



OES

Osman Environmental Solutions, LLC

**Electronic
DEP
COPY**

Panther Creek Power Operating, LLC

AIR QUALITY PLAN APPROVAL APPLICATION

for

**Combustion of Tire-Derived Fuel (TDF) as a
Supplemental Fuel**

in

Two Existing, Permitted

Circulating Fluidized Bed Combustors

Located in

Nesquehoning, PA

For Submittal To

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

AIR QUALITY

NORTHEAST REGIONAL OFFICE

WILKES-BARRE, PA

June 2023

Prepared By

OES OSMAN ENVIRONMENTAL SOLUTIONS, LLC
Harrisburg, Pennsylvania

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1.0 Introduction

1.1 General

This application seeks DEP approval to allow the two existing Panther Creek Power Operating, LLC (Panther Creek) circulating fluidized bed (CFB) combustors (Pyropower Unit #1, Source 031 and Pyropower Unit #2, Source 032), which are both currently permitted to combust culm and No. 2 fuel oil, to also combust tire-derived fuel (TDF) as a supplemental fuel up to 15% by weight on a monthly basis. The TDF will be chipped and processed, prior to delivery to Panther Creek, by other non-affiliated parties to meet the definition of a fuel under EPA's Non-Hazardous Secondary Materials Rule (NHSM), as further explained in Section 4.8. While a change in fuel can trigger Prevention of Significant Deterioration (PSD) applicability, the facility operates under a Plantwide Applicability Limit (PAL) permit (13-00003A, issued May 25, 2023) and since the PAL limits will not be exceeded by this modification, PSD is not applicable. Additionally, Best Available Technology (BAT) is not an applicable requirement since this is a modification of an existing source under a PAL permit. (See 25 Pa Code § 127.218.(g)(10)). This application triggers no new regulatory requirements.

1.2 Application Organization

There are four sections to the narrative portion of this permit application. These sections consist of the following: 1.0 Introduction, 2.0 Project Description, 3.0 Baseline Air Emissions, and 4.0 PAL Emission Limits. 1.0 describes the proposed project in general terms. Section 2.0 contains a more detailed description of the project for which the plan approval application is being submitted. Section 3.0 discusses the existing PAL limits and confirms continuing compliance with those limits with this issued Plan Approval. Section 4.0 discusses the regulatory implications of the project. Finally, the appendices of this application contain the actual application forms, a General Information Form, a compliance review form, and proof of municipal notice.

2.0 Project Description

The Panther Creek Energy Facility is an electrical generation facility located in the Borough of Nesquehoning in Carbon County, Pennsylvania. The facility consists of two existing, permitted circulating, fluidized bed (CFB) combustors, each having a rated Heat Input of 600 MMBTU/hr. The facility is permitted, under its existing PAL permit, to burn only coal refuse (anthracite culm) and No. 2 fuel oil as a supplemental fuel used for periods of startup, shutdown and load stabilization. This application seeks approval to combust chipped, tired-derived fuel (TDF) as a supplemental fuel, up to 15% by weight on a monthly basis.

TDF has long been recognized as a valuable fuel in well-controlled power plants, as well as cement plants. In a 1991 report, EPA concluded “Based on the experience and the emissions data from power plants burning tire or TDF, the use of tires and TDF as supplemental fuel is viable. In many cases, the quality of the emissions actually improves with increased use of tires or TDF as supplemental fuel.”¹

Additionally, DEP has permitted the combustion of tires and/or TDF as a supplemental fuel at several facilities in Pennsylvania, including Northampton Generating, Hercules Cement, Lafarge, Lehigh Cement, ESSROC, and Viking Energy.

¹ Environmental Protection Agency. (1991). *Burning Tires for Fuel and Tire Pyrolysis: Air implications*. (EPA 450/3-91-024).

3.0 PAL Emission Limits

The Panther Creek facility operates under PAL permit No. 13-00003A. That permit establishes the following plantwide-applicability limits.

Table 3-1
Plantwide Applicability Limits (Tons per Rolling 12-Months)
Panther Creek Facility

Pollutant	Running 12-month PAL Limit (Tons)
PM _f	113.81
PM ₁₀	86.12
PM _{2.5}	35.55
SO ₂	603.65
NO _x	586.85
CO	381.05
Fluorides (not including HF)	3.0
H ₂ SO ₄	15.15
Pb	0.03
CO ₂ (e)	1,116,217.64

The facility will continue to track all emissions and operate with TDF under the above-listed PAL limits.

4.0 Regulatory Review

4.1 *Non-attainment Area Review*

The area in which this source is located is in attainment of all NAAQS. However, because it is in the Northeast Ozone Transport Region it is considered a moderate non-attainment area for ozone. Consequently, the application is potentially subject to Non-Attainment New Source Review (NNSR) for NO_x and VOCs, only.

4.2 *Major/Minor Source Review*

The facility is a major source for SO₂, CO, and NO_x, based on existing federally enforceable permit limits. The facility has significant emissions of PM, PM₁₀, and PM_{2.5}, but minor emissions of VOCs, lead, fluorides, and H₂SO₄.

4.3 *New Source Performance Standards (NSPS)*

4.3.1 *40 CFR Part 60 Subpart Da - Standards of Performance for Electric Utility Steam Generating Units*

The existing boilers are subject to Subpart Da. No modifications to the boiler are required to combust the TDF, and no NSPS pollutant will increase with the TDF fuel, so there are no Subpart Da implications to the use of this alternative fuel.

4.3.2 *40 CFR Part 60 Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units*

The Panther Creek boilers are not subject to this rule since it only applies to EGUs that commenced construction, reconstruction, or modification after June 2014. And as described above, no modifications to the boiler are required and no NSPS pollutant emissions will increase with the use of TDF as an alternative fuel.

4.4 *New Source Review*

The permit application must consider NSR (non-attainment) impacts. As discussed above, the facility is major for NO_x and minor for VOCs. The applicant proposes restricting emissions to the PAL permit limits to ensure that NSR thresholds are not exceeded.

4.5 Prevention of Significant Deterioration

The facility is a major PSD source, but the applicant proposes compliance with PAL limits to remain below PSD major modification applicability thresholds

4.6 Best Available Technology (BAT) Analysis

No new sources are proposed for this application. BAT is not applicable for modifications of existing sources under a PAL permit.

4.7 Maximum Available Control Technology Standards

4.7.1 40 CFR Part 63 Subpart UUUUU - National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units

The facility is subject to this rule but the current application has no bearing on applicability or compliance.

