  - The railcar unloading pit is not covered.
- Trailer Office/Scales/Access Road: There is an active mining operation on the other side of the access road, between leased portion of site and Lackawanna River.
  - Someone comes in to refuel vehicles. Staining was noted. Inspector noted need to clean-up and need for cleanup materials to be located at the Trailer.
  - Inspector asked for the PPC Plan to include a figure showing the area, as it is location of potential pollution releases.
  - Inspector noted PPC Plan needed actual contact information for emergency contractors oncall.
  - Saw a small truck with open trailer (outfitted with front snow plow and back salt spreader) leave without tarping of visible salt piled in the back.
  - They keep site records in the Trailer. Analytical results are stored offsite but available from Ms. Hinkson.
- Outfall No. 001 (on River): Chip showed a cellphone picture of current Outfall No. 001 condition on River. He cleans out the area annually.

6/9/2025: ARSC (Raissa Luna, Environmental Engineer) E-mail indicating she was the new client contact, and asking if anything was needed for the NPDES Permit renewal application.
6/10/2025: DEP (Berger) E-mail restarting application review and asking for updated application as needed within 30 days. **Noted high impoundment discharge concentrations and potential reclassification as IW wastewater discharge**.
6/17/2025: ARSC (Raissa Luna, Environmental Engineer) E-mail asking for 15-day extension.
6/17/2025: DEP (Berger) E-mail granting requested 15-day extension (to July 25, 2025) for the updated application information
7/25/2025: Updated 2025 NPDES Permit Application information: Public Upload# 334908