

Comment Response Document

***Commonwealth of Pennsylvania
Department of Environmental Protection***

***PANTHER CREEK POWER OPR LLC
Permit Decision
Permit 13-00003B
Nesquehoning Borough, Carbon County***

***Public Comment Period Dates
November 18, 2023 thru December 28, 2023
Public Hearing held on December 18, 2023***

April 30, 2025

Department of Environmental Protection

www.depweb.state.pa.us

FACILITY DESCRIPTION

Panther Creek Power Operating, LLC (“Panther Creek”) operates an electrical generating unit (“EGU”) in Nesquehoning Borough, Carbon County that consists of two existing permitted circulating fluidized bed (“CFB”) combustors, each having a rated Heat Input of 600 MMBTU/hr. and associated equipment (“Facility”).

On November 18, 2023, the Department of Environmental Protection (“Department”) published in *The Pennsylvania Bulletin* a Notice of Intent to Issue Plan Approval 13-00003B and Notice of Intent to Issue or Amend Title V Operating Permit No. 13-00003 for Panther Creek to allow the two existing circulating fluidized bed (“CFB”) combustors—Pyropower Unit #1, Source 031 and Pyropower Unit #2, Source 032—to also combust tire derived fuel (“TDF”) as a supplemental fuel up to 15% by weight on a monthly basis, as identified in their June 15, 2023 Plan Approval Application and supplemental submissions. There are no physical modifications proposed in Panther Creek’s TDF plan approval application.

In addition to the CFBs, the Facility includes several pieces of ancillary equipment, including the following:

- Diesel Fire Pump
- Ash Loading System
- Ash Silo
- Bottom Ash Conveyor
- Culm Crusher
- Cooling Tower
- FFS1 Fly Ash Filter Separator #1
- FFS2 Fly Ash Filter Separator #2
- Fuel Silo/Reversing Conveyor
- Fuel Truck Dump
- Fuel Truck Unloading
- Lime Bin
- Limestone Bin
- Portable Kerosene Heaters (6)
- Roadways
- Reclaim Hoppers
- Soda Ash Bin
- Daily Use Refuse Storage Pile
- Strategic Reserve Coal Refuse

PUBLIC COMMENTS

In addition to the November 18, 2023, Pennsylvania Bulletin notice, notice of a 30-day public comment period on the proposed TDF plan approval was also published in the Times News on November 18, 20 and 21, 2023. The Department received comments from the public during the public comment period and during the public hearing held on December 18, 2023. Public comments were accepted until December 28, 2023.

This document briefly summarizes the written comments submitted and testimony presented during the public hearing and provides the Department's response to relevant comments received during the comment period. The comments are not intended to be a complete summary of each individual's testimony, but rather to identify the issues or comments raised and provide the context for the Department's responses. The Department's responses are limited by the scope of the permit application process and the Department's authority under the Pennsylvania Air Pollution Control Act ("APCA"), the regulations promulgated thereunder, the Federal Clean Air Act, and the Federal regulations promulgated thereunder. The testimony of each individual was transcribed, is available in its entirety at the Department's Northeast Regional Office and may be accessed by any person wishing to review it by scheduling a file review with the Department at (570) 826-2511.

LIST OF COMMENTERS

List of Individuals providing comments concerning Permit No. 13-00003B

1	Alma Castaldo
2	Barb Reinhardt
3	Chloe Humbert
4	Brian Bonner
5	Linda Christman
6	Joseph and Avril Guardiani
7	Anne Derlunas
8	Beth Hurley
9	Bob Derlunas
10	Daniel Uphold
11	Aquashicola Pohopoco Watershed Conservancy
12	Emma Bast-Penn Future
13	Robert Altenburg-Penn Future
14	Charles McPhedran, Esq.-Earthjustice
15	Zachery M Fabish, Sr Atty., Sierra Club
16	Jacob Smith
17	Steve Welsh
18	Lucy Freck
19	Chris Cella
20	Mary Amodea Welsh
21	Steve Chuckra
22	Gil Waters
23	Fran Yacapsin
24	John McArdle-Nesquehoning Hose Co #1

25	Ben and Ann Davis
26	Cheryl Mercier
27	Kevin Saporta
28	Marcia Evans
29	Diane and Jay O'Neill
30	Donna Kravelk
31	Richelle Dillon
32	Carol Gall
33	Joan Morykin and Victor Stabin
34	Ann Velopoleck
35	Abigail M Jones, Esq-Penn Future
36	David Hunter
37	Mary Anne Clausen
38	Michael J Schirra
39	Bill Kellner
40	Jerry Hoare
41	Roy Christman
42	Midge Heiser
43	Carol Schnaiter
44	Carol Etheridge
45	Mandy DeRoche, Deputy Managing Attorney-Earth Justice
46	Gil Walters
47	Robert Strauss
48	Wayne Fignar
49	Ben Price
50	James Whitehead
51	George Sabel
52	Mike Ewall, Earth Justice
53	Al Jannini
54	Sharon Lopinto
55	Ciro Lopinto
56	Avril Guardiani
57	Nathan Egiss
58	Fred Osman, PE, Osman Environmental Solutions, LLC

Public Comments and Department Responses

Comment 1: The Department arbitrarily and unreasonably denied an extension in the public comment period, while granting itself an extension for a Right-to-Know request that ensured that important documents would not be available to commenter(s). These actions are contrary to the requirements found in DEP's Policy on Public Participation in the Permit Review Process (012-0900-003) which states that "For any public notice issues, department staff will...ensure that sufficient information is provided to assist the public in determining the potential impact of the project."

Response: Under Section 6.1(b)(1) of the APCA, 35 P.S. § 4006.1(b)(1), and Sections 127.44 and 127.521 of the Department's Air Resources Regulations, 25 Pa. Code §§ 127.44, and 127.521, the Department is required to publish notice of receipt of plan approval applications and the opportunity for the public to comment on applications received. Section 127.44(f)(2) provides for a 30-day comment period beginning on the date of publication. Similarly, 25 Pa. Code § 127.521(e) requires at least 30 days for public comment for permit proceedings for Title V facilities. The Department is also required to make available to the public any permit application and permit required by the APCA. 35 P.S. § 4006.1(j).

