pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0229083**
Facility Type	**Industrial**	APS ID	**990002**
Major / Minor	**Minor**	Authorization ID	**1291069**

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

Applicant and Facility Information

Applicant Name	**Phoenix Resources, Inc.**	Facility Name	**Phoenix Resources**
Applicant Address	782 Antrim Road	Facility Address	782 Antrim Road
	Wellsboro, PA 16901-8501		Wellsboro, PA 16901-8501
Applicant Contact	Sean Ryan	Facility Contact	Sean Ryan
Applicant Phone	(570) 323-2406	Facility Phone	(570) 323-2406
Client ID	93217	Site ID	463098
SIC Code	4953	Municipality	Duncan Township
SIC Description	Trans. & Utilities - Refuse Systems	County	Tioga
Date Application Received	October 4, 2019	EPA Waived?	Yes
Date Application Accepted	October 15, 2019	If No, Reason	

Purpose of Application: Application for the renewal of the existing individual NPDES permit.

Summary of Review

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

Notes: This facility does not currently discharge treated leachate. However, it is anticipated that this facility may discharge in the future. All effluent limits for this discharge are based on current untreated leachate concentrations and projected treatment capabilities. Additionally, the permittee has added an additional stormwater Outfall 009.

Approve	Deny	Signatures	Date
X		*Jonathan P. Peterman* Jonathan P. Peterman / Project Manager	September 17, 2020
X		*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	September 21, 2020

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	N/A
Latitude	41º 37' 30.04"	Longitude	-77º 15' 34.33"
Quad Name	Antrim	Quad Code	0527
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Wilson Creek (CWF)	Stream Code	21730
NHD Com ID	66538347	RMI	2.62
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	1820	Slope (ft/ft)	N/A
Watershed No.	9-A	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, 04/09/2003	Name	Babb Creek
Nearest Downstream Public Water Supply Intake	Jersey Shore Area Joint Water Authority		
PWS Waters	Pine Creek	Flow at Intake (cfs)	37.9
PWS RMI	1.92	Distance from Outfall (mi)	45

Changes Since Last Permit Issuance: None.

Other Comments: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	N/A
Latitude	41º 39' 13.89"	Longitude	-77º 14' 58.90"
Quad Name	Antrim	Quad Code	0527
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Rock Run (HQ-CWF (existing use))	Stream Code	21760
NHD Com ID	66537277	RMI	2.28
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	1840	Slope (ft/ft)	N/A
Watershed No.	9-A	Chapter 93 Class.	CWF
Existing Use	HQ-CWF(HIGH QUALITY-COLD WATER FISHES)	Existing Use Qualifier	Designated Class A Wild Trout
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final, 04/09/2003	Name	Babb Creek
Nearest Downstream Public Water Supply Intake	Jersey Shore Area Joint Water Authority		
PWS Waters	Pine Creek	Flow at Intake (cfs)	37.9
PWS RMI	1.92	Distance from Outfall (mi)	45

Changes Since Last Permit Issuance: None.

Other Comments: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	N/A
Latitude	41º 37' 30.04"	Longitude	-77º 15' 34.33"
Quad Name	Antrim	Quad Code	0527
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Wilson Creek (CWF)	Stream Code	21730
NHD Com ID	66538347	RMI	2.62
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	1820	Slope (ft/ft)	N/A
Watershed No.	9-A	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, 04/09/2003	Name	Babb Creek
Nearest Downstream Public Water Supply Intake	Jersey Shore Area Joint Water Authority		
PWS Waters	Pine Creek	Flow at Intake (cfs)	37.9
PWS RMI	1.92	Distance from Outfall (mi)	45

Changes Since Last Permit Issuance: None.

Other Comments: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	0
Latitude	41º 38' 19.78"	Longitude	-77º 14' 58.83"
Quad Name	Antrim	Quad Code	0527
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Rock Run (CWF)	Stream Code	21760
NHD Com ID	66537697	RMI	2.28
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	1800	Slope (ft/ft)	N/A
Watershed No.	9-A	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE, ACID MINE DRAINAGE		
TMDL Status	Final, 04/09/2003	Name	Babb Creek
Nearest Downstream Public Water Supply Intake	Jersey Shore Area Joint Water Authority		
PWS Waters	Pine Creek	Flow at Intake (cfs)	37.9
PWS RMI	1.92	Distance from Outfall (mi)	45

Changes Since Last Permit Issuance: None.

Other Comments: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	005	Design Flow (MGD)	N/A
Latitude	41º 38' 19.78"	Longitude	-77º 14' 58.83"
Quad Name	Antrim	Quad Code	0527
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Rock Run (CWF)	Stream Code	21760
NHD Com ID	66537697	RMI	2.28
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	1760	Slope (ft/ft)	N/A
Watershed No.	9-A	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE, ACID MINE DRAINAGE		
TMDL Status	Final, 04/09/2003	Name	Babb Creek
Nearest Downstream Public Water Supply Intake	Jersey Shore Area Joint Water Authority		
PWS Waters	Pine Creek	Flow at Intake (cfs)	37.9
PWS RMI	1.92	Distance from Outfall (mi)	45

Changes Since Last Permit Issuance: None.

Other Comments: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	006	Design Flow (MGD)	N/A
Latitude	41º 37' 30.04"	Longitude	-77º 15' 34.33"
Quad Name	Antrim	Quad Code	0527
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Babb Creek (CWF)	Stream Code	21757
NHD Com ID	66538347	RMI	9.1
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	1800	Slope (ft/ft)	N/A
Watershed No.	9-A	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, 04/09/2003	Name	Babb Creek
Nearest Downstream Public Water Supply Intake	Jersey Shore Area Joint Water Authority		
PWS Waters	Pine Creek	Flow at Intake (cfs)	37.9
PWS RMI	1.92	Distance from Outfall (mi)	45

Changes Since Last Permit Issuance: None.

Other Comments: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	007	Design Flow (MGD)	N/A
Latitude	41º 37' 30.04"	Longitude	-77º 15' 34.33"
Quad Name	Antrim	Quad Code	0527
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Babb Creek (CWF)	Stream Code	21757
NHD Com ID	66538347	RMI	9.1
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	1780	Slope (ft/ft)	N/A
Watershed No.	9-A	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, 04/09/2003	Name	Babb Creek
Nearest Downstream Public Water Supply Intake	Jersey Shore Area Joint Water Authority		
PWS Waters	Pine Creek	Flow at Intake (cfs)	37.9
PWS RMI	1.92	Distance from Outfall (mi)	45

Changes Since Last Permit Issuance: None.