4.8 Non-Hazardous Secondary Materials (NHSM)

In March 2011, EPA finalized regulations that establish which materials are fuels and which are wastes when used in a combustion process. This is an important rule since waste burning boilers are subject to Clean Air Act Section 129 incinerator rules and fuel-burning boilers are subject to boiler regulations. These regulations are codified at 40 CFR Part 421. EPA has determined that scrap tires that are not discarded and are managed under the oversight of established tire collection programs are not solid wastes when used as fuel in a combustion unit (40 CFR §241.4(a)(1)).

Additionally, in the preamble to the final rule, EPA stated that other NHSM materials may be extracted from wastes to produce fuel commodities, and gave several examples, one of which was scrap tires. EPA asserts that these processed scrap tires meet legitimacy criteria.² And EPA further states that in the case of waste tires being processed into fuel, waste tires that have been converted to TDF (shredded/chipped, sized, sorted, and with a significant portion of the metal belts or

² Non Hazardous Secondary Materials, 76, Fed. Reg. 15492 (Mar 21, 2011) (to be codified at 40 CFR §241)

wire removed, as appropriate for the unit) meet the processing threshold to allow the TDF to be considered a fuel.³

Consequently, all TDF combusted at Panther Creek will be a fuel and not a waste under EPA regulations, either because the tires come from managed tire disposal programs or alternatively because they are processed into a legitimate fuel.

³ Ibid., 15499.

Panther Creek Power Operating, LLC

Appendix A - General Information Form



GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This form is used by the Department of Environmental Protection (DEP) to inform our programs regarding what other DEP permits or authorizations may be needed for the proposed project or activity. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the DEP.

<p style="text-align: center;">Related ID#s (If Known)</p> <p>Client ID# <u>43625</u> APS ID# _____</p> <p>Site ID# <u>484644</u> Auth ID# _____</p> <p>Facility ID# <u>475620</u></p>	<p style="text-align: center;">DEP USE ONLY</p> <p style="text-align: center;">Date Received & General Notes</p>
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CLIENT INFORMATION

DEP Client ID# 43625	Client Type / Code LLC	Dun & Bradstreet ID#	
Legal Organization Name or Registered Fictitious Name Panther Creek Power Operating, LLC		Employer ID# (EIN) 45-5062056	Is the EIN a SSN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> NO
State of Incorporation or Registration of Fictitious Name Delaware	<input type="checkbox"/> Corporation <input checked="" type="checkbox"/> LLC <input type="checkbox"/> Partnership <input type="checkbox"/> LLP <input type="checkbox"/> LP <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Association/Organization <input type="checkbox"/> Estate/Trust <input type="checkbox"/> Other		
Individual Last Name	First Name	MI	Suffix
Additional Individual Last Name	First Name	MI	Suffix
Mailing Address Line 1 4 Denison Road		Mailing Address Line 2	
Address Last Line – City Nesquehoning	State PA	ZIP+4 182402242	Country USA
Client Contact Last Name Cochran	First Name Matthew	MI J	Suffix
Client Contact Title Asset Manager	Phone (570) 645-8731	Ext	Cell Phone
Email Address matt.cochran@strongholddigitalmining.com		FAX	

SITE INFORMATION

DEP Site ID# 484644	Site Name Panther Creek Power				
EPA ID# 110030471610	Estimated Number of Employees to be Present at Site 49				
Description of Site Electrical Generating Plant					
Tax Parcel ID(s): 122-44-A9					
County Name(s) Carbon	Municipality(ies) Nesquehoning	City <input type="checkbox"/>	Boro <input checked="" type="checkbox"/>	Twp <input type="checkbox"/>	State
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site Location Line 1 4 Dennison Raod		Site Location Line 2			
Site Location Last Line – City Nesquehoning	State PA	ZIP+4 182402242			
Detailed Written Directions to Site 81 S to PA-309 S (X 138). PA 309-S to PA-54 E to Dennison Road to Plant.					

Site Contact Last Name Heistand	First Name Cliff	MI	Suffix
Site Contact Title Environmental Manager		Site Contact Firm Panther Creek Energy	
Mailing Address Line 1 4 Dennision Road		Mailing Address Line 2	
Mailing Address Last Line – City Nesquehoning		State PA	ZIP+4 18240
Phone 570.645.8731	Ext	FAX	Email Address cliffheistand@panthercreekenergy.com
NAICS Codes (Two- & Three-Digit Codes – List All That Apply) 221		6-Digit Code (Optional) 221112	
Client to Site Relationship OWN			

FACILITY INFORMATION

Modification of Existing Facility	Yes	No
1. Will this project modify an existing facility, system, or activity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Will this project involve an addition to an existing facility, system, or activity? <i>If "Yes", check all relevant facility types and provide DEP facility identification numbers below.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Facility Type	DEP Fac ID#	Facility Type	DEP Fac ID#
<input checked="" type="checkbox"/> Air Emission Plant	475620	<input type="checkbox"/> Industrial Minerals Mining Operation	
<input type="checkbox"/> Beneficial Use (water)		<input type="checkbox"/> Laboratory Location	
<input type="checkbox"/> Blasting Operation		<input checked="" type="checkbox"/> Land Recycling Cleanup Location	585260
<input type="checkbox"/> Captive Hazardous Waste Operation		<input checked="" type="checkbox"/> Mine Drainage Treatment / Land Recycling Project Location	475617
<input checked="" type="checkbox"/> Coal Ash Beneficial Use Operation	475617	<input type="checkbox"/> Municipal Waste Operation	
<input checked="" type="checkbox"/> Coal Mining Operation	475617	<input type="checkbox"/> Oil & Gas Encroachment Location	
<input type="checkbox"/> Coal Pillar Location		<input type="checkbox"/> Oil & Gas Location	
<input type="checkbox"/> Commercial Hazardous Waste Operation		<input type="checkbox"/> Oil & Gas Water Poll Control Facility	
<input type="checkbox"/> Dam Location		<input type="checkbox"/> Public Water Supply System	
<input type="checkbox"/> Deep Mine Safety Operation -Anthracite		<input type="checkbox"/> Radiation Facility	
<input type="checkbox"/> Deep Mine Safety Operation -Bituminous		<input type="checkbox"/> Residual Waste Operation	
<input type="checkbox"/> Deep Mine Safety Operation -Ind Minerals		<input type="checkbox"/> Storage Tank Location	
<input type="checkbox"/> Encroachment Location (water, wetland)		<input checked="" type="checkbox"/> Water Pollution Control Facility	475617
<input type="checkbox"/> Erosion & Sediment Control Facility		<input type="checkbox"/> Water Resource	
<input type="checkbox"/> Explosive Storage Location		<input type="checkbox"/> Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
AIRST	40	51	21	75	52	40
Horizontal Accuracy Measure	Feet	10	--or--	Meters		
Horizontal Reference Datum Code	<input type="checkbox"/> North American Datum of 1927 <input type="checkbox"/> North American Datum of 1983 <input checked="" type="checkbox"/> World Geodetic System of 1984					
Horizontal Collection Method Code	ITPSA					
Reference Point Code	AIRST					
Altitude	Feet	1060	--or--	Meters		
Altitude Datum Name	<input type="checkbox"/> The National Geodetic Vertical Datum of 1929 <input checked="" type="checkbox"/> The North American Vertical Datum of 1988 (NAVD88)					
Altitude (Vertical) Location Datum Collection Method Code	TOPO					
Geometric Type Code	POINT					
Data Collection Date	09/13/2012					
Source Map Scale Number	Inch(es)		=	Feet		
	--or--		=	Centimeter(s)		Meters