In accordance with these requirements, the Department published the following notices related to Plan Approval 13-00003B and Title V Operating Permit No. 13-00003 for Panther Creek:

- The Department initially published notice of receipt of the Plan Approval application on July 8, 2023, opening a comment period extending from that date until August 6, 2023. (53 Pa.B. 3602).
- The Department published Notice of Intent to Issue Plan Approval(s) and Notice of Intent to Issue or Amend Operating Permit(s) on November 18, 2023, opening a comment period extending from that date until December 18, 2023. (53 Pa.B. 7204).
- In addition to the Pennsylvania Bulletin publications, notice of a 30-day public comment period was published in the Times News for three days in accordance with 25 Pa. Code §§ 127.44, 127.48 and 127.521 on November 18, 20 and 21, 2023.
- The Department also held a public hearing on December 18, 2023, which was not required under the Department's regulations, in order to provide the public with an additional opportunity to testify and provide comments on the pending application. The period to submit written comments was extended until December 28, 2023. Therefore, the comment period, from the date of the first newspaper notice on November 18, 2023, was open for 40 days.

While the commenter(s) conflate the two, the procedures for the Department to respond to a Right to Know request differ from the public comment procedures under the Air Pollution Control Act and the Department's Air Resources Regulations. Under section 901 of the Right to Know Law, 65 P.S. § 67.901, the Department has just five (5) days to respond to a request. This is a short amount of time to gather and provide information that is responsive to a large request. Under section 902 of the Right to Know Law, 65 P.S. § 67.902, if the Department determines that one or more enumerated conditions related to the request exist, the Department is required to notify the requestor that their request is being reviewed and that an additional 30 days is needed to issue a final response to the request.

In this instance, the commenter(s) requested the following records:

- All documents regarding tire-derived fuel at the Panther Creek plant since January 1, 2016. This request includes, but is not limited to, applications, correspondence, inspections, stack testing, emissions, permits, approvals, denials of applications, enforcement documents, reports, and e-mails.

- All continuous emission monitoring data from the Panther Creek plant since January 1, 2023, for sulfur dioxide and oxides of nitrogen.
- We are also requesting all documents since January 1, 2022, regarding tire-derived fuel at both (a) the Northampton Generating Plant, Northampton, Pennsylvania and (b) the Viking Energy facility referenced in the Panther Creek Power Operating, LLC Air Quality Plan Approval Application, June 2023, Section 2.0, p. 4. This request includes, but is not limited to, applications, correspondence, inspections, stack testing, emissions, permits, approvals, denials of applications, enforcement documents, reports, and e-mails.

Given how voluminous the commenter(s) request for information was, the Department determined that the request fit within the criteria under 65 P.S. § 67.902 and that an extension of time to respond was appropriate. The Department acted reasonably and in accordance with the law in notifying the commenter(s) that an extension of time under 65 P.S. § 67.902 would be needed to provide responsive records.

The Department also provided the commenter(s) with a copy of the plan approval application on July 17, 2023, just seven (7) days after the Department published notice of receipt of the plan approval application, opening an initial public comment period. Therefore, the commenter(s) received notice that the application was pending and received a copy of the application five (5) months before the end of the public comment period. The commenter(s) extensive Right-to-Know request was not received until November 21, 2023.

The Department acted in accordance with the requirements under the Right to Know Law, the Air Pollution Control Act and the Air Resources Regulations in providing requested information to the commenter(s) and in implementing the public comment process. The Department believes that sufficient time and opportunity was provided for the public to provide comments on the application, and the Department is responding to the extensive comments received in this comment response document. Respectfully, the Department does not agree that it acted arbitrarily or unreasonably during the public comment process or in responding to the commenter(s) Right-to-Know request.

Further, the Department received comments and a petition weeks after the deadline for receiving comments had passed. The Department is also responding to those comments in this comment response document even though they were submitted following the close of the comment period.

Comment 2: Panther Creek should not be allowed to burn TDF for the purpose of mining Bitcoin.

Response: Panther Creek currently operates an electric generating facility using recovered anthracite culm/refuse as fuel for their existing two (2) permitted, CFB combustors. While the Facility supplies power to an onsite cryptocurrency operation, it continues to produce power for the electrical grid upon PJM demand. Panther Creek's supply of a portion of its power generation to power servers used for mining cryptocurrency is not a basis for denying the permit application.

Panther Creek submitted a Plan Approval application to the Department to combust TDF as a fuel source which has been reviewed for compliance with applicable requirements, including the requirement to control emissions to the maximum extent consistent with Best Available Technology (“BAT”). This is not the first-co-generation facility to burn TDF as a fuel source and the Department has data and information related to the combustion of TDF in CFBs and their ability to operate in compliance with permit and regulatory requirements. Panther Creek must operate in compliance with its permit conditions and in a manner that is protective of the environment.

Comment 3: The Department should be required to prevent further pollution of the land and water and protect peoples’ right to breathe clean air. (Article I, Section 27 of the Pennsylvania Constitution)

Response: The Department’s issuance of this Plan Approval is consistent with applicable statutory and regulatory requirements and Article I, Section 27. The Department has taken a number of steps during the permit review in an effort to satisfy its Article I, Section 27 obligations and its duties of loyalty, prudence and impartiality in conserving and maintaining public natural resources and protecting the peoples’ right to breath clean air.

To ensure that air quality is protected, the Department included applicable regulatory requirements in the plan approval, including conditions requiring Panther Creek to control the emission of air pollutants from TDF to the maximum extent consistent with best available technology (“BAT”), in accordance with 25 Pa. Code §§ 127.1, 127.411(a)(6) and 127.35(g).

The Department’s Air Quality Program also contacted other Department programs to ensure that Panther Creek has its necessary permits. That internal contact resulted in coordination with the Department’s Waste Management Program regarding the storage of tires at the facility in an effort to protect the public’s natural resources. That coordination resulted in the inclusion of requirements in the permit. (*See* TDF Management Requirements in response to Comment No. 12 below.)

The Department also has previously collected data from another facility that submitted a plan approval application to combust TDF in a CFB, like those at Panther Creek. The Department required that applicant to conduct a TDF test burn consisting of a baseline test (CFB boiler being fired solely by anthracite waste culm) and a TDF test (CFB boiler being fired by anthracite waste culm and TDF). Results from those test burns are included in the following Table 1:

TABLE 1: TDF TESTING RESULTS AT SIMILAR FACILITY

POLLUTANT	<i>BASELINE (NO TDF) LBS./HR.</i>	<i>WITH TDF LBS./HR.</i>
PM	1.8	3.1
PM₁₀	3.8	6.2
SO₂	122.3	108.9

CO	118.6	60.3
NO_x	96.6	90.9
VOC	Non-detect	Non-detect
ARSENIC	< 0.000465	< 0.000412
CADMIUM	0.000457	0.000681
HEX CHROME	0.00321	0.00261
LEAD	0.0241	0.00079
NICKEL	0.00407	0.00295
ZINC	0.0214	0.0334

The results above from the similar facility show that lbs./hr emissions for several pollutants tested were lower when TDF and anthracite culm were fired together than when anthracite culm was fired alone. PM and PM₁₀ emissions increased, but were below permit limits. Metal emissions were also low and below their permit limits.