Other Comments: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	008	Design Flow (MGD)	0.054
Latitude	41º 37' 30.03"	Longitude	-77º 17' 39.04"
Quad Name	Antrim	Quad Code	0527
Wastewater Description:	IW Process Effluent with ELG		

Receiving Waters	Wilson Creek (CWF)	Stream Code	21730
NHD Com ID	66538315	RMI	2.62
Drainage Area	18.91	Yield (cfs/mi^2)	0.0401
Q_{7-10} Flow (cfs)	0.7577	Q_{7-10} Basis	Gage No. 1548500
Elevation (ft)	1740	Slope (ft/ft)	0.0063
Watershed No.	9-A	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	N/A
Exceptions to Use	None	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE, ACID MINE DRAINAGE		
TMDL Status	Final, 04/09/2003	Name	Babb Creek

Nearest Downstream Public Water Supply Intake	Jersey Shore Area Joint Water Authority		
PWS Waters	Pine Creek	Flow at Intake (cfs)	37.9
PWS RMI	1.92	Distance from Outfall (mi)	45

Changes Since Last Permit Issuance: None.

Other Comments: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	009	Design Flow (MGD)	N/A
Latitude	41º 37' 35.12"	Longitude	-77º 17' 47.85"
Quad Name	Antrim	Quad Code	0527
Wastewater Description:	Stormwater		
Receiving Waters	Wilson Creek (CWF, MF)	Stream Code	21730
NHD Com ID	66538315	RMI	0.500
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	1820	Slope (ft/ft)	N/A
Watershed No.	9-A	Chapter 93 Class.	CWF
Existing Use	CWF	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE, ACID MINE DRAINAGE		
TMDL Status	Final, 04/09/2003	Name	Babb Creek
Nearest Downstream Public Water Supply Intake	Jersey Shore Area Joint Water Authority		
PWS Waters	Pine Creek	Flow at Intake (cfs)	37.9
PWS RMI	1.92	Distance from Outfall (mi)	45

Changes Since Last Permit Issuance: None.

Other Comments: None.

TMDL Impairment

The Department's Geographic Information System (GIS) shows that the Babb Creek is impaired and a TMDL exists for these stream segments. High levels of metals, and in some areas depressed pH, caused these impairments. All impairments resulted from acid drainage from abandoned coalmines. The TMDL addresses the three primary metals associated with acid mine drainage (iron, manganese, aluminum) and pH. The TMDL addresses the three primary metals associated with abandoned mine drainage (iron, aluminum, and manganese) and acidity. No Waste Load Allocation (WLA) was developed for this facility given that this discharge does not exist. These allowable limits we previously implemented in order to ensure that the discharge does not create an excursion or contribute to the impairment of the stream.

Table D6. Load Allocations at Point 5

Measured Sample Data			Allowable		Reduction Identified
Parameter	Conc (mg/l)	Load (lbs/day)	LTA conc (mg/l)	Load (lbs/day)	%
Al	2.69	468.6	0.27	46.2	90%
Fe	0.63	109.9	0.51	89.2	19%
Mn	2.11	367.7	0.51	89.4	76%
Acidity	6.90	1200.4	3.27	568.7	53%
Alkalinity		12.83		2232.7	

Effluent limits for iron will be assigned for outfall 001 accordingly.

Anti-Backsliding

In accordance with 40 CFR 122.44(l)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit. The permittee has supplied the Department with new information regarding the projected effluent quality. This has resulted in the elimination and addition of effluent parameters and associated limits. The permittee is not currently discharging treated leachate from the landfill. This is acceptable given 40 CFR 122.44(l)(2)(B)(1), which states that if information is available which was not available at the time of permit issuance which would have justified the application of a less stringent effluent limitation at the time of permit issuance;

Chesapeake Bay Requirements

This facility is classified as a “non-significant” IW given that the gross effluent discharges do not exceed 75 lbs/day of TN or 25 lbs/day of TP. The permittee will be not be required to monitor and report TN and TP throughout the permit term in accordance with the Phase II WIP Chesapeake Bay Strategy for non-significant industrial waste facilities. Non-significant IW dischargers should receive monitoring requirements in permits if there is any possibility of a net increase in nutrients as a result of facility processes, and monitoring frequencies should be established using the general guidance in the Phase II WIP Supplement. It was determined that there is no potential that the associated facility process discharge could create a net increase in TP.

Existing Effluent Limitations and Monitoring Requirements

Outfalls 001 though 007 - Existing Limits

	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring	
Discharge Parameter	Monthly Average	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instantaneous Maximum	Minimum Frequency	Sample Type
pH (S.U.)					Report		1/6 Months	Grab
BOD5					Report		1/6 Months	Grab
Chemical Oxygen Demand					Report		1/6 Months	Grab
Total Suspended Solids					Report		1/ Quarter	Grab
Total Dissolved Solids					Report		1/6 Months	Grab
Ammonia-Nitrogen					Report		1/6 Months	Grab
Total Aluminum					Report		1/6 Months	Grab
Total Arsenic					Report		1/6 Months	Grab
Total Barium					Report		1/6 Months	Grab
Total Cadmium					Report		1/6 Months	Grab
Total Chromium					Report		1/6 Months	Grab
Total Cyanide					Report		1/6 Months	Grab
Total Iron					Report		1/6 Months	Grab
Total Lead					Report		1/6 Months	Grab
Total Manganese					Report		1/6 Months	Grab
Dissolved Magnesium					Report		1/6 Months	Grab
Total Magnesium					Report		1/6 Months	Grab
Total Mercury					Report		1/6 Months	Grab
Total Selenium					Report		1/6 Months	Grab
Total Silver					Report		1/6 Months	Grab

Total Zinc					Report		1/6 Months	Grab
Phenol					Report		1/6 Months	Grab
a-Terpineol					Report		1/6 Months	Grab
Benzoic Acid					Report		1/6 Months	Grab
p-Cresol					Report		1/6 Months	Grab
Total Organic Carbon					Report		1/6 Months	Grab

The existing effluent limits for Outfall 001 through 007 were not based on a design flow.