PROJECT INFORMATION

Project Name
TDF Permit

Project Description
Approval to burn tire-derived fuel in boilers

Project Consultant Last Name	First Name	MI	Suffix
Osman	Fred	P	

Project Consultant Title	Consulting Firm
President	Osman Environmental Solutions, LLC

Mailing Address Line 1	Mailing Address Line 2
4708 Rock Ledge Drive	

Address Last Line – City	State	ZIP+4
Harrisburg	PA	17110

Phone	Ext	FAX	Email Address
717.234.3610			fredosman@osmanenv.com

Time Schedules	Project Milestone (Optional)

1. **Is the project located in or within a 0.5-mile radius of an Environmental Justice community as defined by DEP?** Yes No

To determine if the project is located in or within a 0.5-mile radius of an environmental justice community, please use the online [Environmental Justice Areas Viewer](#).

2. **Have you informed the surrounding community prior to submitting the application to the Department?** Yes No

Method of notification: Municipal Notice

3. **Have you addressed community concerns that were identified?** Yes No N/A

If no, please briefly describe the community concerns that have been expressed and not addressed.

4. **Is your project funded by state or federal grants?** Yes No

Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

Aspect of Project Related to Grant _____
 Grant Source: _____
 Grant Contact Person: _____
 Grant Expiration Date: _____

5. **Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions)** Yes No

Note: If "No" to Question 5, the application is not subject to the Land Use Policy.
 If "Yes" to Question 5, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants should submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1.	Is there an adopted county or multi-county comprehensive plan?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.	Is there a county stormwater management plan?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
3.	Is there an adopted municipal or multi-municipal comprehensive plan?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
4.	Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
<p>Note: If the Applicant answers "No" to either Questions 1, 3 or 4, the provisions of the PA MPC are not applicable and the Applicant does not need to respond to questions 5 and 6 below. If the Applicant answers "Yes" to questions 1, 3 and 4, the Applicant should respond to questions 5 and 6 below.</p>					
5.	Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval? If zoning approval has been received, attach documentation.	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
6.	Have you attached Municipal and County Land Use Letters for the project?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 utilizing the [Project Review Form](#).

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	Is this a coal mining project? If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
1.1	Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.2	Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.3	Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.4	For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.5	Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.6	Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.0	Is this a non-coal (industrial minerals) mining project? If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
2.1	Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.2	Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

2.3	Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.4	For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.5	Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
3.0	Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well? If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
3.1	Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
3.2	Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system? If "Yes", discuss in <i>Project Description</i> .	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
3.3	Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
4.0	Will the project involve a construction activity that results in earth disturbance? If "Yes", specify the total disturbed acreage.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
4.0.1	Total Disturbed Acreage				
4.0.2	Will the project discharge or drain to a special protection water (EV or HQ) or an EV wetland?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
4.0.3	Will the project involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.0	Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility? If "Yes", respond to 5.1-5.7. If "No", skip to Question 6.0.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
5.1	Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.2	Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.3	Floodplain Projects by the Commonwealth, a Political Subdivision of the Commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.4	Is your project an interstate transmission natural gas pipeline?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

5.5	Does your project consist of linear construction activities which result in earth disturbance in two or more DEP regions AND three or more counties?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.6	Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
5.7	Does your project utilize Class V Gravity / Injection Wells as a best management practice for Post Construction Stormwater Management?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
6.0	Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
6.1	Will the project involve discharge of industrial waste stormwater or wastewater from an industrial activity or sewage to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
7.0	Will the project involve the construction and operation of industrial waste treatment facilities?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
8.0	Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations? If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the <i>Project Description</i> , where applicable.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	8.0.1 Estimated Proposed Flow (gal/day)				
9.0	Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
10.0	Is this project for the beneficial use of biosolids for land application within Pennsylvania? If "Yes" indicate how much (i.e. gallons or dry tons per year).	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	10.0.1 Gallons Per Year (residential septage) _____				
	10.0.2 Dry Tons Per Year (biosolids) _____				
11.0	Does the project involve construction, modification or removal of a dam? If "Yes", identify the dam.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	11.0.1 Dam Name				
12.0	Will the project interfere with the flow from, or otherwise impact, a dam? If "Yes", identify the dam.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	12.0.1 Dam Name				
13.0	Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	13.0.1 If "Yes", is the operation subject to the agricultural exemption in 35 P.S. § 4004.1?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	13.0.2 If the answer to 13.0.1 is "No", identify each type of emission followed by the estimated amount of that emission. Enter all types & amounts of emissions; separate each set with semicolons. All emissions will remain under the limits in the PAL permit.				

14.0	Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year? If "Yes", check all proposed sub-facilities.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
14.0.1	Number of Persons Served _____				
14.0.2	Number of Employee/Guests _____				
14.0.3	Number of Connections _____				
14.0.4	Sub-Fac: Distribution System	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.5	Sub-Fac: Water Treatment Plant	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.6	Sub-Fac: Source	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.7	Sub-Fac: Pump Station	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.8	Sub Fac: Transmission Main	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.9	Sub-Fac: Storage Facility	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
15.0	Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
16.0	Is your project to be served by an existing public water supply? If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project.	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
16.0.1	Supplier's Name <u>Borough of Nesquehoning</u>				
16.0.2	Letter of Approval from Supplier is Attached	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
17.0	Will this project be served by on-lot drinking water wells?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
18.0	Will this project involve a new or increased drinking water withdrawal from a river, stream, spring, lake, well or other water bod(ies)? If "Yes", reference Safe Drinking Water Program.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
18.0.1	Source Name _____				
19.0	Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste? If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
19.0.1	Type & Amount _____				
20.0	Will your project involve the removal of coal, minerals, contaminated media, or solid waste as part of any earth disturbance activities?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
21.0	Does your project involve installation of a field constructed underground storage tank? If "Yes", list each Substance & its Capacity. <u>Note:</u> Applicant may need a Storage Tank Site Specific Installation Permit.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
21.0.1	Enter all substances & capacity of each; separate each set with semicolons.				
22.0	Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility? If "Yes", list each Substance & its Capacity. <u>Note:</u> Applicant may need a Storage Tank Site Specific Installation Permit.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
22.0.1	Enter all substances & capacity of each; separate each set with semicolons.				
23.0	Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724? If "Yes", list each Substance & its Capacity. <u>Note:</u> Applicant may need a Storage Tank Site Specific Installation Permit.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
23.0.1	Enter all substances & capacity of each; separate each set with semicolons.				