Emissions in that application were also compared to Prevention of Significant Deterioration (“PSD”) “de-minimus” limits, as illustrated in the following Table 2:

TABLE 2: RESULTS AT SIMILAR FACILITY

POLLUTANT	BASELINE TPY	WITH TDF TPY	NET CHANGE TPY	PSD SIGNIFICANCE LIMIT TPY
PM	7.9	13.6	5.7	25
PM₁₀	16.6	27.2	10.6	15
SO₂	535.7	477.0	-58.7	40
CO	519.5	264.1	-255.4	100
NO_x	423.1	398.1	-25.0	40
VOC	Non-detect	Non-detect	-----	40
LEAD	0.1	0.003	-0.097	0.6

As Table 2 shows, none of the pollutants evaluated exceed their respective PSD “de-minimus” limits when the CFB boiler is being fired with TDF. PM and PM₁₀ showed an increase, yet the net change in tons per year was below the PSD de-minimus limit. Other pollutants decreased.

The test results from the similar facility shown above, in combination with their air dispersion modeling, were used to conduct an inhalation risk assessment for the various pollutants. The Department reviewed the risk assessment and modeling analysis and did not identify any unacceptable inhalation risks arising from the use of TDF in the CFB boiler.

There were also test burns performed at the Panther Creek facility to evaluate emissions from TDF. Information regarding emissions from that testing is discussed further below in response to Comment No. 35.

The Department also reviewed certain local ordinances of Nesquehoning Borough regarding issues raised during the public comment period, including odors, noise and other nuisances, setback

requirements, burning, and truck traffic (*see* responses to Comment Nos. 5, 36 and 37) and included a condition stating that the plan approval does not relieve Panther Creek from complying with other federal, state and local laws.

For additional information, the Department refers the commenter(s) to its responses to Comment Nos. 4, 5, 7, 12, 30 and 35 for additional information.

These are all steps the Department took to protect clean air and to conserve and maintain public natural resources that are consistent with its duties of loyalty, prudence and impartiality under Article I, Section 27.

Comment 4: Concerns about the release of harmful chemicals caused by burning tires (i.e. polycyclic aromatic hydrocarbons (PAHs), benzene, styrene, phenols and butadiene)

Response: EGUs may only combust legitimate fuels in order to be regulated under the Mercury and Air Toxics (“MATs”) rule, which is the U.S. Environmental Protection Agency (“EPA”) rule regulating hazardous air pollutants (“HAPs”) from these sources. EGU’s combusting waste materials, as opposed to legitimate fuels, are subject to federal Clean Air Act Section 129 rules for Commercial and Industrial Solid Waste Incineration (“CISWI”) units. The fuels being combusted, and proposed to be combusted at Panther Creek, (waste coal, tires and distillate oil) are all legitimate fuels as defined by EPA regulations and are thus subject to the MATs rule.

In establishing this rule, the EPA considered the types of fuel combusted, the design of the combustion source, and whether the unit was a new unit or an existing unit. For EGU’s that are fired by coal, the EPA evaluated the HAPs that were likely to be emitted and determined that the pollutants of concern were:

1. Mercury
2. Non-mercury metals
 - Antimony
 - Arsenic
 - Beryllium
 - Cadmium
 - Chromium
 - Cobalt
 - Lead
 - Manganese
 - Nickel
 - Selenium
3. Acid Gas HAP
 - Hydrogen Chloride
4. Organic HAP
 - Formaldehyde
 - Dioxin/furan

Panther Creek has systems in place to ensure compliance with each of the pollutants of concern identified by EPA:

1. Mercury: To demonstrate compliance with the mercury limit, Panther Creek completes a 30- day stack test for mercury emissions each year.
2. Non-Mercury Metals: The EPA allows 3 methods for compliance: (i) compliance with limits on each of the individual HAPS; (ii) compliance with a total limit of all the non-mercury HAPS; or (iii) compliance with a surrogate limit on total filterable particulate emissions. Panther Creek uses the third option (the total filterable particulate). The Facility conducted stack tests every quarter for 3 years in order to demonstrate that it qualifies as a low emitting EGU or “LEE,” which means it has emissions consistently at or below 50% of the EPA limit. As a LEE source for particulate matter, Panther Creek will continue to test every 36 months to verify continuing compliance with the LEE limit.
3. Acid Gases: Panther Creek continuously monitors SO₂ to ensure compliance with this standard.
4. Organic HAPs: EPA requires periodic boiler tune-ups to ensure complete combustion to limit formation and emissions of these HAPs. Panther Creek completes boiler tune-ups as required.

Panther Creek routinely demonstrates compliance with all HAPs of concern under the EPA regulation. These definitions and limits apply so long as Panther Creek burns at least 10% coal, which it does.

The EPA has also put forth guidance on scrap tires specifically in CFBs, like those at Panther Creek. The EPA states in its **Scrap Tires: Handbook on Recycling Applications and Management for the U.S. and Mexico (EPA530-R-10-010, December 2010)**:

Circulating fluidized bed boilers represent one of the newer systems designed to minimize environmental impact from use of solid fossil fuels. High turbulence and uniform heat distribution allow fluidized beds to operate at lower temperatures to minimize NO_x formation. Ammonia injection may also be used for supplemental NO_x reduction. Limestone is commonly used as the circulating bed media, providing efficient SO_x control through integral mixing with combustion gases. Sophisticated baghouses or electrostatic precipitators remove particulates. These systems represent environmentally viable candidates for use of nominal 2.5-centimeter (1-inch) TDF.

The Facility meets all these criteria: (i) It uses CFB technology; (ii) it uses ammonia injection to lower NO_x and limestone injection to control acid gases; and (iii) it uses a sophisticated baghouse to remove particulates. Further, the EPA has not objected to permits issued by the Department to combust TDF at other facilities including LaFarge, Hercules Cement, Lehigh Cement, ESSROC, Viking Energy, or Northampton Generating.

Additionally, the Department has extensively evaluated emissions from TDF combustion in both a cement kiln and a CFB combustor and found in both analyses that there were no unacceptable increases in risk with the combustion of TDF. (See discussion above in response to Comment 3.)

In Summary:

- The EPA MATS rule regulates hazardous air pollutant emissions associated with TDF from these sources.
- EPA has stated that fluidized bed boilers represent one of the newer systems designed to minimize environmental impact from use of solid fuels like TDF.
- The Department has previously evaluated the inhalation risk from TDF being co-fired with other fossil fuels at a facility operating similar CFB boilers to evaluate operational risks and ensure that the environment is protected.
- The use of TDF has been approved by the Department in PA at other facilities.