Outfall 008 - Existing Limits

	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring	
Discharge Parameter	Monthly Average	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instantaneous Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
BOD5	XXX	XXX	XXX	37	140	XXX	1/week	24-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	27	88	XXX	1/week	24-Hr Composite
Ammonia-Nitrogen	XXX	XXX	XXX	4.9	10	XXX	1/week	24-Hr Composite
Total Aluminum	XXX	XXX	XXX	0.27	0.67	XXX	1/week	Grab
Total Antimony (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
Total Arsenic (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
Total Cadmium (µg/L)	XXX	XXX	XXX	2	5	XXX	1/year	24-Hr Composite
Total Copper (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
Total Iron	XXX	XXX	XXX	0.51	1.27	XXX	1/week	Grab
Total Lead (µg/L)	XXX	XXX	XXX	20	50	XXX	1/year	24-Hr Composite
Total Manganese	XXX	XXX	XXX	0.51	1.27	XXX	1/week	Grab
Total Selenium (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
Total Silver (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
Total Thallium (µg/L)	XXX	XXX	XXX	2.41	6.04	XXX	1/year	24-Hr Composite
Total Zinc	XXX	XXX	XXX	0.11	0.20	XXX	1/week	24-Hr Composite
4,4-DDD (µg/L)	XXX	XXX	XXX	0.01	0.025	XXX	1/year	24-Hr Composite
4,4-DDT (µg/L)	XXX	XXX	XXX	0.01	0.025	XXX	1/year	24-Hr Composite
4,4-DDE (µg/L)	XXX	XXX	XXX	0.01	0.025	XXX	1/year	24-Hr Composite
4,6-dinitro-o-cresol (µg/L)	XXX	XXX	XXX	130.9	327.2	XXX	1/year	24-Hr Composite
3,3-Dichlorobenzidine (µg/L)	XXX	XXX	XXX	1.48	3.71	XXX	1/year	24-Hr Composite

Pentachlorophenol (µg/L)	XXX	XXX	XXX	19.1	47.7	XXX	1/year	24-Hr Composite
2,3,7,8-TCDD (µg/L)	XXX	XXX	XXX	0.000005	0.000012	XXX	1/year	24-Hr Composite
2,4,6-Trichlorophenol (µg/L)	XXX	XXX	XXX	50	125	XXX	1/year	24-Hr Composite
Phenol	XXX	XXX	XXX	0.015	0.026	XXX	1/week	24-Hr Composite
Acenaphthene (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
Acrolein (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	4 Grabs/24 Hours
Aldrin (µg/L)	XXX	XXX	XXX	0.003	0.0075	XXX	1/year	24-Hr Composite
alpha-BHC (µg/L)	XXX	XXX	XXX	0.18	0.46	XXX	1/year	24-Hr Composite
alpha-Endosulfan (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
a-Terpineol	XXX	XXX	XXX	0.016	0.033	XXX	1/week	24-Hr Composite
Hexachlorobenzene (µg/L)	XXX	XXX	XXX	0.02	0.05	XXX	1/year	24-Hr Composite
Nitrobenzene (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
Benzo(a)Anthracene (µg/L)	XXX	XXX	XXX	0.26	0.67	XXX	1/year	24-Hr Composite
Benzo(a)Pyrene (µg/L)	XXX	XXX	XXX	0.26	0.67	XXX	1/year	24-Hr Composite
Benzo(k)Fluoranthene (µg/L)	XXX	XXX	XXX	0.26	0.67	XXX	1/year	24-Hr Composite
3,4-Benzofluoranthene (µg/L)	XXX	XXX	XXX	0.26	0.67	XXX	1/year	24-Hr Composite
Benzoic Acid	XXX	XXX	XXX	0.071	0.12	XXX	1/week	Grab
beta-BHC (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
beta-Endosulfan (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
Chlordane (µg/L)	XXX	XXX	XXX	0.043	0.10	XXX	1/year	24-Hr Composite
1,2-Diphenylhydrazine (µg/L)	XXX	XXX	XXX	2.54	6.37	XXX	1/year	24-Hr Composite
Bis(2-Chloroethyl)Ether (µg/L)	XXX	XXX	XXX	2.12	5.31	XXX	1/year	24-Hr Composite
Bis(2-Ethylhexyl)Phthalate (µg/L)	XXX	XXX	XXX	50	125	XXX	1/year	24-Hr Composite
Chrysene (µg/L)	XXX	XXX	XXX	0.26	0.67	XXX	1/year	24-Hr Composite
Dibenzo(a,h)Anthracene (µg/L)	XXX	XXX	XXX	0.26	0.67	XXX	1/year	24-Hr Composite
Dieldrin (µg/L)	XXX	XXX	XXX	0.004	0.01	XXX	1/year	24-Hr Composite

gamma-BHC (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
Heptachlor (µg/L)	XXX	XXX	XXX	0.006	0.15	XXX	1/year	24-Hr Composite
Heptachlor Epoxide (µg/L)	XXX	XXX	XXX	0.003	0.0075	XXX	1/year	24-Hr Composite
Hexachlorobutadiene (µg/L)	XXX	XXX	XXX	20.1	50.3	XXX	1/year	24-Hr Composite
Hexachlorocyclopentadiene (µg/L)	XXX	XXX	XXX	10.0	25.1	XXX	1/year	24-Hr Composite
Hexachloroethane (µg/L)	XXX	XXX	XXX	50	125	XXX	1/year	24-Hr Composite
Indeno(1,2,3-cd)Pyrene (µg/L)	XXX	XXX	XXX	0.26	0.67	XXX	1/year	24-Hr Composite
N-Nitrosodimethylamine (µg/L)	XXX	XXX	XXX	0.049	0.12	XXX	1/year	24-Hr Composite
N-Nitrosodi-N-Propylamine (µg/L)	XXX	XXX	XXX	0.35	0.88	XXX	1/year	24-Hr Composite
N-Nitrosodiphenylamine (µg/L)	XXX	XXX	XXX	Report	Report	XXX	1/year	24-Hr Composite
p-Cresol	XXX	XXX	XXX	0.014	0.025	XXX	1/week	24-Hr Composite
Phenanthrene (µg/L)	XXX	XXX	XXX	10.0	25.1	XXX	1/year	24-Hr Composite
Toxaphene (µg/L)	XXX	XXX	XXX	0.002	0.005	XXX	1/year	24-Hr Composite

The existing effluent limits for Outfall 008 were based on a design flow of 0.054 MGD.