24.0 Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons? Yes No
If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.

24.0.1 Enter all substances & capacity of each; separate each set with semicolons.

NOTE: If the project includes the installation of a regulated storage tank system, including diesel emergency generator systems, the project may require the use of a Department Certified Tank Handler. For a full list of regulated storage tanks and substances, please go to www.dep.pa.gov search term storage tanks


25.0 Will the intended activity involve the use of a radiation source? Yes No

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

For applicants supplying an EIN number: I am applying for a permit or authorization from the Pennsylvania Department of Environmental Protection (DEP). As part of this application, I will provide DEP with an accurate EIN number for the applicant entity. By filing this application with DEP, I hereby authorize DEP to confirm the accuracy of the EIN number provided with the Pennsylvania Department of Revenue. As applicant, I further consent to the Department of Revenue discussing the same with DEP prior to issuance of the Commonwealth permit or authorization.

Type or Print Name Mathew Cochran


Signature

Asset Manager

Title

06/12/2023

Date

Panther Creek Power Operating, LLC

Appendix B - Plan Approval Application Form



Submit in Triplicate

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY

COMBUSTION UNIT

Application for Plan Approval to Construct, Modify or Reactivate an Air Contamination Source and/or Install an Air Cleaning Device

This application and the General Information Form (GIF) must be included in the submittal

Before completing this form, read the instructions provided with this form.

Section A - Facility Name, Checklist And Certification

Organization Name or Registered Fictitious Name/Facility Name: Panther Creek Power Operating, LLC

DEP Client ID# (If Known): 43625

Type of Review required and Fees:

Source which is not subject to NSPS, NESHAPs, MACT, NSR and PSD: \$ _____
 Source requiring approval under NSPS or NESHAPS or both:..... \$\$\$7,500
 Source requiring approval under NSR:..... \$ _____
 Source requiring the establishment of a MACT limitation:..... \$ _____
 Source requiring approval under PSD: \$ _____

Applicant's Checklist

Check the following list to make sure that all the required documents are included.

General Information Form (GIF)

Combustion Unit Plan Approval Application

Compliance Review Form or provide reference of most recently submitted compliance review form for facilities submitting on a periodic basis: _____

Proof of County and Municipal Notifications

Permit Fees

Addendum A: Source Applicable Requirements (only applicable to existing Title V facility)

Certification of Truth, Accuracy and Completeness by a Responsible Official

I, Matthew J. Cochran, certify under penalty of law in 18 Pa. C. S. A. §4904, and 35 P.S. §4009(b) (2) that based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate and complete.

(Signature):

Date: 06/12/2023

Name (Print): Matthew J. Cochran

Title: Asset Manager

OFFICIAL USE ONLY

Application No. _____ Unit ID _____ Site ID _____

DEP Client ID #: _____ APS. ID _____ AUTH. ID _____

Date Received _____ Date Assigned _____ Reviewed By _____

Date of 1st Technical Deficiency _____ Date of 2nd Technical Deficiency _____

Comments: _____

Section B - Combustion Unit Information

1. Combustion Units: Coal Oil Natural Gas Other: Tire Derived Fuel (TDF)

Description: Two existing and permitted CFBs seeking approval to burn TDF

Manufacturer PyroPower	Model No.	Number of units 2	
Maximum heat input (Btu/hr)	Rated heat input (Btu/hr) 600 MMBTU/hr, each	Typical heat input (Btu/hr)	Furnace Volume
Grate Area (if applicable) N/A		Method of firing	

Indicate how combustion air is supplied to boiler
ID Fan is used to suspend fuel in boilers

Indicate the Steam Usage: Steam is used to operate turbine and generate electricity

Mark and describe soot Cleaning Method:

- i. Air Blown
 - ii. Steam Blown
 - iii. Brushed and Vacuumed
 - iv. Other _____
 - v. Frequency of Cleaning 6 times per day
- Air Blown

Maximum Operating schedule

Hours/Day 24	Days/Week 7	Days/Year 365	Hours/Year 8760
-----------------	----------------	------------------	--------------------

Operational restrictions taken or requested, if any (e.g., bottlenecks or voluntary restrictions to limit potential to emit)

Capacity (specify units)

Per hour	Per day	Per week	Per year
----------	---------	----------	----------

Typical Operating schedule

Hours/Day 24	Days/Week 7	Days/Year 365	Hours/Year 8760
-----------------	----------------	------------------	--------------------

Seasonal variations (Months): If variations exist, describe them.

Operating using primary fuel: _____ From _____ to _____
 Operating using secondary fuel: _____ Form _____ to _____
 Non-operating: From _____ to _____

2. Specify the primary, secondary and startup fuel. Furnish the details in item 3.
Primary fuel is anthracite culm. Startup fuel is No. 2 oil. This application seeks approval for TDF as a supplemental fuel.

Section B - Combustion Unit Information (Continued)

3. Fuel

Type	Quantity Hourly	Annually	Sulfur	% Ash (Weight)	BTU Content
Oil Number 2	1440 GPH @ 60°F	110 X 10 ³ Gal	0.04% by wt	0.001	19450Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10 ³ Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Oil Number	GPH @ 60°F	X 10 ³ Gal	% by wt		Btu/Gal. & Lbs./Gal. @ 60 °F
Natural Gas	SCFH	X 10 ⁶ Gal	gr/100 SCF		Btu/SCF
Gas (other)	SCFH	X 10 ⁶ Gal	gr/100 SCF		Btu/SCF
Coal Culm		490,600	0.41%	47%	5200-6000 btu
Other* TDF		78,000 Tons	2%	5%	15,000 BTU/lb

* Note: Describe and furnish information separately for other fuels in Addendum B.

4. Burner

Manufacturer	Model Number	Type of Atomization (Steam, air, press, mech., rotary cup)	
Number of Burners	Maximum fuel firing rate (all burners)		Normal fuel firing rate
If oil, temperature and viscosity.			
Maximum theoretical air requirement			
Percent excess air 100% rating			
Turndown ratio			
Combustion modulation control (on/off, low-high fire, full automatic, manual). Describe.			
Main burner flame ignition method (electric spark, auto gas pilot, hand-held torch, other). Describe.			