Comment 5: The Department received comments concerning the potential for malodorous emissions.

Response: Pursuant to 25 Pa. Code § 123.31, “[a] person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.” In addition to this being a Department regulation, the Plan Approval for Panther Creek contains a condition in Section C that mirrors this regulation. The Borough of Nesquehoning also has a zoning ordinance that, under Chapter 27, Section 505 (§ 27-505) contains restrictions regarding odors. It also has a section devoted specifically to “Refuse and Resource Recovery or Co-generation Plants” that requires, in part, the following for facilities like Panther Creek:

B. These facilities shall comply with the most stringent of Federal, State, regional, and County requirements. Documentation demonstrating compliance from the appropriate agencies shall be submitted with the zoning application.

C. Operation and maintenance of these facilities shall also be in conformance with the appropriate Federal, State, regional, and County agency requirements which apply to such facilities.

§ 27-505(10)(B) and (C). The Department believes that these local requirements also require the Facility to comply with the malodor requirements in the Department’s regulations and the Facility’s permit. The company, therefore, is required to comply with restrictions on odorous emissions.

Comment 6: Concern about property values

Response: In reviewing the permit application, the Department does not directly evaluate impacts to local property values. Instead, its decision to issue or deny a plan approval is based largely on all applicable state and federal air quality regulatory requirements and consideration of Article I, Section 27 of the Pennsylvania Constitution. Potential impacts to property values can best be addressed through local land use requirements. The Borough has a zoning ordinance that includes a number of requirements in Chapter 27, Section 505 that are applicable to facilities in the Borough. This includes setback requirements and performance requirements in § 27-505 that address a variety of issues, including nuisance concerns. Local requirements such as this should assist in addressing concerns related to property values.

Comment 7: Concern about the impact to the local health of the residents (e.g. respiratory, cancer, asthma, cardiovascular)

Response: The protection of public health, welfare and the environment are fundamental to permitting under the federal Clean Air Act and the Pennsylvania Air Pollution Control Act. The Title V Operating Permit for the facility incorporates applicable requirements under both of those statutes, as well as the regulations developed under those statutes. This includes requirements related to the National Ambient Air Quality Standards (“NAAQS”).

There are two types of NAAQS for six criteria pollutants (sulfur dioxide [SO₂], particulate matter [PM], nitrogen oxides [NO_x], carbon monoxide [CO], ozone [O₃] and lead [Pb]):

- (1) Primary Standards, which are designed to protect human health, taking into consideration sensitive populations, including children, the elderly and individuals with respiratory ailments; and
- (2) Secondary Standards designed to protect public welfare, including effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, property, and climate, as well as effects on economic values and on personal comfort and well-being.

The permit limitations established through the permitting process and associated conditions incorporated into the Plan Approval, along with the Title V permit, are designed to ensure that the facility will not cause a violation of the NAAQS.

Comment 8: Concern about the economic impact to tourism

Response: The Department was not presented with any specific information or documentation establishing negative impacts to tourism associated with the Plan Approval application. The Department also notes that the plan approval application is not for the construction of a new facility, but rather the addition of a fuel source at an existing facility that has been operating for approximately 32 years, since 1992. It is not clear to the Department how the plan approval would have an economic impact on tourism. The proposed plan approval contains numerous regulatory requirements with which the Panther Creek is required to comply, including the requirement to operate in compliance with BAT for controlling emissions. Any such impact may be better be addressed through local zoning requirements.

Comment 9: The company will not be acting as an Electrical Generating Unit (EGU) while incinerating tires.

Response: This is not consistent with the Department’s understanding of how the Facility will operate. Please see Department’s response to Comment No. 2 above.

Comment 10: The company should be required to install Electrostatic Precipitators (“ESPs”) to control particulate emissions.

Response: The Panther Creek Facility was constructed using BAT for controlling emissions under the Department’s regulations, and Best Available Control Technology (“BACT”) required under the federal PSD program. The plant uses limestone injection to control SO₂ and other acid gases, selective non-catalytic reduction (“SNCR”) to control NO_x, and a fabric filter (“baghouse”), to control particulate emissions. Baghouses are generally more efficient at particulate collection than

ESPs. Baghouses can easily have an efficiency of 99.9% or higher while ESPs are typically 98-99% efficient. Coal plants use baghouses as best available control. Panther Creek also uses a baghouse.

Panther Creek's particulate control has been certified as a Low Emitting Electrical ("LEE") Generating Unit for Filterable Particulate Matter. This required Panther Creek to conduct twelve individual stack tests, one every quarter for three years, and show emissions limits less than 50% of the federal standard in each test. The federal standard is 0.03 lbs./MMBtu. The LEE limit is 50% of that standard or 0.015 lbs./MMBtu. The average of the twelve tests was 0.0063 lbs./MMBtu, 21% of the emission limit, and only 42% of the LEE standard.

The use of the currently installed baghouse(s) to control particulate emissions satisfies the Department's BAT requirement.

Comment 11: Testing and monitoring should be conducted for Polycyclic Aromatic Hydrocarbons ("PAHs").

Response: PAHs are products of incomplete combustion and not expected to be found in high concentrations in a well-controlled boiler, particularly the CFBs operated at Panther Creek, which are the most efficient of the coal burners due to the long residence time of the fuel in the boiler.

Comment 12: Fire danger from tire storage

Response: A plan has been developed and submitted to the Department by Panther Creek to ensure the safe and environmentally responsible storage and handling of TDF at Panther Creek. Requirements related to storage and handling are included in the draft plan approval in Section E, Group 7, condition number 7 titled, "TDF Management Requirements." The language from the condition, which is provided below, was drafted in cooperation with the Department's Waste Management Program. The fuels manager for the Facility is responsible for ensuring the requirements are followed. All personnel that work in the fuel yard are to be made aware of these requirements.

TDF Management Requirements

1. Only shredded, chipped, or crumbed TDF that meets PC fuel specifications will be accepted. Unacceptable shipments will be rejected and not unloaded at the facility. Piles of TDF stored will not be more than 15 feet in height and will not cover a surface area greater than 2,500 square feet. The corridors between these TDF piles will be a minimum of thirty-five (35) feet wide and are maintained as fire breaks on all sides of the storage piles, with no point being more than twenty-five 25 feet from a fire break. All corridors are to be maintained free from obstructions that could limit access in the event of an emergency.
2. PC's outdoor TDF storage areas have catch basins which will prevent the discharge of fire-generated oils and liquids into the surface water and groundwater should a TDF fire occur.
3. TDF will not be accumulated speculatively or stored for more than one (1) year.