Development of Effluent Limitations

Outfall No. 008 **Design Flow (MGD)** 0.054
Latitude 41° 37’ 44.00” **Longitude** 77° 17’ 25.00”
Wastewater Description: Treated IW Effluent

Technology-Based Limitations
The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Limit (mg/l) (Average Monthly)	Limit (mg/l) (Daily Maximum)	Limit (mg/l) (Inst. Maximum)	Federal Regulation	State Regulation
pH	6-9 at all times	-		§133.102(c)	§95.2

Effluent Limits Guidelines (ELGs) and Monitoring Frequencies

-The facility is classified under CFR Title 40 *Section 445 - LANDFILLS POINT SOURCE CATEGORY (RCRA Subtitle D Non-Hazardous Waste Landfill)*. The Effluent Limitations Guidelines in subparts §445.21, §445.22, and §445.23 are concentration based limits provided in the exerted table below. Sections §445.22 and §445.23 refer back to section §445.21 for limitations. The pH limitations in these sections coincide with the standard limitations issued under 25 PA Code §95.2 (1) which provides the basis of effluent limitations for pH. The effluent limitations for all parameters typically are taken from the most stringent of the BPT, BCT, and BAT. However, in this case, the BPT, BCT, and BAT parameters are all identical in this case.

Title 40: Protection of Environment
PART 445—LANDFILLS POINT SOURCE CATEGORY
Subpart B—RCRA Subtitle D Non-Hazardous Waste Landfill

§445.21 Effluent limitations attainable by the application of the best practicable control technology currently available (BPT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations which represent the application of BPT:

EFFLUENT LIMITATIONS

Regulated parameter	Maximum daily[1]	Maximum monthly avg.[1]
BOD	140	37
TSS	88	27
Ammonia (as N)	10	4.9
α-Terpineol	0.033	0.016
Benzoic acid	0.12	0.071
p-Cresol	0.025	0.014
Phenol	0.026	0.015
Zinc	0.20	0.11
pH	([2])	([2])

[1]Milligrams per liter (mg/L, ppm)

[2]Within the range 6 to 9.

Water Quality-Based Limitations

To establish whether or not water-quality based effluent limitations (WQBELs) are required, the Department models in-stream conditions. In order to determine limitations for toxics, the Department utilizes the PENTOXSD v2.0d model.

WQM 7.0 for Windows, Version 1.0b, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen
The Department uses the computer model WQM 7.0 to determine water quality based effluent limitations for Carbonaceous BOD ($CBOD_5$), Ammonia Nitrogen (NH_3-N), and Dissolved Oxygen (DO). This model can be utilized for single and multiple point source discharges scenarios. The WQM 7.0 model determines wasteload allocations for each parameter and then derives effluent limitations in a two part process. The model simulates the mixing (assuming complete mixing) and consumption/degradation of both DO and NH_3-N individually in the stream due to the degradation of ($CBOD_5$ and NH_3-N for DO) and (NH_3-N for NH_3-N), and compares calculated instream concentrations for each parameter to the corresponding water quality criteria. The WQM 7.0 model then calculates the highest pollutant loadings that the stream can assimilate while still meeting water quality criteria.

The model was run using the latest information on Q7-10 stream flow, background water quality, average annual design flow, and other discharge characteristics. The existing technology based effluent limit for $CBOD_5$ (37 mg/l) was used as inputs for the modeling. The existing technology based effluent limit for NH3-N (4.9 mg/l) was used in the model as well. The DO minimum daily average criterion from §93.7 (6 mg/L for CWF) was used for the in-stream objective for the model. The summary of the output is as follows:

Parameter	Effluent Limit		
	30 Day Average	Maximum	Minimum
CBOD5	37	N/A	N/A
Ammonia-N	4.9	9.8	N/A
Dissolved Oxygen	N/A	N/A	3

The model does not recommend more stringent water-quality based effluent limitations with regards to CBOD5, dissolved oxygen, and Ammonia-N and the current limits will remain. Refer to Appendix B for the WQM 7.0 inputs and results. Based on the model output, the existing limitations are appropriate and will be maintained.

PENTOXSD for Windows Version 2.0d
PENTOXSD V2.0d is a single discharge wasteload allocation program for toxics that uses a mass-balance water quality analysis to determine recommended water quality-based effluent limits. The model incorporates consideration for mixing, first-order decay and other factors to computes a Wasteload Allocation (WLA) for each applicable criterion. Finally, the model determines a maximum water quality-based effluent limitation (WQBEL) for each parameter and outputs the more stringent of the WQBEL or the input concentration. The output of which is the recommends average monthly and maximum daily effluent limitations.

In order to determine which parameters are required to be analyzed in the PENTOXSD model, a Toxics Screening Analysis is used to identify toxic pollutants of concern. In this particular case, sampling for pollutant Groups 1 through 6 was submitted with the application. This is required by the application given the types of industrial users connected to the collection system. These values were input into the Toxics Screening Analysis v2.7 spreadsheet to determine if each pollutant was a candidate for PENTOXSD modeling (pollutant of concern). Refer to Appendix B for the Toxics Screening Analysis v2.7.

The Toxics Screening Analysis v2.7 determines pollutants of concern using the following logic:

- All toxic pollutants whose maximum concentrations, as reported in the permit application or on DMRs, that are greater than the most stringent applicable water quality criterion were considered to be pollutants of concern.
- Also, where the maximum reported value in an application for a pollutant is less than the detection limit using the most sensitive analytical method listed in Chapter 16, the parameter is not a parameter of concern, even if the maximum reported value exceeds the applicable Chapter 93 criterion.
- Where the maximum reported values in an application for a parameter is less than the detection limit for some analytical method other than the most sensitive analytical method listed in Chapter 16, the parameter is a pollutant of concern if the maximum reported value exceeds the Chapter 93 criterion, even if the value is reported as “non-detect.”

The PENTOXSD model was then run for all parameters of concern to evaluate reasonable potential (RP) for other toxic pollutants to cause an excursion above water quality standards. See Appendix C for the PENTOXSD model input/output. The most stringent WQBEL recommended by the model was then entered back into the same Toxics Screening Analysis v2.7 spreadsheet in order to determine which action to take regarding the pollutant. The permit recommendations of Monitor, Establish Limits, or to take no action (-) are established in the Toxics Screening Analysis v2.7 spreadsheet for each pollutant based off of the following logic:

- Establish average monthly and IMAX limits in the draft permit where the maximum reported concentration exceeds 50% of the WQBEL.
- For non-conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 25% - 50% of the WQBEL.
- For conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 10% - 50% of the WQBEL.