5. Nitrogen Oxides (NO_x) control Options

Mark and describe the NO_x control options adopted

- | | | |
|--|---------------------------------|--------------|
| Low excess air (LEA) | Flue gas recirculation | Other. _____ |
| Over fire air (OFA) | Burner out of service | |
| Low-NO _x burner | Reburning | |
| Low NO _x burners with over fire air | Flue gas treatment (SCR / SNCR) | |

Section B - Combustion Unit Information (Continued)

6. Miscellaneous Information

Describe fly ash reinjection operation
N/A

Describe, in detail, the equipment provided to monitor and to record the source(s) operating conditions, which may affect emissions of air contaminants. Show that they are reasonable and adequate.

PCEF has a certified CEMS unit for each boiler. The CEMS equipment consists of 2 MC3 Multi-Component Analyzers, ESC Datalogger / system controllers and a Data Acquisition System. This is a PArt 75 certified system.

Describe each proposed modification to an existing source.

The only modification being requested is to allow combustion of TDF as a supplemental fuel.

Describe how emissions will be minimized especially during start up, shut down, combustion upsets and/or disruptions. Provide emission estimates for start up, shut down and upset conditions. Provide duration of start up and shut down.

Describe in detail with a schematic diagram of the control options adopted for SO₂ (if applicable).

Anticipated milestones:

Expected commencement date of construction/reconstruction: Upon DEP approval
 Expected completion date of construction/reconstruction: _____
 Anticipated date(s) of start-up: _____

Section C - Air Cleaning Device

1. Precontrol Emissions*

Emission Rate

Pollutant	Maximum Emission Rate			Calculation/ Estimation Method	
	Specify Units	Pounds/Hour	Hours/Year		Tons/Year
PM	Both Boilers	1,962	8760	8,592	Fire
PM ₁₀	Both Boilers	1,488	8760	6,519	Fire
SO _x	Both Boilers	335	8760	1,466	Ap-42 1.2
CO	Both Boilers	69	8760	303	Ap-42 1.2
NO _x	Both Boilers	208	8760	910	Ap-42 1.2
VOC	Both Boilers	6	8760	25	Fire
Others: (e.g., HAPs)	----	-----	-----		-----

* These emissions must be calculated based on the requested operating schedule and/or process rate, e.g., operating schedule for maximum limits or restricted hours of operation and/or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Gas Conditioning

Water quenching YES NO Water injection rate _____ GPM

Radiation and convection cooling YES NO Air dilution YES NO
If YES, _____ CFM

Forced draft YES NO Water cooled duct work YES NO

Other _____

Inlet volume _____ ACFM @ _____ °F
Outlet volume _____ ACFM @ _____ °F _____ % Moisture

Describe the system in detail.

Section C - Air Cleaning Device (Continued)

4. Fabric Collector

Equipment Specifications

Manufacturer Brandt	Model No.	<input checked="" type="checkbox"/> Pressurized Design <input type="checkbox"/> Suction Design
Number of Compartments 10	Number of Filters Per Compartment 240	Is Baghouse Insulated? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Can each compartment be isolated for repairs and/or filter replacement?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are temperature controls provided? (Describe in detail)		<input type="checkbox"/> Yes <input type="checkbox"/> No

Dew point at maximum moisture _____ °F Design inlet volume 150,000 _____ SCFM

Type of Fabric

Material <u>Nomex</u>	<input type="checkbox"/> Felted	<input type="checkbox"/> Membrane
Weight _____ oz/sq.yd	<input type="checkbox"/> Woven	<input type="checkbox"/> Others: List: _____
Thickness _____ in	<input type="checkbox"/> Felted-Woven	

Fabric permeability (clean) @ 1/2" water-Δ P _____ CFM/sq.ft.

Filter dimensions 6.125" _____ Diameter/Width 16' Long _____

Effective area per filter 24.42 _____ Maximum operating temperature (°F) 400 _____

Effective air to cloth ratio Minimum 3.2:1 Maximum 4.0:1

Drawing of Fabric Filter

A sketch of the fabric filter showing all access doors, catwalks, ladders and exhaust ductwork, location of each pressure and temperature indicator should be attached.

Operation and Cleaning

Volume of gases handled <u>200,000</u> ACFM <u>350</u> °F	Pressure drop across collector (in. of water). 6-8 Describe the equipment to be used to monitor the pressure drop. Delta P guage
--	---

Type of filter cleaning

<input type="checkbox"/> Manual Cleaning	<input type="checkbox"/> Bag Collapse	<input checked="" type="checkbox"/> Reverse Air Jets
<input type="checkbox"/> Mechanical Shakers	<input type="checkbox"/> Sonic Cleaning	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Pneumatic Shakers	<input type="checkbox"/> Reverse Air Flow	

If compressed air is required for collector operation, describe the equipment with the compressor to provide dry air free from oil.

Cleaning Initiated By

<input type="checkbox"/> Timer	Frequency if timer actuated _____
<input type="checkbox"/> Expected pressure drop range _____ in. of water	<input type="checkbox"/> Other Specify _____

Does air cleaning device employ hopper heaters, hopper vibrators or hopper level detectors? If yes, describe.
No

Describe the warning/alarm system that protects against operation when the unit is not meeting design requirements.

Emissions Data

Pollutant	Inlet	Outlet	Removal Efficiency (%)
PM	1,962 lb/hr, 2 boilers	16.44 lb/hr, 2 boilers	99.2%
PM-10	1,488 lb/hr, 2 boilers	13.54 lb/hr, 2 boilers	99.1%

Section C - Air Cleaning Device (Continued)

8. SELECTIVE CATALYTIC REDUCTION (SCR)
 SELECTIVE NON-CATALYTIC REDUCTION (SNCR)
 NON-SELECTIVE CATALYTIC REDUCTION (NSCR)

Equipment specifications

Manufacturer Ransome	Type	Model No
-------------------------	------	----------

Design inlet volume (SCFM) 150,000	Design operating temperature (°F) 1500
---------------------------------------	---

Is the system equipped with process controls for proper mixing/control of the reducing agent in gas stream? If yes, give details.

Control valves regulate ammonia flow based on NO_x in stack

Attach efficiency and other pertinent information (e.g., Ammonia, urea slip).

Operating parameters

Volume of gases handled (ACFM) 500,000 @ 1500 (°F)

Operating temperature range for the SCR/SNCR/NSCR system (°F)	From 1400	To 2000
---	--------------	------------

Reducing agent used, if any. Ammonia	Oxidation catalyst used, if any. None
---	--

State expected range of usage rate and concentration.
0 to 24 gallon/hr

Service life of catalyst	Ammonia slip (ppm)
--------------------------	--------------------

Describe fully with a sketch giving locations of equipment, controls system, important parameters and method of operation.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.
High pressure trip; high temperature trip; low pressure warning; tank pressure relief valve

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)
NO _x	910 TPY, 2 boilers	635.1 TPY, 2 boilers	30%

Section C - Air Cleaning Device (Continued)

9. Other Control Equipment: Limestone Injection

Equipment specifications

Manufacturer Pyropower	Type Dry sorbent injection	Model No
---------------------------	-------------------------------	----------

Design inlet volume (SCFM)	Capacity 4,172 lb/hr limestone
----------------------------	-----------------------------------

Describe pH monitoring and pH adjustment, if any.
Injection rate controlled by SO2 CEMs

Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any.
N/A Dry injection

Attach efficiency curve and/ or other efficiency information.

Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.

Operating parameters

Volume of gas handled
_____ @ _____ °F _____ % Moisture

Describe, in detail, important parameters and method of operation.
Powdered limestone is pneumatically injected into the combustion chamber. SO2 is captured through a chemical reaction with the calcium in the limestone.

Describe the warning/alarm system that protects against operation when unit is not meeting design requirements.
Limestone feed is trimmed by the CEMS system based on stack SO2 levels. CEMS data are recorded continuously and maintained for 5 years.

Emissions data

Pollutant	Inlet	Outlet	Removal Efficiency (%)
SO2	1.56 lb/MMBTU	0.156 lb/MMBTU	90%

Section D - Additional Information

Will the construction, modification, etc. of the sources covered by this application increase emissions from other sources at the facility? If so, describe and quantify.

No

If this project is subject to any one of the following, attach a demonstration to show compliance with applicable standards

- a. Prevention of Significant Deterioration permit (PSD), 40 CFR Part 52? YES NO
- b. New Source Review, 25 Pa. Code Chapter 127, Subchapter E? YES NO
- c. New Source Performance Standards, 40 CFR Part 60?
(If Yes, which subpart) Not an NSPS modification YES NO
- d. National Emissions Standards for Hazardous Air Pollutants (NESHAPS), 40 CFR Part 61?
If Yes, which subpart) _____ YES NO
- e. Maximum Achievable Control Technology (MACT), 40 CFR Part 63?
(If Yes, which subpart) UUUUU YES NO

Attach a demonstration showing that the emissions from any new source will be the minimum attainable through the use of best available technology (BAT).

BAT is not applicable to a modification of an existing source under a PAL permit..

Provide emission increases and decreases in allowable (or potential) and actual emissions within the last 5 years for applicable PSD pollutant(s) if the facility is an existing major facility (for PSD purposes)

N/A - Facility is under a PAL permit.

Section E - Compliance Demonstration

Note: Complete this section if the facility is not a Title V facility. Title V facilities must complete Addendum A.

Method of Compliance Type: Check all that apply and complete all appropriate sections below.

- Monitoring
- Testing
- Reporting
- Recordkeeping
- Work Practice Standard

Monitoring:

- a. Monitoring device type (stack test, CEM etc.):
- b. Monitoring device location:
- c. Describe all parameters being monitored along with the frequency and duration of monitoring each parameter:

Testing:

- a. Reference Test Method Citation:
- b. Reference Test Method Description:

Recordkeeping:

Describe the parameters that will be recorded and the recording frequency:

Reporting:

- a. Describe the type of information to be reported and the reporting frequency:
- b. Reporting start date:

Work Practice Standard: Describe each

Section F - Flue and Air Contaminant Emission

1. Estimated Maximum Emissions*

Pollutant	Maximum emission rate			Calculation/ Estimation Method
	specify units	lbs/hr	tons/yr.	
PM	Facility	No limits for facility	113.81	PAL Limit
PM ₁₀	Facility	..	86.12	PAL Limit
SO _x	Facility	..	603.65	PAL Limit
CO	Facility	..	381.05	PAL Limit
NO _x	Facility	..	586.85	PAL Limit
VOC	Facility	..	50	Minor Source Limit
Others: (e.g., HAPs)	-----	-----	-----	-----
Lead	Facility	..	0.03	PAL Limit
Fluorides (not HF)	Facility	..	3.0	PAL Limit
H ₂ SO ₄	Facility	..	15.15	PAI Limit

* These emissions must be calculated based on the requested operating schedule and/or process rate e.g., operating schedule for maximum limits or restricted hours of operation and /or restricted throughput. Describe how the emission values were determined. Attach calculations.

2. Stack and Exhauster

Stack Designation/Number S01

List Source(s) or source ID exhausted to this stack:
031, 032

% of flow exhausted to stack: 100

Stack height above grade (ft.) 350
Grade elevation (ft.) 1060

Stack diameter (ft) or Outlet duct area (sq. ft.)
7.6 ft

Weather Cap
 YES NO

Distance of discharge to nearest property line (ft.). Locate on topographic map.
150

Does stack height meet Good Engineering Practice (GEP)?

If modeling (estimating) of ambient air quality impacts is needed, attach a site plan with buildings and their dimensions and other obstructions. N/A

Location of Stack** Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
	40	51	21	75	52	40

Stack Exhaust

Volume 200,000 ACFM Temperature 350 °F Moisture 6 %

Exhauster (attach fan curves) _____ in. of water _____ HP @ _____ RPM.

** If the datum and collection method information and codes differ from those provided on the General Information Form - Authorization Application, provide the additional required by that form on a separate sheet.

Section G - Attachments

Number and list all attachments submitted with this application below:

Appendix A -- GIF

Appendix C -- Compliance Review From

Appendix D -- Municipal Notification

Panther Creek Power Operating, LLC

Appendix C - Compliance Review Form



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF AIR QUALITY

AIR POLLUTION CONTROL ACT COMPLIANCE REVIEW FORM

Fully and accurately provide the following information, as specified. Attach additional sheets as necessary.

Type of Compliance Review Form Submittal (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Original Filing | Date of Last Compliance Review Form Filing: |
| <input checked="" type="checkbox"/> Amended Filing | <u>05/23/2023</u> |

Type of Submittal

- | | | |
|---|---|---|
| <input type="checkbox"/> New Plan Approval | <input type="checkbox"/> New Operating Permit | <input checked="" type="checkbox"/> Renewal of Operating Permit |
| <input type="checkbox"/> Extension of Plan Approval | <input type="checkbox"/> Change of Ownership | <input type="checkbox"/> Periodic Submission (@ 6 mos) |
| <input type="checkbox"/> Other: _____ | | |

SECTION A. GENERAL APPLICATION INFORMATION

Name of Applicant/Permittee/("applicant")
 (non-corporations-attach documentation of legal name)

Panther Creek Power Operating, LLC

Address 4 Dennison Road
 Nesquehoning, PA 18240

Telephone 570-645-8731 **Taxpayer ID#** 45-5062056

Permit, Plan Approval or Application ID# 13-00003

Identify the form of management under which the applicant conducts its business (check appropriate box)

- | | | |
|--|--|--|
| <input type="checkbox"/> Individual | <input type="checkbox"/> Syndicate | <input type="checkbox"/> Government Agency |
| <input type="checkbox"/> Municipality | <input type="checkbox"/> Municipal Authority | <input type="checkbox"/> Joint Venture |
| <input type="checkbox"/> Proprietorship | <input type="checkbox"/> Fictitious Name | <input type="checkbox"/> Association |
| <input type="checkbox"/> Public Corporation | <input type="checkbox"/> Partnership | <input checked="" type="checkbox"/> Other Type of Business, specify below: |
| <input type="checkbox"/> Private Corporation | <input type="checkbox"/> Limited Partnership | LLC |

Describe below the type(s) of business activities performed.