4. PC's outdoor TDF storage areas are not in a 100-year floodplain, not within 100 feet of a wetland, not within 300 feet of dwellings not owned by PC, not within 100 feet of a sinkhole or area draining into a sinkhole, not within 100 feet of a perennial stream, not within 50 feet of a property line, not within 300 feet of a water source.

Panther Creek has a TDF storage plan, a pollution prevention contingency ("PPC") plan that is used for all emergencies and spills, and an on-site fire pump in the event of a fire. The PPC plan calls for the notification of and co-operation with local emergency responders, the Carbon County Emergency Management Agency, PEMA, the Department, and the National Response Center. While it is not possible to say that a fire could never happen, Panther Creek has plans in place to minimize the risk and to respond appropriately if needed.

Comment 13: Commenter(s) raised a concern about not being able to ask questions at the public hearing and only allowed 3 minutes to speak.

Response: The Department held a public hearing, as opposed to a public meeting. Public hearings differ from public meetings in that public meetings are question and answer sessions, whereas public hearings are opportunities for members of the public to provide testimony regarding a permit application. Public hearings are provided for under Section 127.48 of the Department's Air Resources Regulations, 25 Pa. Code § 127.48. Section 127.48(a) states:

Prior to any plan approval issuance, the Department may, in its discretion, hold a fact finding conference or hearing at which the petitioner, and any person who has properly filed a protest under § 127.46 (relating to filing protests) may appear and give testimony; provided, however, that in no event will the Department be required to hold such a conference or hearing.

The Department received requests for a public hearing from the public and the purpose was to receive comments on the proposed application. One advantage to a public hearing is that the comments are recorded, enabling the Department to respond to them in a comment response document such as this one.

The time for speaking was limited, as it is with all public hearings, in order to ensure that everyone who wishes to speak is able to. Commenter(s) also had an opportunity to provide written comments to the Department for its consideration during the application review. The acceptance of written comments and oral comments from the public hearing was designed to ensure that the public had sufficient opportunity to comment on the plan approval application.

Comment 14: There was not adequate time to review documents related to the application and there was a lack of responsiveness on the part of the Department.

Response: The Department disagrees that there was not sufficient time to review documents related to the application and that there was a lack of responsiveness. In response to this comment, the Department refers to the commenter(s) to its responses to Comment Nos. 1 and 13 above.

Comment 15: The Department's holding of the Public Hearing close to the holiday suppresses public participation because the public interest is diverted by holiday preparations.

Response: The Plan Approval application was received on June 15, 2023. The Department initially published notice of receipt of the Plan Approval application on July 8, 2023, opening a

comment period extending from that date until August 6, 2023 (53 Pa.B. 3601-3602). Once the Department performed its technical review, a draft permit and a technical review memo were prepared. Notices of Intent to Issue were then published in the Pennsylvania Bulletin on November 18, 2023, and in the Times News on November 18, 20 and 21, 2023. Those notices advertised the acceptance of written comments on the proposed plan approval for 30 days from the date of publication and advertised a public hearing, scheduled for December 18, 2023. 53 Pa.B. 7204.

The notices were published in accordance with the requirements in 25 Pa. Code §§ 127.45 and 127.48. There is also a requirement in 25 Pa. Code § 127.521 related to permit proceedings for Title V facilities that requires the Department to provide notice at least thirty (30) days in advance of a public hearing. The November 18, 2023, notice was thirty (30) days before the December 18, 2023, public hearing it provided the public with at least thirty (30) days to provide written comments. The written comment period was, in fact, extended beyond thirty (30) days until December 28, 2023.

There was no intent on the part of the Department to suppress public participation by scheduling the public hearing on December 18, 2023. The Department believes there was sufficient time to submit comments following the original notice published on July 8, 2023, as well as the notices of intent to issue that were published in the Pennsylvania Bulletin and the Times News in November 2023, and the extension of the public comment period until December 28, 2023. In fact, the Department received and considered comments after December 28, 2023, and responses to those comments are included in this response document.

Comment 16: Concern expressed over emissions of Dioxins/Furans while burning tires

Response: See the Department's response to Comment No. 4 above.

Comment 17: Concern expressed over emissions of metals while burning tires

Response: See the Department's response to Comment No. 4 above.

Comment 18: Concern expressed of the potential for the spontaneous combustion of tires from exposure to sunlight and buildup of methane gas

Response: Although tires can spontaneously combust if they are not managed properly, Panther Creek will not be accepting whole tires. Instead, only shredded, chipped, or crumbed TDF that meets Panther Creek's fuel specifications will be accepted at the facility. In addition, the Department's Air Quality Program consulted with its Waste Management Program to develop conditions for inclusion in the plan approval that are designed to ensure that TDF is managed safely and in an environmentally sound manner. The facility currently has a plan to address fires, as discussed in the Department's response to Comment No. 12 above. Moreover, there are other facilities permitted by the Department to burn TDF that have not experienced the issues that the commenter(s) raises.

Comment 19: What safeguards are in place to prevent the spread of a fire should one start?

Response: See the Department's response to comment Nos. 12 and 18 above.

Comment 20: The company should be required to have an onsite emergency plan.

Response: See the Department's response to Comment No. 12 above.

Comment 21: Panther Creek is in an Environmental Justice ("EJ") area.

Response: The Department has adopted a revised interim final Environmental Justice Policy with an effective date of September 16, 2023 (“2023 Interim Final EJ Policy”). This interim policy revised the former Environmental Justice Public Participation Policy that became effective on April 24, 2004 (“2004 EJ Policy”). Public comments on the 2023 Interim EJ Policy were accepted until November 30, 2023. The 2023 Interim Final EJ Policy applies to permit applications submitted after the effective date of September 16, 2023. Since the Panther Creek plan approval application was submitted prior to that, the 2004 EJ Policy applies. For more information on the Department’s Environmental Justice Policy Revision, see:

<https://www.dep.pa.gov/PublicParticipation/OfficeofEnvironmentalJustice/Pages/Policy-Revision.aspx>

The 2004 policy identifies trigger permits that the Department has determined regulate activities that may lead to significant public concern due to potential impacts on human health and the environment. Other permits that are not identified as trigger permits may still initiate the enhanced public participation procedures under the 2004 policy if the Department determines they warrant special consideration based on factors like community concern, present or anticipated environmental impacts and adverse cumulative impacts. These are referred to as opt-in permits.