A “Reasonable Potential Analysis” (See Appendix B) determined that the following parameters were candidates for monitoring or limitations shown below:

Parameter	Effluent Limit (µg/l)	Governing Criterion	Max Daily Limit (µg/l)	WQBEL (µg/l)	WQBEL Criterion	Permit Recommendation
4,6-Dinitro-o-Cresol	130.912	INPUT	156.016	130.912	THH	Establish Limits
Pentachlorophenol	19.113	CRL	29.819	19.113	CRL	Establish Limits
Benzo(a)Anthracene	0.269	CRL	0.42	0.269	CRL	Establish Limits
Benzo(a)Pyrene	0.269	CRL	0.42	0.269	CRL	Establish Limits
3,4-Benzofluoranthene	0.269	CRL	0.42	0.269	CRL	Establish Limits
Benzo(k)Fluoranthene	0.269	CRL	0.42	0.269	CRL	Establish Limits
Bis(2-Chloroethyl)Ether	2.124	CRL	3.313	2.124	CRL	Establish Limits
Bis(2-Ethylhexyl)Phthalate	50	INPUT	78.00	84.946	CRL	Establish Limits
Butyl Benzyl Phthalate	100	INPUT	156.016	352.4454	CFC	Monitor
Chrysene	0.269	CRL	0.42	0.269	CRL	Establish Limits
Dibenzo(a,h)Anthrancene	0.269	CRL	0.42	0.269	CRL	Establish Limits

3,3-Dichlorobenzidine	1.487	CRL	2.319	1.487	CRL	Establish Limits
Di-n-Butyl Phthalate	100	INPUT	156.016	211.473	CFC	Monitor
Hexachlorobenzene	0.02	CRL	0.031	0.02	CRL	Establish Limits
Hexachlorobutadiene	10	INPUT	15.602	20.14	CFC	Monitor
Hexachlorocyclopentadiene	10.07	CFC	15.711	10.07	CFC	Establish Limits
Indeno(1,2,3-cd)Pyrene	0.269	CRL	0.42	0.269	CRL	Establish Limits
n-Nitrosodimethylamine	0.049	CRL	0.076	0.049	CRL	Establish Limits
n-Nitrosodi-n-Propylamine	0.354	CRL	0.552	0.354	CRL	Establish Limits
Aldrin	0.003	CRL	0.005	0.003	CRL	Establish Limits
alpha-BHC	0.1	INPUT	0.156	0.184	CRL	Establish Limits
Chlordane	0.043	CFC	0.068	0.043	CFC	Establish Limits
4,4-DDD	0.01	CFC	0.016	0.01	CFC	Establish Limits
Toxaphene	0.002	CFC	0.003	0.002	CFC	Establish Limits

Comments: Since the applicants and their laboratories did not achieve QLs that achieve or approach the lowest Detection Limits identified in 25 Pa. Code Chapter 16, Tables 2A and 2B, it can be assumed that the pollutant is present in the effluent at the QL concentration. This has resulted in a finding of “reasonable potential” to exceed water quality standards and the establishment of effluent limitations and/or monitoring requirements for the abovementioned parameters.

The applicant will be given the opportunity to re-test for these parameters to the Department’s established QLs during the comment period. The results will then be incorporated into the fact sheet addendum. (See Anti-backsliding section.)

Best Professional Judgement (BPJ) Limitations

Comments: None.

Additional Considerations

None.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst the abovementioned technology, water quality, and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001) and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date

Outfall 008 - Proposed Limits

	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring	
Discharge Parameter	Monthly Average	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Inst. Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report	Report					Continuous	Meter
pH (s.u.)			6.0		9.0		1/Day	Grab
BOD				37	140		1/Week	24 Hr. Comp
TSS				27	88		1/Week	24 Hr. Comp
Ammonia-N				4.9	10		1/Week	24 Hr. Comp
α-Terpineol				0.016	0.033		1/Week	24 Hr. Comp
Benzoic Acid				0.071	0.12		1/Week	Grab
p-Cresol				0.014	0.025		1/Week	24 Hr. Comp
Phenol				0.015	0.026		1/Week	24 Hr. Comp
Zinc				0.11	0.20		1/Week	24 Hr. Comp
Aluminum (Total)				0.27	0.67		1/Week	Grab
Iron (Total)				0.51	1.27		1/Week	Grab
Manganese (Total)				0.51	1.27		1/Week	Grab
4,6-Dinitro-o-Cresol (µg/L)				130.9	327.2		1/ Year	24 Hr. Comp
Pentachlorophenol (µg/L)				19.1	47.7		1/ Year	24 Hr. Comp
Benzo(a)Anthracene (µg/L)				0.26	0.67		1/ Year	24 Hr. Comp
Benzo(a)Pyrene (µg/L)				0.26	0.67		1/ Year	24 Hr. Comp
3,4-Benzofluoranthene (µg/L)				0.26	0.67		1/ Year	24 Hr. Comp
Benzo(k)Fluoranthene (µg/L)				0.26	0.67		1/ Year	24 Hr. Comp
Bis(2-Chloroethyl)Ether (µg/L)				2.12	5.31		1/ Year	24 Hr. Comp
Bis(2-Ethylhexyl)Phthalate (µg/L)				50	125		1/ Year	24 Hr. Comp
Butyl Benzyl Phthalate (µg/L)				Report	Report		1/ Year	24 Hr. Comp
Chrysene (µg/L)				0.26	0.67		1/ Year	24 Hr. Comp
Dibenzo(a,h)Anthrancene (µg/L)				0.26	0.67		1/ Year	24 Hr. Comp
3,3-Dichlorobenzidine (µg/L)				1.48	3.71		1/ Year	24 Hr. Comp
Di-n-Butyl Phthalate (µg/L)				Report	Report		1/ Year	24 Hr. Comp
Hexachlorobenzene (µg/L)				0.02	0.05		1/ Year	24 Hr. Comp

Hexachlorobutadiene (µg/L)				Report	Report		1/ Year	24 Hr. Comp
Hexachlorocyclopentadiene (µg/L)				10.0	25.1		1/ Year	24 Hr. Comp
Indeno(1,2,3-cd)Pyrene (µg/L)				0.26	0.67		1/ Year	24 Hr. Comp
n-Nitrosodimethylamine (µg/L)				0.049	0.12		1/ Year	24 Hr. Comp
n-Nitrosodi-n-Propylamine (µg/L)				0.35	0.88		1/ Year	24 Hr. Comp
Aldrin (µg/L)				0.003	0.0075		1/ Year	24 Hr. Comp
alpha-BHC (µg/L)				0.18	0.46		1/ Year	24 Hr. Comp
Chlordane (µg/L)				0.043	0.10		1/ Year	24 Hr. Comp
4,4-DDD (µg/L)				0.01	0.025		1/ Year	24 Hr. Comp
Toxaphene (µg/L)				0.002	0.005		1/ Year	24 Hr. Comp

The proposed effluent limits for Outfall 008 were based on a design flow of 0.054 MGD.