Electrical Steam Generating Unit

SECTION B. GENERAL INFORMATION REGARDING "APPLICANT"

If applicant is a corporation or a division or other unit of a corporation, provide the names, principal places of business, state of incorporation, and taxpayer ID numbers of all domestic and foreign parent corporations (including the ultimate parent corporation), and all domestic and foreign subsidiary corporations of the ultimate parent corporation with operations in Pennsylvania. Please include all corporate divisions or units, (whether incorporated or unincorporated) and privately held corporations. (A diagram of corporate relationships may be provided to illustrate corporate relationships.) Attach additional sheets as necessary.

Unit Name	Principal Places of Business	State of Incorporation	Taxpayer ID	Relationship to Applicant
Panther Creek Power Operating, LLC	4 Dennison Road, Nesquehoning, PA 18240	DE	45-5062056	Applicant
Liberty Bell Funding	Dennison Road, Nesquehoning, PA 18240	DE	1-5147333	Parent of Panther Creek
OpCO	595 Madison Ave, 28 th Fl, NY, NY 10022	DE	94-3128347	Parent of Liberty Bell
Falcon Power	2151 Lisbon Rd, Kennerdell, PA 16374	DE	90-0426737	Subsidiary of Liberty
Scrubgrass Reclamation Co, LP		DE	61-1992239	Subsidiary of Falcon

SECTION C. SPECIFIC INFORMATION REGARDING APPLICANT AND ITS "RELATED PARTIES"

Pennsylvania Facilities. List the name and location (mailing address, municipality, county), telephone number, and relationship to applicant (parent, subsidiary or general partner) of applicant and all Related Parties' places of business, and facilities in Pennsylvania. Attach additional sheets as necessary.

Unit Name	Street Address	County and Municipality	Telephone No.	Relationship to Applicant
Panther Creek Power Operating	4 Dennison Road, Nesquehoning, PA 18240	Carbon/ Nesquehoning Boro	570-645-8731	Applicant
Scrubgrass Generating Plant	2151 Lisbon Rd. Kennerdell, PA 16374-3305	Venango/ Scrubgrass Twp.	814-385-6661	Related Party

Provide the names and business addresses of all general partners of the applicant and parent and subsidiary corporations, if any.

Name	Business Address
OpCo	595 Madison Ave, 28th Fl, NY, NY 10022

List the names and business address of persons with overall management responsibility for the process being permitted (i.e. plant manager).

Name	Business Address
Matthew J. Cochran	4 Dennison Road, Nesquehoning, PA 18240

Plan Approvals or Operating Permits. List all plan approvals or operating permits issued by the Department or an approved local air pollution control agency under the APCA to the applicant or related parties that are currently in effect or have been in effect at any time 5 years prior to the date on which this form is notarized. This list shall include the plan approval and operating permit numbers, locations, issuance and expiration dates. Attach additional sheets as necessary.

Air Contamination Source	Plan Approval/ Operating Permit#	Location	Issuance Date	Expiration Date
Panther Creek Facility	13-00003	Nesquehoning Borough, Carbon County	Nov. 26, 2003	Nov 30, 2008
Scrubgrass Generating Plant	61-00181	Scrubgrass Twp., Venango Co.	July 9, 2018	June 30, 2023
Panther Creek Facility	13-00003A	Nesquehoning Borough, Carbon County	May 25, 2023	May 24, 2033

Compliance Background. (Note: Copies of specific documents, if applicable, must be made available to the Department upon its request.) List all documented conduct of violations or enforcement actions identified by the Department pursuant to the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. Attach additional sheets as necessary. See the definition of "documented conduct" for further clarification. Unless specifically directed by the Department, deviations which have been previously reported to the Department in writing, relating to monitoring and reporting, need not be reported.

Date	Location	Plan Approval/ Operating Permit#	Nature of Documented Conduct	Type of Department Action	Status: Litigation Existing/Continuing or Corrected/Date	Dollar Amount Penalty
	See Attachment 1					\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$

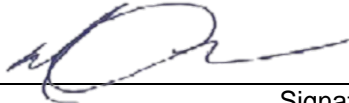
List all incidents of deviations of the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. This list must include items both currently known and unknown to the Department. Attach additional sheets as necessary. See the definition of "deviations" for further clarification.

Date	Location	Plan Approval/ Operating Permit#	Nature of Deviation	Incident Status: Litigation Existing/Continuing Or Corrected/Date
None				

CONTINUING OBLIGATION. Applicant is under a continuing obligation to update this form using the Compliance Review Supplemental Form if any additional deviations occur between the date of submission and Department action on the application.

VERIFICATION STATEMENT

Subject to the penalties of Title 18 Pa.C.S. Section 4904 and 35 P.S. Section 4009(b)(2), I verify under penalty of law that I am authorized to make this verification on behalf of the Applicant/Permittee. I further verify that the information contained in this Compliance Review Form is true and complete to the best of my belief formed after reasonable inquiry. I further verify that reasonable procedures are in place to ensure that "documented conduct" and "deviations" as defined in 25 Pa Code Section 121.1 are identified and included in the information set forth in this Compliance Review Form.



06/12/2023

Signature

Date

Matthew J. Cochran

Name (Print or Type)

Asset Manager

Title

Date	Location	Permit #	Nature of Documented Conduct	Type of Department Action	Status	Dollar Amount Penalty
2/22/2023	Panther Creek	13-00003	CEMs violations	CEMs review	2/22/2023	
2/22/2023	Panther Creek	13-00003	CEMs violations	CEMs review	2/22/2023	
9/23/2022	Panther Creek	13-00003	Late Emission Fee reporting	NOV	9/28/2022	\$9,345.97
1/30/2020	Panther Creek	13-00003	CEMs violations	CEMs review	1/30/2020	
5/9/2019	Panther Creek	13-00003	CEMs violations	CEMs review	5/9/2019	
1/31/2019	Panther Creek	13-00003	CEMs violations	CEMs review	1/31/2019	
10/26/2018	Panther Creek	13-00003	CEMs violations	CEMs review	10/26/2018	
7/9/2018	Panther Creek	13-00003	CEMs violations	CEMs review	7/9/2018	
9/13/2022	Scrubgrass	61-00181	Opacity	CACP	9/13/2022	
2/16/2022	Scrubgrass	61-00181	Data Availability	CACP	2/16/2022	\$1,212
2/16/2022	Scrubgrass	61-00181	Data Availability	CACP	2/16/2022	\$1,063
2/1/2021	Scrubgrass	61-00181	Opacity	CACP	2/1/2021	
2/1/2021	Scrubgrass	61-00181	SO ₂ lb/MMBtu	CACP	2/1/2021	\$1,714
11/2/2020	Scrubgrass	61-00181	NO _x 30-Day	CACP	11/2/2020	\$1,903
7/18/2019	Scrubgrass	61-00181	Opacity	CACP	7/18/2019	