In addition to the type of permit application being reviewed, the Department also evaluates the project’s area of concern in determining whether the enhanced public participation policy applies. The area of concern is identified, in part, by looking a “[a]circle defined by a radius of one-half mile from the center of a proposed permit activity or, where an activity is not centralized, an area extending one-half mile beyond the boundary of the proposed activity.”

This radius around the Panther Creek plant does not intersect an EJ area therefore, the Department has determined it is not located within an area of concern.

With that said, both the 2023 Interim Final EJ Policy and the 2004 EJ Policy contain strategies focused on enhancing public participation in the permitting process, including holding public hearings and opportunities for submitting written public comments. For the Panther Creek TDF plan approval application, the Department held a public hearing, which is not required under the Air Resources Regulations, and accepted comments from the public over an extended public comment period. See Responses to Comment Nos. 1, 13 and 14 above. Through this process the public in nearby communities was given an opportunity to comment on the permit application. Those comments have been considered by the Department and are being addressed in this comment response document.

Comment 22: The Department should have the authority to make unannounced inspections.

Response: The Department has the authority to and performs unannounced inspections. Section 4 of the Air Pollution Control Act, 35 P.S. § 4004, sets out the powers and duties of the Department and states, in part:

The Department shall have the power, and its duty shall be to -

- (1) Implement the provisions of the Clean Air Act in the Commonwealth.
- (2) Enter any building, property, premises or place and inspect any air contamination source for the purpose of investigating an actual or a suspected source of air pollution or for the purpose of ascertaining the compliance or non-compliance with this act, any rule or regulation promulgated under this act or any

plan approval, permit or order of the department. In connection with such inspection or investigation, samples of air, air contaminants, fuel, process material or other matter may be taken for analysis, a duplicate of the analytical report shall be furnished promptly to the person who is suspected of causing such air pollution or air contamination.

(3) Have access to, and require the production of, books, papers and records, including, but not limited to, computerized information in a format as the department may reasonably prescribe pertinent to any matter under investigation.

* * *

In addition, the plan approval in Section C contains a condition that states:

The company shall not impose conditions upon or otherwise restrict the Department's access to the sources and/or any associated air cleaning device(s) and shall allow the Department to have access at any time to the sources and associated air cleaning device(s) with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act.

Under provisions such as these, the Department can and does perform unannounced inspections and requests records from companies, like Panther Creek, to evaluate compliance with permit conditions and requirements in the Pennsylvania Air Pollution Control Act and Air Resources Regulations.

Comment 23: What are the long-term health impacts?

Response: See the Department's response to Comments 3 and 4 above. The Department has reviewed risk assessment data from the combustion of TDF at another similar facility, and as stated above:

The test results from the test burns discussed above, in combination with air dispersion modeling, were used to conduct an inhalation risk assessment for the various pollutants. The Department reviewed the risk assessment and modeling analysis and did not identify any unacceptable inhalation risks arising from the use of TDF in the CFB boiler.

Comment 24: Company should be required to install scrubbers to control smoke and fumes.

Response: The Facility is currently equipped with control devices that satisfy BAT and Federal BACT. These controls will ensure compliance with visible emissions limits in 25 Pa. Code § 123.41 and conditions in Panther Creek's operating permit related to visible emissions. In addition, the Department has a regulation for odorous emissions at 25 Pa. Code § 123.31 that prohibits "malodors," as that term is defined in the Department's regulations. Under section 123.31(b), Panther Creek "may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of [Panther Creek]." Nesquehoning Borough also has a local regulation prohibiting the emission of odors beyond lot lines. (See Nesquehoning zoning regulation § 27-505). The

Department believes that thorough this combination of regulatory requirements, concerns related to smoke and fumes from the Facility are addressed.

Comment 25: Comment regarding a lack of access to documents related to the application.

Response: Documents were available from the time of the initial notice by either requesting an informal file review or submitting a RTK request. See the Department's response to Comment No.1 above.

Comment 26: Another public hearing should be held.

Response: Section 127.48 of the Department's regulations, 25 Pa. Code § 127.48, provides:

§ 127.48. Conferences and hearings.

- (a) Prior to any plan approval issuance, the Department may, in its discretion, hold a fact finding conference or hearing at which the petitioner, and any person who has properly filed a protest under § 127.46 (relating to filing protests) may appear and give testimony; provided, however, that in no event will the Department be required to hold such a conference or hearing.

Holding a public hearing is discretionary, and the Department determined that, in addition to receiving written comments from the public regarding the plan approval application, it would hold a public hearing for Panther Creek's plan approval application. That public hearing was held on December 18, 2023. The written comment period was open for approximately 40 days, from initial publication of the Notice of Intent to Issue on November 18, 2023, through December 28, 2023. (53 Pa.B. 7204-7205). The Department also received and is addressing comments received after December 28, 2023. In addition, the Department published notice of receipt of the plan approval application on July 8, 2023, opening a comment period on the application that extended from July 8 until August 6, 2023. (53 Pa.B. 3602). The Department believes there was sufficient time and opportunity for the public to provide comments on the plan approval application and the draft plan approval and that another public hearing is not necessary.

Comment 27: Company performed testing without monitoring for metals and toxic pollutants.

Response: See the Department's response to Comment Nos. 3 and 4 above.

Comment 28: Company should be required to monitor for PAH and air toxins.

Response: See the Department's response to Comment Nos. 3 and 4 above.

Comment 29: Company has had multiple violations (7) in the past.

Response: Plan approval applicants are required to fill out Compliance Review Forms as part of the application process in which they must disclose documented violations or enforcement actions and "deviations," as that term is defined in the Department's Air Resources Regulations at 25 Pa. Code § 121.1. The Department has identified violations at Panther Creek in the past and notified Panther Creek through Notices of Violation ("NOV's"). NOVs' routinely request that companies provide a response identifying what steps the company has taken to address the violation(s) and what steps will be taken in the future to avoid having the violations occur again. Pursuant to its

enforcement authority under the Air Pollution Control Act, the Department has assessed civil penalties against Panther Creek to resolve violations. The Department will continue to inspect and monitor the activities at the Facility to ensure that Panther Creek operates in compliance with applicable requirements in the Air Pollution Control Act, the Air Resource's Regulations and the Facility's permits. If Panther Creek has a violation, the Department will take appropriate enforcement action to ensure that the Facility comes into compliance.

Department Air Quality permitting staff has coordinated internally and determined that Panther Creek has no outstanding violations that are not currently being addressed by the Department.

Comment 30: The Plant is not designed to burn tires.