Outfalls 001, 002, 003, 004, 005, 006, 007, and 009 - Proposed Limits

	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring	
Discharge Parameter	Monthly Average	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instantaneous Maximum	Minimum Frequency	Sample Type
TSS					Report		1/Quarter	Grab
pH					Report		1/6 Months	Grab
BOD					Report		1/6 Months	Grab
COD					Report		1/6 Months	Grab
Phenol					Report		1/6 Months	Grab
p-Cresol					Report		1/6 Months	Grab
α-Terpineol					Report		1/6 Months	Grab
Ammonia-N					Report		1/6 Months	Grab
Benzoic Acid					Report		1/6 Months	Grab
Zinc					Report		1/6 Months	Grab
Total Dissolved Solids (TDS)					Report		1/6 Months	Grab
Total Organic Carbon (TOC)					Report		1/6 Months	Grab
Barium (Total)					Report		1/6 Months	Grab
Cadmium (Total)					Report		1/6 Months	Grab
Chromium (Total)					Report		1/6 Months	Grab
Lead (Total)					Report		1/6 Months	Grab
Mercury (Total)					Report		1/6 Months	Grab
Magnesium (Total)					Report		1/6 Months	Grab
Magnesium (Dissolved)					Report		1/6 Months	Grab
Selenium (Total)					Report		1/6 Months	Grab
Silver (Total)					Report		1/6 Months	Grab
Arsenic (Total)					Report		1/6 Months	Grab
Cyanide (Total)					Report		1/6 Months	Grab
Iron (Total)					Report		1/6 Months	Grab
Aluminum (Total)					Report		1/6 Months	Grab
Manganese (Total)					Report		1/6 Months	Grab

The proposed effluent limits for these Outfalls were not based on a design flow.

Flow
The existing monitoring frequency (Continuous) and sample type (Meter) for Flow correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3. Reporting of maximum daily flow and monthly average is appropriate for this type of facility and consistent with similar facility types.

Biochemical Oxygen Demand (BOD), Total Dissolved Solids (TSS), Ammonia-N, α-Terpineol, Benzoic Acid, p-Cresol, Phenol, and Zinc
The ELG concentration-based limits will remain in the permit as specified. The existing monitoring frequency (2/ Month) and sample types (24-hr composite) (Grab for Benzoic Acid) are appropriate for this facility and will remain.

Total Iron, Total Aluminum, Total Manganese
The concentration based effluent limits for total iron, total aluminum, and total manganese have been applied in accordance with the Babb Creek TMDL. The monitoring frequency (1/ Week) and sample type (Grab) have been established using BPJ.

pH
The existing permit limits for pH were implemented in accordance with 25 PA Code §95.2(1), which provide the basis of effluent limitations for pH, and shall remain. Additionally, the applicable ELGs for this facility (40 CFR Section §445.21*)* are identical to the state requirements. The existing monitoring frequency (Daily) and sample type (grab) for pH correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-4 and will remain.

Pollutants of Concern
Effluent limitations and monitoring requirements have been established for these pollutants based upon the above-mentioned modeling results. In order to obtain data regarding these pollutants for future decision-making, a yearly 24-hr composite sample is proposed. These limits were then rounded down in accordance with the rounding rules established in the *Technical Guidance for the Development and Specification of Effluent Limitations (362-0400-001)*, Chapter 5 - Specifying Effluent Limitations in NPDES Permits. The sample type corresponds to the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-4. The monitoring frequency varies from the guidance and is based on BPJ given that it is anticipated that these pollutants are not present in significant concentrations. The facility and laboratory merely did not conduct testing in the application to a level that achieve or approach the Department's established QLs or the lowest Detection Limits identified in 25 Pa. Code Chapter 16, Tables 2A and 2B.

All of the limits proposed above are consistent with permits issued for similar facilities in the region.

Other Comments: None.

Stormwater Requirements

The industrial activities associated with Phoenix Resources, Inc. are identified in 40 CFR 122.26(b)(14)(ix) and thus the facility required to obtain an NPDES permit to discharge stormwater into waters of the Commonwealth of Pennsylvania. The facility is classified under SIC Code 4953- Refuse Systems. Establishments primarily engaged in the collection and disposal of refuse by processing or destruction or in the operation of incinerators, waste treatment plants, landfills, or other sites for disposal of such materials. SIC code major group 4953 is under the coverage of Appendix C. For that reason, General Stormwater (PAG-03) Appendix C (Primary Metal Industry Facilities) Monitoring Requirements and Best Management Practices (BMPs) have been assigned.

The permittee must monitor and report monitoring results for the water quality parameters listed below in accordance with the General Permit requirements and BPJ. The measurement frequencies listed below are the minimum required by DEP as well as the ELG parameters and PAG-03 equivalent requirements. The permittee has added an additional outfall 009. Additional sampling is optional.

DISCHARGE PARAMETER	UNITS	SAMPLE TYPE	MEASUREMENT FREQUENCY
Total Suspended Solids (TSS) *	mg/L	1 Grab	1/Quarter
pH *	S.U.	1 Grab	1/6 months
Biochemical Oxygen Demand (BOD) *	mg/L	1 Grab	1/6 months
Chemical Oxygen Demand (**COD) ****	mg/L	1 Grab	1/6 months
Phenol *	mg/L	1 Grab	1/6 months
p-Cresol *	mg/L	1 Grab	1/6 months
α –Terpineol *	mg/L	1 Grab	1/6 months
Ammonia-N *	mg/L	1 Grab	1/6 months
Benzoic Acid *	mg/L	1 Grab	1/6 months
Zinc *	mg/L	1 Grab	1/6 months
Total Dissolved Solids (TDS) ***	mg/L	1 Grab	1/6 months
Total Organic Carbon (TOC) ***	mg/L	1 Grab	1/6 months
Barium (Total) ***	mg/L	1 Grab	1/6 months
Cadmium (Total) ***	mg/L	1 Grab	1/6 months
Chromium (Total) ***	mg/L	1 Grab	1/6 months
Lead (Total) ***	mg/L	1 Grab	1/6 months
Mercury (Total) ***	mg/L	1 Grab	1/6 months
Magnesium (Total) ***	mg/L	1 Grab	1/6 months
Magnesium (Dissolved) ***	mg/L	1 Grab	1/6 months
Selenium (Total) ***	mg/L	1 Grab	1/6 months
Silver (Total) ***	mg/L	1 Grab	1/6 months
Arsenic (Total) ***	mg/L	1 Grab	1/6 months
Cyanide (Total) ***	mg/L	1 Grab	1/6 months
Iron (Total) ***	mg/L	1 Grab	1/6 months
Aluminum (Total) ****	mg/L	1 Grab	1/6 months
Manganese (Total) ****	mg/L	1 Grab	1/6 months

* The facility is subject to any pollutant limited in an effluent guideline.
** These parameters were previously established in the permit using BPJ and shall remain.
*** These parameters were derived from Appendix C of the PAG-03 General permit requirements.
**** These parameters are derived from the associated TMDL.