Date	Location	Permit #	Nature of Deviation	Status

Panther Creek Power Operating, LLC

Appendix D - Municipal Notification



OES

Osman Environmental Solutions, LLC

June 9, 2023

The Honorable Wayne E. Nothstein, Chairman
Carbon County Commissioners
P.O Box 129
Jim Thorpe, PA 18229

RE: Panther Creek Operating, LLC -- Plan Approval Application for Combustion of Tire-Derived Fuel

Dear Commissioner Nothstein:

On behalf of Panther Creek Operating, LLC (Panther Creek), Osman Environmental Solutions is informing you that we will be submitting an Air Quality Plan Approval Application to the Pennsylvania Department of Environmental Protection (DEP) for approval to combust tire-derived fuel (TDF) as a supplemental fuel in the Panther Creek facility.

The Panther Creek boilers will continue to combust anthracite culm as the primary fuel. Panther Creek is seeking this permit to combust TDF in order to improve the heat content of the fuel mixture to allow for more efficient combustion. Panther Creek has tested the boilers' ability to handle this fuel under a DEP temporary approval and has conducted emission testing on the combined fuel and provided those results to DEP. Panther Creek is continuing the testing of the best ways to introduce the fuel into the boiler under additional DEP temporary approvals. This application seeks to finalize these approvals and allow continuing utilization of this fuel.

TDF is widely recognized as a valuable fuel when combusted in a well-controlled boiler, such as those existing at Panther Creek. DEP has previously approved the use of TDF at several facilities in PA, including Northampton Generating, Hercules Cement, Lafarge, and Lehigh Cement. EPA also supports the use of TDF in well-controlled boilers.

There are no other changes to the facility associated with the application being submitted. Panther Creek.

If you wish to submit comments on the air permit application or would like to review the application, please contact Mr. Mark Wejkszner, Air Quality Program Manager, Department of Environmental Protection, 2 Public Square, Wilkes-Barre, PA 18701-1915.

The Honorable Wayne E. Nothstein
RE: Panther Creek Operating, LLC
Plan Approval Application for Combustion of Tire-Derived Fuel
June 9, 2023
Page 2 of 2

A 30-day formal comment period commences with your receipt of this letter. This notice is being given to you in compliance with section 1905-A of the Administrative Code of 1929 (71 P.S. § 510-5).

Additionally, please feel free to contact me directly if you would like additional information on this application.

Sincerely,

A handwritten signature in blue ink, appearing to read 'F. Osman', with a long horizontal line extending to the right.

Fred P. Osman P.E., BCEE,
President

cc: Mr. David Bodnar, Director
Carbon County Planning & Development
P.O. Box 210
Jim Thorpe, PA 18229-0210

From: iShip_Services_111@iship.com
Sent: Wednesday, June 14, 2023 8:53 AM
To: fredosman osmanenvironmental.com
Subject: Your parcel has been delivered

Your parcel has been delivered



Your package is waiting

The package sent to THE HONORABLE WAYNE NOTHSTEIN has been delivered.



Your shipping information

Who sent it

FRED OSMAN

(Sender's street address omitted intentionally from this email)

Harrisburg, PA 17110

Who will receive it

THE HONORABLE WAYNE NOTHSTEIN

CARBON COUNTY COMMISSIONERS

(Recipient's street address omitted intentionally from this email)

JIM THORPE, PA 18229-0101 US

Mon 12 Jun 2023 10:53 AM

Shipped from

THE UPS STORE #2204

717-541-5484

Carrier details

USPS Priority Mail

Tracking details

Tracking No.: 9405511206207017303651

Shipment ID: MMJW2P7KQAPSP

Order / Item #: --

Reference #: --

Ship date

Monday, June 12, 2023

Delivery date

Mon 12 Jun 2023 10:53 AM

Tracking your item

Click the link below to view complete tracking information.

For any questions about this shipment, please contact USPS directly at 1-800-ASK-USPS (1-800-275-8777), and have your tracking



OES

Osman Environmental Solutions, LLC

June 9, 2023

Ms. RoniSue Ahner
Secretary/Treasurer
Borough of Nesquehoning
114 West Catawissa Street
Nesquehoning, PA 18240

RE: Panther Creek Operating, LLC -- Plan Approval Application for Combustion of Tire-Derived Fuel

Dear Ms. Ahner:

On behalf of Panther Creek Operating, LLC (Panther Creek), Osman Environmental Solutions is informing you that we will be submitting an Air Quality Plan Approval Application to the Pennsylvania Department of Environmental Protection (DEP). The application is to seek approval to combust tire-derived fuel (TDF) as a supplemental fuel in the Panther Creek facility.

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Ms. RoniSue Ahner
RE: Panther Creek Operating, LLC
Plan Approval Application for Combustion of Tire-Derived Fuel
June 9, 2023
Page 2 of 2

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Fred P. Osman P.E., BCEE,
President

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Sent: Tuesday, June 13, 2023 11:46 AM
To: fredosman osmanenvironmental.com
Subject: Your parcel has been delivered

Your parcel has been delivered



Your package is waiting

The package sent to MS.RONISUE AHNER has been delivered.



Your shipping information

Who sent it

FRED OSMAN

(Sender's street address omitted intentionally from this email)

Harrisburg, PA 17110

Who will receive it

MS.RONISUE AHNER

SECRETARY/TRESURER

(Recipient's street address omitted intentionally from this email)

NESQUEHONING, PA 18240-1536 US

Tue 13 Jun 2023 10:30 AM

Shipped from

THE UPS STORE #2204

717-541-5484

Carrier details

UPS Ground

Tracking details

Tracking No.: 1ZX176330385382706

Shipment ID: MMJW2P765T7RH

Order / Item #: --

Reference #: --

Ship date

Monday, June 12, 2023

Delivery date

Tue 13 Jun 2023 10:30 AM

Tracking your item

Click the link below to view complete tracking information.

For any questions about this shipment, please contact UPS directly at 1-800-PICK-UPS (1-800-742-5877), and have your tracking number