Response: CFB boilers can use a wide variety of solid fuels, including coal, waste coal, biomass, and even refuse derived fuel. The technology was developed to combust low-value fuels that were previously unrecoverable from an energy standpoint. Individual CFBs are designed for a specific BTU fuel and operate most efficiently at that design point. The issue at Panther Creek is that the higher BTU fuels that were previously blended with lower BTU material are increasingly rare and the TDF approval is being sought to blend the remaining waste coal to the design BTU value to allow for continuing remediation of the waste coal piles still remaining in the area and which will also allow more efficient operation of the boilers.

Comment 31: Notice of proposal was made available online prior to the hearing but not in the local newspaper

Response: The notice of public hearing was placed in The Times News on 11/18, 11/20 and 11/21/2023 as required.

Comment 32: Concerns about climate changes due to burning tires

Response: Panther Creek is required to meet all applicable requirements according to 40 CFR Part 98, which is the federal Mandatory Greenhouse Gas Reporting regulation. GHG emissions are minimized by employing good combustion practices.

Comment 33: Nesquehoning Borough Council passed an ordinance, Ordinance 2017-1 and Article 2 prohibits the burning of rubber and other toxic materials.

Response: The ordinance that the commenter(s) refers to, Ordinance No. 2017-1, does not appear to apply to facilities such as Panther Creek, and Article 2 is a definitions section that does not, in and of itself, ban any burning activities. Articles 3 and 4 apply to fires in public places; outdoor fires on private property and recreational fire pits; fireplaces; and charcoal and gas grills. The ordinance does not appear to apply to a commercial industrial facility such as Panther Creek that combusts certain fuels in a controlled CFB.

The Department also notes that with regard to local ordinances and requirements that apply to the Panther Creek Facility, it has included language in the draft plan approval that states, in part:

This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

Section C, Condition # 013 of the Plan Approval contains identical language. Therefore, Panther Creek is still required to comply with applicable local ordinances, which are enforceable by local authorities.

Comment 34: Test burn wasn't advertised.

Response: Panther Creek was required to submit a Request for Determination ("RFD") to the Department for the testing. RFDs are reviewed by the Department to determine whether a permit is required and are not advertised. These requests were for trial burns to evaluate the feasibility of burning TDF in one or both of the two boilers at Panther Creek. During the trial burns, limited amounts of TDF were burned over a limited time period. Continuous Emission Monitors ("CEMS") were required to evaluate emissions during the trial burns. In addition, Panther Creek was required to record the dates, duration time of the trial, the amount of TDF used and provide the starting and projected end date of the trial burns. These records were to be made available to the Department upon request. Following the trial period, in order for Panther Creek to continue to burn TDF, it was required to submit a plan approval application to the Department for review. The receipt of that application, as well as the draft plan approval itself, were advertised and subject to public review and comment as discussed in response to Comment No. 1 above.

Comment 35: No actual emissions from the test burn were provided.

Response: Panther Creek provided the results of the testing as follows:

Sulfur dioxide (SO₂), oxides of nitrogen (NO_x), carbon monoxide (CO), and carbon dioxide (CO₂) emissions were monitored by the use of CEMS. An analysis was performed that compared the emissions during days when TDF was combusted with culm to emission days when no TDF was fired. If either boiler burned TDF in a day that day was counted as a TDF day for that boiler. If the boiler burned no TDF for that day the day was counted as a Culm only day for that boiler. The study included 59 days during which TDF was burned in one or both boilers and 86 days during which only anthracite culm was burned in one or both boilers.

To conduct the test, Panther Creek calculated the daily average lbs./MMBtu for each of the CEMS parameters for both units. The two data sets were the daily average on days that only anthracite culm was combusted and the daily averages on days that TDF was combusted along with anthracite culm. The results of the analysis are discussed below for each of the CEMS pollutants:

- Carbon Monoxide (CO)

Carbon monoxide is an indicator of incomplete or poor combustion and is a parameter for unburnt hydrocarbons. There was a slight increase in CO with the addition of TDF. The mean CO emission rate when burning culm was 0.0619 lbs./MMBtu and the result for TDF was 0.0644 lbs./MMBtu, an increase of 4.0%. An analysis of the statistical significance using the Part 60 Appendix C procedure yielded a t statistic of 1.21 against a one-tail t' value of 1.66. There is no significant increase in emissions from burning TDF.

- Oxides of Nitrogen (NO_x)

NO_x emissions are formed either from nitrogen in the fuel or from thermal NO_x because of high temperature combustion. CFB's have much lower NO_x levels than conventional boilers and the Panther Creek Facility uses ammonia injection to further reduce NO_x. There was essentially no difference between the two data sets. The mean NO_x emission rate when burning culm was 0.1179

lbs./MMBtu, and the addition of TDF raised the mean to a value of 0.1181 lbs./MMBtu, an increase of two tenths of a percent. This was not a significant increase with a t statistic of 0.139 against a t' value of 1.66. There are no differences in NOX emissions with the addition of TDF.

- Sulfur Dioxide (SO₂)

SO₂ is emitted from the combustion of sulfur in the fuel combusted. Anthracite waste coal is low in sulfur and the CFB uses limestone injection to further control emissions. CFB SO₂ emissions, especially those burning culm, are very low for a coal combustion boiler. The mean SO₂ emissions burning just culm was 0.0965 lbs./MMBtu. Adding TDF decreased the rate to 0.0925 lbs./MMBtu, a slight decrease of 4.1%. This was not a statistically significant decrease; the t statistic was -0.789 against a t' of 1.66 and there is no significant difference in SO₂ in combusting TDF.

- Carbon Dioxide (CO₂)

CO₂ is generated by the complete combustion of carbon in the fuels and in the case of CFB's from the calcination of limestone injected to control acid gases. The mean CO₂ lbs./MMBtu burning just culm was 231 lbs./MMBtu. Adding TDF decreased the rate to 226, a decrease of 2.1%. This was not a statistically significant decrease; the t statistic was -1.37 against a t' of 1.656 and there is no significant increase in CO₂ in combusting TDF.

Using data gathered during the evaluation of TDF emissions, the above analysis shows that SO₂ and CO₂ showed small reductions in average emissions with the addition of TDF, and CO increased slightly. NO_x changed little. Using EPA procedures for determining whether an emissions increase has occurred, the above analysis shows there are no increased emissions from the CEMS monitored pollutants with the addition of TDF to the fuel feed.

Summary of Test Burn Emissions Differences When Burning TDF at Panther Creek

Table 3

Pollutant	Emissions lbs./MMBtu		Change with TDF (lbs./MMBtu)	Potential Annual Change (Tons Per Year)
	w/TDF	Culm		
Carbon Monoxide (CO)	0.0644	0.0619	+ 0.0025	+ 2.7
Oxides of Nitrogen (NO _x)	0.118095	0.117878	+ 0.000216	+ 0.236
Sulfur Dioxide (SO ₂)	0.092513	0.096475	- 0.00396	-4.33
Carbon Dioxide (CO ₂)	226.4740	231.2775	-4.81	-5,248
PM ₁₀	0.0076	0.0098	-0.0022	-2.3

Comment 36: Concerned about noise coming from the plant.

Response: Noise is often regulated at the local level through noise ordinances and Nesquehoning Borough has requirements related to noise in its local zoning code. (See, e.g. § 27-505). This is not a new facility. It has been operating for approximately 32 years, since 1992, and the Department is not aware of noise complaints regarding the Facility's operations. Additionally, the

Department does not believe that the issuance of the plan approval to combust TDF will result in excessive noise or cause a public nuisance because of noise. However, the Department has included a condition in the Plan Approval stating: “Nothing in this Plan Approval relieves the facility owner or operator from its obligations to comply with all applicable federal, state and local laws and regulations.” (See Section C, Condition # 013). This would include Nesquehoning’s local noise restrictions.

Comment 37: Truck traffic and wear and tear on the roads.

Response: While the Department’s Plan Approval does not contain specific provisions governing truck traffic and wear and tear from trucks on roads, the Department notes that the Borough of Nesquehoning has local requirements related to the use of Motor Vehicles and Traffic in Chapter 15 of its local ordinances (see e.g. Part 3 – Restrictions on Size, Weight and Type of Vehicle and Load), as well as in Ordinance No. 2020-1, enacted February 26, 2020 (see weight limits for Dennison Road and Industrial Drive). As stated in response to Comment 36, the Department has included a condition in the Plan Approval stating: “Nothing in this Plan Approval relieves the facility owner or operator from its obligations to comply with all applicable federal, state and local laws and regulations.” This would include Nesquehoning’s local requirements related to motor vehicles and traffic.

Comment 38: Concerns about the lack of evidence supporting the assertions that TDF does not pose a risk to human health or the environment.

Response: See the Department’s response to Comments 3,4 and 35 above.

Comment 39: Harmful pollutants like dioxins and metals are not on Panther Creek’s Plantwide Applicability Limit (“PAL”) emissions list.

Response: A PAL acts as a facility-wide permit limit for regulated New Source Review pollutants. PALs are generally based on 12-month rolling totals and are measured in tons of pollutant per year (“TPY”) for criteria pollutants only. As long as a facility demonstrates compliance with its PAL, physical changes and changes in the method of operation at a facility can be made and are not considered major modifications triggering NSR or PSD review. This provides facilities, like Panther Creek, with a certain level of flexibility in managing their operations while also being required to comply with their PAL limits in order to protect health and the environment.

HAPs, which the commenter(s) expresses concern about, are regulated under Section 112 of the Clean Air Act, 42 U.S.C. § 7412. Section 112 requires the EPA to establish emissions standards for “major sources” and “area sources” of HAPs to control and reduce their emissions. This includes the development of emission standards that require the maximum degree of reduction in the emission of hazardous air pollutants. These standards are called maximum available control technology (“MACT”) standards. The Mercury and Air Toxics Standards (“MATS”) rule is a MACT standard that Panther Creek is subject to (AKA, the Utility MACT), and it limits the amount of mercury and other pollutants emitted by the plant, including filterable particulate matter (“FPM”), which acts as a surrogate for non-mercury metals and dioxins/furans. MATS requirements are included in the operating permit for the Panther Creek Facility.

Comment 40: The application notes that the TDF use will be limited to 15% by weight “on a monthly basis.” This means, however, on a short-term basis, the amount of TDF used could be substantially greater than 15%.

Response: TDF is being used to bring the fuel mix up to the specification needed for the boiler. TDF burns at a temperature that is too high to be used significantly above 20% with the current waste coal so there is a practical maximum amount of TDF that may be fired.

Additionally, the Facility is subject to short-term limits for most of the pollutants including lbs./hr. emission limits for filterable particulate, filterable PM-10, CO, and VOC, and a lbs./day limit for SO₂.

Comment 41: The application does not address how emissions of various toxic air contaminants or hazardous air pollutants (HAPs) would change as a result of burning the TDF at these two CFB units.

Response: See the Department’s response to Comments 3, 4 and 39 above.

Comment 42: The application indicates that more sulfur (SO₂) will be introduced into the two CFB boilers as a result of the 15% by weight addition of TDF causing increased SO₂ emissions.

Response: Tires can have higher sulfur content than the low sulfur waste coal being combusted at Panther Creek, but the facility is subject to a very stringent SO₂ emission standard under the MATS Rule of 0.20 lbs./MMBtu in addition to a rolling 12-month annual PAL limit. These limits must be met regardless of the fuel burned. The Department is regulating the SO₂ emissions from the combustion of the fuels, rather than the sulfur content of the fuels. Also, see the Department’s response to Comments 35 above.

Comment 43: Emissions from TDF depend heavily on the fuel and its preparation.

Response: Under the MATS Rule and under the Non-Hazardous Secondary Materials (NHSM) Rule, Panther Creek may only combust TDF that comes from established recycling programs. Since the CFB’s at Panther Creek have BAT and BACT air pollution controls in the form of acid gas control, particulate control, and organic HAPS control through good combustion practices, any deviations in fuel quality will be addressed, just as they are with varying quality of waste coal. Further, Panther Creek must still operate in compliance with the emission limits in its plan approval and the current Title V Operating Permit. The facility will also continue to track all emissions and operate with TDF under the PAL limits previously approved under Plan Approval 13-00003A.

FINAL DETERMINATION

Pursuant to 25 Pa. Code Chapter 127, all comments submitted during the public comment period have been reviewed and are appropriately addressed in this document. It is the view of the Department that, after consideration of all comments received, the available information indicates that Panther Creek Power Operating, LLC's request to burn Tire Derived Fuel in their existing CFB's will meet the emission limitations and conditions set forth in the Facility's Title V Operating permit and PAL Plan Approval 13-00003A and will comply with all applicable State and Federal air quality regulatory requirements.

Mark J. Wejkszner, P.E. *MSW 5-1-2025*
Air Quality Environmental Program Manager
Department of Environmental Protection
2 Public Square
Wilkes-Barre, PA 18711
Phone: (570) 826-2511
www.depweb.state.pa.us

Shailesh Patel, P.E.
EEM, New Source Review
Air Quality Program

SP
4/30/2025

Neal J Elko
Application Manager
Air Quality Program

NJE *4/30/2025*