Part C of the permit will contain following requirements for this stormwater facility:

1. Applicable Discharges
2. Preparedness, Prevention and Contingency (PPC) Plan
3. Minimum Required BMPs
4. Annual Inspection and Compliance Evaluation
5. Stormwater Sampling Requirements

The following Minimum Required Best Management Practices (BMPs) for this facility will be included in the permit for the permittee to implement:

1. Ensure secondary containment and leak detection for all liquid waste and raw material storage tanks.
2. Wherever feasible, conduct waste and raw material loading, transfer and unloading activities in enclosed, covered areas; collect and separately manage runoff from these areas.
3. Inspect and maintain the integrity of all containers used to store hazardous materials; store containers in areas with secondary containment.
4. Ensure segregation of landfill leachate and stormwater drainage from landfills.
5. Install temporary, intermediate and final covers as required by solid waste permits.
6. Provide for run-on controls for landfills and land application sites.
7. Design covers to minimize erosion and wind entrainment.
8. Operate land application sites in accordance with permitted land application rates; do not over apply leachate to saturated soils.
9. Perform vehicle washing in dedicated areas (indoors wherever possible). Collect and manage wash water separately from storm drainage.

Compliance History

Summary of Inspections -The last facility inspection was conducted on 4/3/2019 by the Department which reveals that there were no issues and the facility was operating normally and there is no IW discharge from the facility.

WMS Query Summary – A WMS Query was run at *Reports - Violations & Enforcements – Open Violations for Client Report* to determine whether there are any unresolved violations associated with the client that will affect issuance of the permit (per CSL Section 609). This query revealed two (2) open violations in the Waste program. The program will be contacted, and this open violation will be resolved in the system prior to issuance of this permit.

CLIENT ID	CLIENT	INSP PROGRAM	INSP ID	VIOLATION ID	VIOLATION DATE	VIOLATION CODE	VIOLATION
93217	PHOENIX RESOURCES INC	Residual Waste	2852553	875056	01/28/2020	288.201C2	Residual waste landfill is not operated in accordance with approved plans and permit.
93217	PHOENIX RESOURCES INC	Residual Waste	2852553	875057	01/28/2020	288.222A	Radiation Protection Monitoring Plan not approved or not implemented.

Summary of e-DMR- A review of the e-DMR data over the permit term reveals that the permittee has been in compliance.

Attachments

Appendices

Compliance History

DMR Data for Outfall 001 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
pH (S.U.) Daily Maximum	7.1						7.0					
BOD5 (mg/L) Daily Maximum	< 2						4					
COD (mg/L) Daily Maximum	26						25					
TSS (mg/L) Daily Maximum	< 2			4			22					
Total Dissolved Solids (mg/L) Daily Maximum	122						98					
Ammonia (mg/L) Daily Maximum	< 0.1						< 0.10					
Total Aluminum (mg/L) Daily Maximum	< 0.10						0.8					
Total Arsenic (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Barium (mg/L) Daily Maximum	0.1						0.11					
Total Cadmium (mg/L) Daily Maximum	< 0.002						< 0.002					
Total Chromium (mg/L) Daily Maximum	< 0.01						< 0.01					
Total Cyanide (mg/L) Daily Maximum	< 0.02						< 0.020					
Total Iron (mg/L) Daily Maximum	0.92						1.22					
Total Lead (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Manganese (mg/L) Daily Maximum	0.43						0.08					
Dissolved Magnesium (mg/L) Daily Maximum	6.9						3.7					

Total Magnesium (mg/L) Daily Maximum	6.8						3.9					
Total Mercury (mg/L) Daily Maximum	< 0.0002						< 0.0002					
Total Selenium (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Silver (mg/L) Daily Maximum	< 0.005						< 0.005					
Total Zinc (mg/L) Daily Maximum	0.02						< 0.05					
Phenol (mg/L) Daily Maximum	< 0.011						< 0.011					
a-Terpineol (mg/L) Daily Maximum	< 0.011						< 0.011					
Benzoic Acid (mg/L) Daily Maximum	< 0.023						< 0.021					
p-Cresol (mg/L) Daily Maximum	< 0.011						< 0.011					
TOC (mg/L) Daily Maximum	9.3						10.2					

DMR Data for Outfall 002 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
pH (S.U.) Daily Maximum	7.2						7.0					
BOD5 (mg/L) Daily Maximum	6						6					
COD (mg/L) Daily Maximum	38						33					
TSS (mg/L) Daily Maximum	16			12			18					
Total Dissolved Solids (mg/L) Daily Maximum	54						64					
Ammonia (mg/L) Daily Maximum	< 0.1						< 0.10					
Total Aluminum (mg/L) Daily Maximum	0.2						1.4					
Total Arsenic (mg/L) Daily Maximum	< 0.02						< 0.02					

Total Barium (mg/L) Daily Maximum	0.05						0.03					
Total Cadmium (mg/L) Daily Maximum	< 0.002						< 0.002					
Total Chromium (mg/L) Daily Maximum	< 0.01						< 0.01					
Total Cyanide (mg/L) Daily Maximum	< 0.02						< 0.020					
Total Iron (mg/L) Daily Maximum	2.42						1.68					
Total Lead (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Manganese (mg/L) Daily Maximum	0.36						0.04					
Dissolved Magnesium (mg/L) Daily Maximum	3.8						1.2					
Total Magnesium (mg/L) Daily Maximum	3.8						1.3					
Total Mercury (mg/L) Daily Maximum	< 0.0002						< 0.002					
Total Selenium (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Silver (mg/L) Daily Maximum	< 0.005						< 0.005					
Total Zinc (mg/L) Daily Maximum	0.01						0.01					
Phenol (mg/L) Daily Maximum	< 0.010						< 0.01					
a-Terpineol (mg/L) Daily Maximum	< 0.010						< 0.01					
Benzoic Acid (mg/L) Daily Maximum	< 0.02						< 0.02					
p-Cresol (mg/L) Daily Maximum	< 0.010						< 0.01					
TOC (mg/L) Daily Maximum	14						13.0					

DMR Data for Outfall 003 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19

pH (S.U.) Daily Maximum	7.0						7.0					
BOD5 (mg/L) Daily Maximum	< 2						3					
COD (mg/L) Daily Maximum	26						14					
TSS (mg/L) Daily Maximum	3			3			14					
Total Dissolved Solids (mg/L) Daily Maximum	140						82					
Ammonia (mg/L) Daily Maximum	< 0.1						< 0.010					
Total Aluminum (mg/L) Daily Maximum	< 0.1						0.3					
Total Arsenic (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Barium (mg/L) Daily Maximum	0.22						0.24					
Total Cadmium (mg/L) Daily Maximum	< 0.002						< 0.002					
Total Chromium (mg/L) Daily Maximum	< 0.01						< 0.01					
Total Cyanide (mg/L) Daily Maximum	< 0.02						< 0.020					
Total Iron (mg/L) Daily Maximum	0.43						3.15					
Total Lead (mg/L) Daily Maximum	0.02						< 0.02					
Total Manganese (mg/L) Daily Maximum	0.3						0.49					
Dissolved Magnesium (mg/L) Daily Maximum	7.9						4.0					
Total Magnesium (mg/L) Daily Maximum	7.8						4.0					
Total Mercury (mg/L) Daily Maximum	< 0.0002						< 0.0002					
Total Selenium (mg/L) Daily Maximum	< 0.02						< 0.02					

Total Silver (mg/L) Daily Maximum	< 0.005						< 0.005					
Total Zinc (mg/L) Daily Maximum	< 0.01						0.12					
Phenol (mg/L) Daily Maximum	< 0.010						< 0.011					
a-Terpineol (mg/L) Daily Maximum	< 0.011						< 0.011					
Benzoic Acid (mg/L) Daily Maximum	< 0.023						< 0.021					
p-Cresol (mg/L) Daily Maximum	< 0.011						< 0.011					
TOC (mg/L) Daily Maximum	10.2						7.1					

DMR Data for Outfall 004 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
pH (S.U.) Daily Maximum	6.9						7.0					
BOD5 (mg/L) Daily Maximum	4						5					
COD (mg/L) Daily Maximum	22						21					
TSS (mg/L) Daily Maximum	3			20			12					
Total Dissolved Solids (mg/L) Daily Maximum	58						30					
Ammonia (mg/L) Daily Maximum	< 0.1						< 0.10					
Total Aluminum (mg/L) Daily Maximum	0.4						0.6					
Total Arsenic (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Barium (mg/L) Daily Maximum	0.06						0.01					
Total Cadmium (mg/L) Daily Maximum	< 0.002						< 0.002					
Total Chromium (mg/L) Daily Maximum	< 0.01						< 0.01					

Total Cyanide (mg/L) Daily Maximum	< 0.02						< 0.020					
Total Iron (mg/L) Daily Maximum	1.14						0.58					
Total Lead (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Manganese (mg/L) Daily Maximum	0.24						0.04					
Dissolved Magnesium (mg/L) Daily Maximum	3.7						0.6					
Total Magnesium (mg/L) Daily Maximum	3.7						0.8					
Total Mercury (mg/L) Daily Maximum	< 0.0002						< 0.002					
Total Selenium (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Silver (mg/L) Daily Maximum	< 0.005						< 0.005					
Total Zinc (mg/L) Daily Maximum	< 0.01						0.01					
Phenol (mg/L) Daily Maximum	< 0.011						< 0.010					
a-Terpineol (mg/L) Daily Maximum	< 0.011						< 0.010					
Benzoic Acid (mg/L) Daily Maximum	< 0.022						< 0.021					
p-Cresol (mg/L) Daily Maximum	< 0.011						< 0.010					
TOC (mg/L) Daily Maximum	7						10.5					

DMR Data for Outfall 005 (from July 1, 2019 to June 30, 2020)

Parameter	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19
pH (S.U.) Daily Maximum	7.0						7.0					
BOD5 (mg/L) Daily Maximum	< 2						3					
COD (mg/L) Daily Maximum	11						< 10					

TSS (mg/L) Daily Maximum	13			7			2					
Total Dissolved Solids (mg/L) Daily Maximum	240						308					
Ammonia (mg/L) Daily Maximum	< 0.1						< 0.10					
Total Aluminum (mg/L) Daily Maximum	0.3						< 0.1					
Total Arsenic (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Barium (mg/L) Daily Maximum	0.13						0.10					
Total Cadmium (mg/L) Daily Maximum	< 0.002						< 0.002					
Total Chromium (mg/L) Daily Maximum	< 0.01						< 0.01					
Total Cyanide (mg/L) Daily Maximum	< 0.02						< 0.020					
Total Iron (mg/L) Daily Maximum	0.72						0.08					
Total Lead (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Manganese (mg/L) Daily Maximum	0.28						0.02					
Dissolved Magnesium (mg/L) Daily Maximum	22.2						25.2					
Total Magnesium (mg/L) Daily Maximum	22.4						25.0					
Total Mercury (mg/L) Daily Maximum	< 0.0002						< 0.0002					
Total Selenium (mg/L) Daily Maximum	< 0.02						< 0.02					
Total Silver (mg/L) Daily Maximum	< 0.005						< 0.005					
Total Zinc (mg/L) Daily Maximum	0.02						< 0.01					
Phenol (mg/L) Daily Maximum	< 0.011						< 0.010					

a-Terpineol (mg/L) Daily Maximum	< 0.011						< 0.010					
Benzoic Acid (mg/L) Daily Maximum	< 0.022						< 0.020					
p-Cresol (mg/L) Daily Maximum	< 0.011						< 0.010					
TOC (mg/L) Daily Maximum	2.7						3.8					

Tools and References Used to Develop Permit	
☒	Q7-10 Analysis and Stream Data (see Appendix **A**)
☒	WQM 7.0 Model Input/Output (see Appendix D)
☒	Toxics Screening Analysis v2.4 (see Appendix B)
☒	PENTOXSD v2.0d Model Input/Output (see Appendix C)
☒	Facility Map and Schematic (see Appendix **E**)
☐	TRC Evaluation Spreadsheet (see Appendix)
☐	Lake Model Output (see Appendix)
☐	WETT Spreadsheet (see Appendix)
☒	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.
☐	Other: