

December 1, 2025

By E-mail

Lori McNabb, Environmental Program Manager
Pennsylvania Department of Environmental Protection
Northwest Regional Office
230 Chestnut Street
Meadville, PA 16335

Re: Homer City VOC Emission Reduction Credit Proposal
55 Pa. Bull. 7611 (Nov. 1, 2025)

Continuing its unlawful “concierge” approach (see Section 6 below) to promoting construction of the largest gas-fired power plant in the nation, the Department of Environmental Protection (DEP or the Department) has proposed approval of emission reduction credits (ERCs) for volatile organic compounds (VOCs) at the Homer City power plant. 55 Pa. Bull. 7611 (Nov. 1, 2025). The Homer City power plant (the Facility) would be part of a 3,200-acre data center campus, generating a massive amount of electricity, intended primarily to run artificial intelligence and high-performance computing facilities.¹ For the reasons set forth in this letter, the Department’s proposed approval of ERCs for the Facility must be withdrawn.

On September 29, 2025, Clean Air Council, PennFuture, Sierra Club, and Earthjustice filed extensive comments on the proposed plan approval for a modification to the Facility that would allow it to operate as a gas plant (Attachment 1). On November 18, 2025, the Department continued its “concierge” approach and issued the plan approval in final form.² Appeals of the Department’s action are due to the Environmental Hearing Board within 30 days of notice of the Department’s action.³

Compared to the plant’s prior operation, the natural gas-fired power plant will sharply increase emissions of VOCs, a category of pollutants that threaten health and environmental consequences and that will also contribute to Pennsylvania’s chronic ground-level ozone problem. The Department’s prior issuance of the plan approval failed to identify the sources of ERCs for VOCs that could allow the modification to proceed. Instead, the Department delayed this critical aspect of the plan approval to the instant Significant Modification and Renewal proposal, 55 Pa. Bull. 7611, on which these comments are filed.

¹ Homer City Redevelopment, Project Overview: Honoring Our Past and Reimagining Tomorrow, <https://www.homercityredevelopment.com/project-overview> (last visited Dec. 1, 2025).

² Pennsylvania DEP, Homer City Generation Site Redevelopment, <https://www.pa.gov/agencies/dep/about-dep/regional-office-locations/northwest-regional-office/northwest-community-information/homer-city-generation-redevelopment#accordion-38ba86a746-item-42a86608f6> (last visited Dec. 1, 2025).

³ 25 Pa. Code § 1021.52(a).

1. The Department Failed to Consider New Requirements

The proposal fails to consider “new requirements” applicable to the facilities from which emission reduction credits were generated. Under Department rules:

ERCs shall be proportionally reduced prior to use in a plan approval in an amount equal to the reductions that the generating facility is or would have been required to make in order to comply with new requirements promulgated by the Department or the EPA, which apply to the generating facility after the ERCs were created.

25 Pa. Code § 127.206(c). This provision ensures that the emission reduction credits, such as the ones that the Department purports to apply here, have not been rendered obsolete by new regulatory requirements issued by the Department or EPA, and thus are properly surplus to current emission standards.

The Department’s Review Memo purports to consider some requirements applicable to emission reduction credits at Homer City.⁴ But it does not reference 25 Pa. Code § 127.206(c) or “new requirements.” Similarly, the Department’s Trajectory Analysis lists regulations but says nothing about “new requirements.”⁵

Thus, the Department has failed to comply with 25 Pa. Code § 127.206(c), which requires it to consider this critical aspect of ERCs. The Department must withdraw its proposed action and investigate what “new requirements” apply to the claimed ERCs at Homer City, and how the amounts of ERCs at generating sources must be reduced.

2. The Department Failed to Properly Consider Ambient Impact Equivalence or the Overall Control Strategy

Department regulations require that a facility:

. . . demonstrate to the satisfaction of the Department that the ERCs proposed for use as offsets will provide, at a minimum, ambient impact equivalence to the extent equivalence can be determined and that the use of the ERCs will not interfere with the overall control strategy of the [state implementation plan].

25 Pa. Code § 127.208(3). There are several mandatory elements in this provision. First, the ERCs must provide ambient impact equivalence. Second, the ERCs must not interfere with the overall control strategy of the state implementation plan. Third, under the terms of this rule, these elements must not merely be throwaway boilerplate that appears in an application, but must actually be demonstrated to the satisfaction of the Department.

⁴ Pennsylvania DEP, Title V Operating Permit Significant Modification & TVOP Renewal, Homer City Generation LP at 2-3 (Nov. 5, 2025).

⁵ Pennsylvania DEP, ERC Transfer Application Analysis and Letters (compilation) at 25 (ERC Transfer Documents).

In the ERC Transfer Documents (at 1), AECOM claims that the ozone transport region “already demonstrates equivalence because the region is treated by law as a single area for ozone management.” However, the legal status of Pennsylvania as part of the ozone transport region nonattainment area, see 25 Pa. Code § 127.208(9), is not dispositive of whether there is “ambient equivalence” under 25 Pa. Code § 127.208(3). Here, the ERCs proposed for use at the Facility will concentrate emissions at a single plant proposed to have annual VOC emissions over 300 tons per year. The Department must evaluate “ambient equivalence” in a manner that will actually protect neighbors, such as community impacts in the Borough of Homer City. Under 25 Pa. Code § 127.208(3), the Department must reject this ERC application for failing to make any demonstration regarding these impacts.

Further, no aspect of the application demonstrates that the use of the ERCs will not interfere with the overall control strategy of Pennsylvania state implementation plans. Indiana County, the location of the plant, borders the seven-county Pittsburgh-Beaver Valley nonattainment area for ozone. The Department must not ignore this requirement, and must not approve ERCs that omit this demonstration.

Finally, and critically, the DEP Review Memo makes no reference to equivalence, so there is no record that the Department has itself evaluated this and determined that it was done to the Department’s “satisfaction” or that “the use of ERCs will not interfere with the overall control strategy of the SIP”, in a state with 17 counties designated as nonattainment for national ozone standards. 25 Pa. Code § 127.208(3).⁶ These omissions require the Department to disapprove the ERCs.

3. The Proposal Fails to Demonstrate “the Same Conditions, Limitations, and Characteristics”

Under Department requirements for ERCs:

ERCs shall include the same conditions, limitations and characteristics, including seasonal and other temporal variations in emission rate and quality, as well as the maximum allowable emission rates the emissions would have had if emitted by the generator, unless equivalent ambient impact is assured through other means.

25 Pa. Code § 127.208(4). This provision ensures that conditions, limitations, characteristics, seasonal and temporal variations in emissions, and maximum allowable emissions rates are the same at the generating source and the source that uses ERCs. This provision guarantees that the new allowed emissions are subject to the same protections as were applied at the generating source, and protects communities against permits that would allow a source to concentrate pollution.

⁶ Pennsylvania Department of Environmental Protection, Pennsylvania 8-hour Ozone Nonattainment Areas, https://files.dep.state.pa.us/Air/AirQuality/AQPortalFiles/Regulations%20and%20Clean%20Air%20Plans/attain/Ozonedes/2008_PA_Ozone_Designation_Map.pdf (last visited Dec. 1, 2025).

There is no record that the Department ever considered this provision, let alone applied its safeguards to the Homer City ERCs, as nothing in the Review Memo or ERC Transfer Documents references 25 Pa. Code § 127.208(4) or its requirements. Thus, the Department has failed to apply these requirements, and the protections they offer against concentrating pollution and placing communities at risk.

4. The Department's Proposed Issuance of an Operating Permit is Unauthorized

The Department proposes to issue a “Significant Modification and Permit Renewal” to the Facility. 55 Pa. Bull. 7611. However, while the Facility has received a plan approval, subject to appeal before the Environmental Hearing Board, it has not been constructed. Under the Department’s bifurcated permitting system, a project receives a plan approval, undertakes the activities authorized by the plan approval including construction, operates the plant during a shakedown period, then returns to the Department for an operating permit:

In addition to allowing construction, installation, or modification, the plan approval authorizes the facility to begin operations in order to “shake down” the equipment to be sure that it operates properly. This shakedown period is built into the plan approval authorization. . . . After a plan approval is granted and the facility completed, it must secure an operating permit.

Robert A. Reiley, “The Air Pollution Control Act”, Environmental Law & Practice § 8-3.2 (9th ed.). Indeed, both the Air Pollution Control Act and its implementing regulations address plan approvals and operating permits in separate provisions, and specifically require source testing prior to issuance of an operating permit. 35 P.S. § 4006.1(a, b); 25 Pa. Code § Chapter 127, Subchapters B, E; 25 Pa. Code § 127.402(c).

It is impossible to test a source that has not been constructed. The proposed modification to the Homer City Facility would replace its primary fuel, combustion units, and emission controls, and completely change its emissions profile. Since this modification has not been constructed, it cannot be tested, and under Pennsylvania law, the Department cannot issue it an operating permit.

5. The Department Fails to Consider Environmental Justice

As Homer City Generation concedes, this project is located in or within a 0.5 mile radius of an environmental justice community, as defined by the Department.⁷ It is DEP’s policy to consider environmental justice status in its evaluation of permit applications, and identify “mitigation and restoration practices for consideration by applicants for projects in [environmental justice] areas.”⁸

⁷ Homer City Generation, Prevention of Significant Deterioration Permit Application (revised July 2025, updated August 4, 2025) at pdf 155 of 554; Pennsylvania DEP, PennEnviroScreen, Office of Environmental Justice, <https://gis.dep.pa.gov/PennEnviroScreen/> (last visited Dec. 1, 2025).

⁸ Pennsylvania DEP, Environmental Justice Policy (Sept. 16, 2023), <https://greenport.pa.gov/elibrary//GetDocument?docId=5600403&DocName=ENVIRONMENTAL%20JUSTICE%20POLICY.PDF%20%20%3cspan%20style%3D%22color:green%3b%22%3eCOMMENTS%20DUE%20OCTOB>

The project will allow VOC emissions to increase by over 300 tons per year, compared to prior actual emissions.⁹ Nothing in the Review Memo or other documents addresses the environmental justice impacts of the Department's action that would allow this steep increase.

The Department may claim that this project fails to qualify for its own "trigger" policy, which lowers the bar on environmental justice by ensuring that the Department will not consider the environmental justice aspects of certain projects.¹⁰ If it makes such an excuse, the Department arbitrarily ignores the undisputed facts that (a) the project is located in an environmental justice community and (b) the project will increase VOC emissions, and their impacts to citizens, by over 300 tons.

6. The Department Must Disavow that it will "Provide a Concierge Level of Service" to Homer City

The Department sometimes acts like it exists merely to do industry's bidding. Here, Erin Wells, Regional Director for the Northwest Regional Office, promised to "provide a concierge level of service" for the Homer City proposal.¹¹ Serving as a "concierge" to a project is in derogation of the policy of the Commonwealth identified in the Air Pollution Control Act to protect the public health, safety and well-being of the citizens of the Commonwealth. 35 P.S. § 4002(a). Taking a "concierge" approach to the Department's role is also in direct contradiction of the Department's constitutional role as a trustee of Pennsylvania's public natural resources, which the Department is obligated to conserve and maintain for the benefit of current and future generations. Indeed, this statement and the approach that it represents undermines the Department's credibility as to every aspect of its actions regarding Homer City Generation LP and the proposed project.

Erin Wells, Regional Director, must respond to these comments by affirming that the Department will vindicate its constitutional and statutory duties regarding the Homer City project, and by specifically disavowing her prior statement that the Department serves industry as a "concierge."

Conclusion

For these reasons, the Department's proposal fails to comply with the Air Pollution Control Act and its implementing regulations; fails to consider the environmental justice impacts of the Facility; and is based on the unauthorized issuance of an operating permit. The Regional

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[pan%3e](#) at i (last visited Dec. 1, 2025).

⁹ Homer City Generation, Prevention of Significant Deterioration Permit Application (revised July 2025, updated August 4, 2025) at 17 (past average actual emissions of 11.3 tons per year); Department of Environmental Protection, Plan Approval for Homer City Generation LP, effective Nov. 18, 2025 at 22 (allowable emissions of 332.16 tons VOCs per year).

¹⁰ *Id.* at Appendix C.

¹¹ E-mail from Erin Wells, Regional Director, DEP to Brian Regli, Office of the Governor (May 24, 2024) (Attachment 2).

Director must disavow prior promises of “concierge” service, and the Department must withdraw the proposed approval.

Further, the Department should hold a public hearing to address these and other issues with this ERC proposal (55 Pa. Bull. 7611), as the sharp increase in VOC emissions at this facility will impact Homer City and nearby residents. Under its own Environmental Justice Policy, the Department should take extra care to provide public participation opportunities to residents in environmental justice communities such as this one.¹²

These comments are joined by Concerned Residents of Western Pennsylvania (CROW), of Homer City, Pa.

Sincerely,

Lawrence Hafetz, Legal Director
Sarah Gordon, Staff Attorney
Clean Air Council
1617 JFK Boulevard, Suite 1130
Philadelphia, PA 19103
lhafetz@cleanair.org
sgordon@cleanair.org

Jessica R. O’Neill
Managing Attorney for Litigation
Citizens for Pennsylvania’s Future
1429 Walnut Street, Suite 701
Philadelphia, PA 19102
oneill@pennfuture.org

Zachary M. Fabish
Senior Attorney
Sierra Club
50 F Street NW, 8th Floor
Washington, DC 20001
zachary.fabish@sierraclub.org

Charles McPhedran
Senior Attorney
Earthjustice
1617 JFK Boulevard, Suite 2020
Philadelphia, PA 19103
cmcphedran@earthjustice.org

Copy: Matthew Williams, Pennsylvania DEP

¹² Pennsylvania DEP, Environmental Justice Policy at 2.

Attachment 1

September 29, 2025

VIA ELECTRONIC MAIL

Lori L. McNabb
Environmental Program Manager
Air Quality Program
Pennsylvania Department of Environmental Protection
Northwest Regional Office
230 Chestnut Street
Meadville, PA 16335

**Re: Initial Plan Approval Application for Homer City Generation LP
No. 32-00457A**

Homer City Generation LP (“the Applicant”) has proposed to construct a fracked gas-fired Combined-Cycle/Simple-Cycle power plant to produce up to 4.5 gigawatts of electricity in Black Lick and Center Townships, Indiana County. The power plant (or “the Facility”) would be part of a 3,200-acre data center campus, generating a massive amount of electricity, intended primarily to run artificial intelligence and high-performance computing facilities.¹

If built, the Facility would be the largest gas power plant in the country.² The Facility would emit more greenhouse gases each year than all the cars in Pennsylvania.³ The Facility would produce enough electricity to power more than three million homes,⁴ but the vast majority of its power would go solely to data center operations. Local residents would face increased air emissions and nuisance odors⁵ from the Facility.

¹ Homer City Redevelopment, *Project Overview, Honoring Our Past and Reimagining Tomorrow*, <https://www.homercityredevelopment.com/project-overview> (last visited Sept. 24, 2025).

² Marc Levy, *Coal-fired power plant, now retired, to become massive gas-powered campus for AI, data centers*, AP News (Apr. 2, 2025), <https://apnews.com/article/technology-ai-natural-gas-electricity-pennsylvania-450534992fab8dd3527b64b92614259e>.

³ 17,551,554 tons of CO₂e annually from the plant (Application at pdf 21) = 3,714,006 gasoline powered vehicles driven for one year. U.S. Environmental Protection Agency (“EPA”), Greenhouse Gas Equivalencies Calculator, <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> (last visited Sept. 24, 2025). 17,551,554 tons of CO₂e annually from the plant (Application at pdf 21) = 3,713,890 gasoline powered passenger vehicles driven for one year. In 2023, there were 3,603,152 cars in Pennsylvania. In 2023, there were 3,603,152 cars in Pennsylvania. Federal Highway Administration, Office of Highway Policy Administration, *State Motor-Vehicle Registrations – 2023*, <https://www.fhwa.dot.gov/policyinformation/statistics/2023/mv1.cfm> (last visited Sept. 24, 2025).

⁴ *Id.*

⁵ AECOM, Homer City Generation, Prevention of Significant Deterioration Permit Application at pdf 55 (updated Aug. 4, 2025) (“Application”), <https://files.dep.state.pa.us/RegionalResources/NWRO/NWROPortalFiles/Homer-City/Air/PSD-Application-HomerCity-8-4-2025.pdf>.

The Department of Environmental Protection (“the Department” or “DEP”) has said that its goal is “to provide a concierge level of service” to the Homer City proposal.⁶ Serving as a “concierge” to a project is in derogation of the policy of the Commonwealth identified in the Air Pollution Control Act to protect the public health, safety and well-being of the citizens of the Commonwealth. 35 P.S. 4002(a). Taking a “concierge” approach to the Department’s role is also in direct contradiction of the Department’s constitutional role as a trustee of Pennsylvania’s public natural resources, which the Department is obligated to conserve and maintain for the benefit of current and future generations. Indeed, this statement and the approach that it represents undermines the Department’s credibility as to every aspect of draft Plan Approval to Homer City Generation LP⁷ and any other Departmental actions regarding this proposed Facility. We call on the Department in its response to these comments to affirm its constitutional and statutory duties and to disavow that it serves industry as a “concierge.”

This Facility’s construction and operation would harm Pennsylvania residents on multiple fronts. The plant could emit more than 17 million tons of CO₂ annually, triple the highest emissions of any polluting facility in Pennsylvania to date.⁸ These CO₂ emissions would set Pennsylvania back in meeting its net-zero by 2050 goal, outlined in the state’s 2024 Climate Action Plan.⁹ Increased CO₂ emissions mean rising temperatures, bringing elevated populations of illness-bearing insects and increasing the frequency and severity of natural disaster, for all Pennsylvanians.¹⁰ The Department itself already predicts the Commonwealth to warm another 5.9 degrees Fahrenheit by 2050, with some parts of the state experiencing temperatures in excess of 95 degrees Fahrenheit as often as 37 days per year.¹¹ The plant’s reliance on fracked gas would further entrench an extractive industry that is harmful to Pennsylvania’s economy, health, and environment.¹²

The plant’s hazardous air emissions, discussed more fully below, would also pose a substantial risk to local residents’ health and wellbeing. Unlike the coal plant that occupied this site for more

⁶ E-mail from Erin Wells, Regional Director, DEP to Brian Regli, Office of the Governor (May 24, 2024) (Attachment 1).

⁷ 8-6-25 V2-DRAFT-Plan-Approval-32-00457A-Homer-City-Generation, available at <https://files.dep.state.pa.us/RegionalResources/NWRO/NWROPortalFiles/Homer-City/Air/V2-DRAFT-Plan-Approval-32-00457A-Homer-City-Generation.pdf> (“Draft Plan Approval”) (last checked Sept. 29, 2025).

⁸ Application, Appendix C Emission Calculations at pdf 325; *See also* Bureau of Air Quality Visuals and Trends, DEP, <http://cedatareporting.pa.gov/reports/powerbi/Public/DEP/AQ/PBI/25%20Year%20Site%20%20Level%20Emission%20Inventory%20Report>.

⁹ Commonwealth of Pennsylvania, *Pennsylvania Climate Action Plan Update 2024*, <https://www.pa.gov/agencies/dep/residents/climate-change/pa-climate-action-plan> (last visited Sept. 24, 2025).

¹⁰ DEP, *Climate Change in PA*, <https://gis.dep.pa.gov/ClimateChange/index.html> (last visited Sept. 24, 2025).

¹¹ *Id.*

¹² Sean O’Leary, *Frackalachia Update 2025*, Ohio River Valley Institute (July 2025), <https://ohiorivervalleyinstitute.org/wp-content/uploads/2025/07/Frackalachia-update-2025.pdf>.

than 50 years, the significantly larger fracked gas power plant could emit up to 910 tons of ammonia annually.¹³ Not only does ammonia smell foul, it can also combine with other gases to form fine particulate matter that, when inhaled, can cause long-lasting respiratory illnesses. According to research from the National Institute of Occupational Safety and Health, long-term exposure to air pollutants like ammonia can increase the risk of allergies, asthma, chronic obstructive pulmonary disease, and lung cancer.¹⁴ In addition to ammonia, the Facility would emit high levels of volatile organic compounds (“VOCs”), nitrogen oxide, carbon monoxide, particulate matter (“PM”), and hazardous air pollutants (“HAPs”) like formaldehyde, toluene, xylenes and acetaldehyde—all of which pose a significant and serious danger to human health.

Importantly, fracked gas-powered data centers will not bring sustainable economic opportunities to Pennsylvania residents. The power generation industry is one of the least labor-intensive sectors in the country.¹⁵ On average, a 1,000 megawatt fracked gas power plant employs around 30 people.¹⁶

The harm from this fracked gas power plant far outweighs the benefits for Pennsylvanians.

These comments are submitted by Citizens for Pennsylvania’s Future, Clean Air Council, Sierra Club, and Earthjustice. They demonstrate that DEP’s Draft Plan Approval has several legal and technical deficiencies that DEP must address, including:

- The Draft Plan Approval is inconsistent with the department’s obligations under Article 1, Section 27, to conserve and maintain Pennsylvania’s air and stable climate.
- The Draft Plan Approval process has not followed the Department’s Environmental Justice Participation Policy.
- The Applicant failed to properly conduct an alternatives analysis as required by New Source Review regulations.
- The Applicant failed to properly evaluate the additional impact of associated growth.
- The Applicant’s LAER/BACT/BAT analyses are improper and incomplete, resulting in impermissibly high emissions limits.

¹³ DEP, Air Quality Program, *Plan Approval 32-00457A, Homer City Generation LP* (Aug. 6, 2025), <https://files.dep.state.pa.us/RegionalResources/NWRO/NWROPortalFiles/Homer-City/Air/V2-DRAFT-Plan-Approval-32-00457A-Homer-City-Generation.pdf>.

¹⁴ CDC, *Ammonia Solution, Ammonia, Anhydrous: Lung Damaging Agent*, https://www.cdc.gov/niosh/ersbdb/emergencyresponsecard_29750013.html (last visited Sept. 24, 2025).

¹⁵ O’Leary, *supra* note 11, at 34.

¹⁶ *Id.*

- The Draft Plan Approval’s emissions monitoring and testing requirements are insufficient to ensure compliance with applicable emissions limits.
- The Draft Plan Approval should include work practice requirements necessary to maintain the functionality of the SCR catalyst.

Factual background:

The Applicant submitted the Application to the Department for a plan approval to construct a fracked gas-fired Combined-Cycle/ Simple-Cycle power plant to produce up to 4.5 gigawatts of electricity in Black Lick and Center Townships, Indiana County. In the August 16, 2025 PA Bulletin, DEP announced that it intended to issue a plan approval for the proposed project and commenced a 45-day comment period on the Draft Plan Approval.¹⁷

This power plant would be a major modification¹⁸ to an existing major stationary source, as defined by the Clean Air Act and Pennsylvania’s State Implementation Plan.¹⁹ Therefore, the Facility is subject to the Prevention of Significant Deterioration (“PSD”) regulations.²⁰

This project is located in an environmental justice (“EJ”) community, as defined by DEP.²¹ It is DEP’s policy to consider EJ status in its evaluation of permit applications, and identify “mitigation and restoration practices for consideration by applicants for projects in EJ areas.”²² Further, a central purpose of the PSD program is to protect public health and “assure that any decision to permit increased air pollution...is made only after careful evaluation of all the consequences of such a decision.”²³ The commenting organizations encourage DEP to thoroughly consider the long-term health and environmental consequences associated with this proposed power plant, sited in an EJ community.

Commenting organizations:

¹⁷ Pennsylvania Bulletin 55:33, at 5903 (Aug. 16, 2025), <https://www.pacodeandbulletin.gov/secure/pabulletin/data/vol55/55-33/55-33.pdf>.

¹⁸ 40 CFR § 52.21(b)(2). Definition of “major modification.”

¹⁹ 40 CFR § 52.2020.

²⁰ DEP, *DEP Summary of Air Quality Analyses for Prevention of Significant Deterioration* (Aug. 11, 2025), <https://files.dep.state.pa.us/RegionalResources/NWRO/NWROPortalFiles/Homer-City/Air/8-11-2025%20-%20PSD-Analysis%20Summary.pdf>.

²¹ DEP, PennEnviroScreen, Office of Environmental Justice, <https://gis.dep.pa.gov/PennEnviroScreen/> (last visited Sept 24, 2025).

²² DEP, *Environmental Justice Policy* (Sept. 16, 2023), <https://greenport.pa.gov/elibrary//GetDocument?docId=5600403&DocName=ENVIRONMENTAL%20JUSTICE%20POLICY.PDF%20%20%3cspan%20style%3D%22color:green%3b%22%3eCOMMENTS%20DUE%20OCTOBER%2029%2c%202023%3c/span%3e%20%3cspan%20style%3D%22color:blue%3b%22%3e%28NEW%29%3c/span%3e>.

²³ 42 U.S.C. § 7470.

Citizens for Pennsylvania’s Future is a member-supported, non-profit, environmental organization fighting for an equitable, job-creating state economy by advancing clean air, pure water, and climate change solutions through legal advocacy, policy engagement, and empowering all Pennsylvanians.

Clean Air Council is a nonprofit environmental health organization with offices in Philadelphia and Pittsburgh, Pennsylvania. The Council has been working to protect everyone’s right to a clean and healthy environment for nearly 60 years. The Council has members throughout Pennsylvania and the Mid-Atlantic region who support its mission, including in Indiana County.

Sierra Club is a non-profit grassroots environmental organization dedicated to the protection and preservation of the environment. Sierra Club’s mission is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth’s ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives. Sierra Club has over 611,000 members nationwide, including over 24,000 members in Pennsylvania.

Earthjustice is a non-profit public interest law firm dedicated to protecting the magnificent places, natural resources, and wildlife of this earth, and to defending the right of all people to a healthy environment.

I. Issuance of This Plan Approval is Inconsistent with the Department’s Obligation Under Article 1, Section 27 to Conserve and Maintain Pennsylvania’s Air as well as to Conserve and Maintain a Stable Climate.

The Department must consider its obligations as a trustee of Pennsylvania’s public natural resources. This Facility, if permitted, would be the largest gas-fired power plant in the nation. It would have major impacts on public natural resources, and the Department, as a trustee, must consider those impacts, which conflict with the Department’s obligation to conserve and maintain trust resources.

First, as a matter of law, the Department’s trustee obligations are clear. As an agency of the Commonwealth, the Department is bound by Article I, Section 27 of the Pennsylvania Constitution. *See Pa. Env’t Def. Found. v. Commw.* (“PEDF I”), 161 A.3d 911, 931 n.23 (Pa. 2017). When the Department exercises its discretion in “evaluat[ing] a permit . . . application, decid[ing] how to act on that application, and decid[ing] what permit conditions and . . . pollution control technologies[] that the operation would be subject to,” Article I, Section 27 directly bears on that exercise. *Montgomery Twp. Friends of Family Farms v. DEP*, No. 2020-082-L (Pa. EHB) (Opinion and Order on Motion in Limine issued July 3, 2024).

Article I, Section 27 protects the rights of the people and imposes a constitutional duty on the Commonwealth as a whole:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

Pa. Const. art. I, § 27. The first clause enumerates the rights of the people, which may not be infringed. The second clause guarantees common ownership of the public natural resources of the Commonwealth, for both current and future Pennsylvanians. The third clause establishes a public trust that dictates how the Commonwealth manages the public natural resources.

“[T]he Commonwealth has a duty to prohibit the degradation, diminution, and depletion of our public natural resources, whether these harms might result from direct state action or from the actions of private parties.” *PEDF II*, 161 A.3d at 933 (citing *Robinson Twp. v. Commonwealth*, 83 A.3d 901, 957 (Pa. 2013) (plurality opinion)). Significantly, the Department's “duties under Article I, Section 27 are not necessarily coextensive with or limited to ensuring compliance with applicable statutes and regulations.” *Del. Riverkeeper Network v. DEP*, 2022 EHB 103, 139 (citing *Friends of Lackawanna v. DEP*, 2017 EHB 1123, 1161). While the Department may not act outside the limitations of its statutory authority, the lack of a statutory or regulatory *requirement* to take any particular action is not sufficient to demonstrate compliance with the constitution. In other words, where the language of a statute or regulation suggests that an action is discretionary, in certain circumstances, the constitution might make the action mandatory. The Department must comply with the constitution while exercising its authority.

Second, the emissions from this Facility would affect public natural resources. The language of the Environmental Rights Amendment (“ERA”), its well-documented legislative history, and precedent leave no doubt that ambient air is a public natural resource within the text and meaning of the ERA. *See Robinson Twp.*, 83 A.3d at 955 (Pa. 2013). The greenhouse gas emissions from this Facility will negatively impact and degrade this public natural resource. That impact is felt by Pennsylvanians in the form of climate change.

Third, the Department has a duty to consider this degradation in light of its obligation to conserve and maintain the air resources and, correspondingly, Pennsylvania's climate. The drafters and the citizens who ratified the ERA “articulated the people's rights and the government's duties to the people in broad and flexible terms that would permit not only reactive

but also anticipatory protection of the environment for the benefit of current and future generations.” *PEDF II*, 161 A.3d at 919 (quoting *Robinson Twp.*, 83 A.3d at 963). As part of its obligation to conserve and maintain trust resources, the Department must consider the impacts that the emissions from this Facility will have on Pennsylvania’s climate.

The climate implications of this proposed Facility are monstrous. As noted above, the Facility could emit more than 17 million tons of CO₂ annually. The sheer quantity of these emissions cannot be overstated. First, this Facility would have triple the emissions of the presently highest polluting facility in Pennsylvania.²⁴ Second, the emissions from just this one Facility would represent, based on the most recent data available, 6% of Pennsylvania’s annual greenhouse gas emissions.²⁵ Third, these emissions are projected to occur without any CO₂ mitigation. For example, the Application rules out carbon capture and sequestration as not technically feasible for either the combined cycle or simple cycle turbines (Application at pdf 53–54) and does not evaluate other mitigation options. The emissions from this Facility, without reductions in greenhouse gas emissions in another sector (which have not yet been proposed or evaluated), would make it likely impossible for Pennsylvania to meet its net-zero by 2050 goal, set out in the state’s 2024 Climate Action Plan.²⁶

Greenhouse gas emissions have costs, in terms of dollars to individuals and to governments as well as in terms of costs to human health and the environment. As discussed above, and as the Commonwealth well knows, increased CO₂ emissions inexorably contribute to changing the climate: Pennsylvania is already experiencing and will continue to experience rising temperatures, which leads to problems including elevated populations of illness-bearing insects and increasing the frequency and severity of natural disasters.²⁷ The Department already predicts the Commonwealth to warm another 5.9 degrees Fahrenheit by 2050, with some parts of the state experiencing temperatures in excess of 95 degrees Fahrenheit as often as 37 days per year.²⁸ Changes in Pennsylvania’s climate are also already causing and projected to cause additional increases in rainfall and flooding.²⁹ The Department has well-documented evidence of the impacts from climate change on Pennsylvania’s public natural resources.

²⁴ Application, Appendix C at pdf 325; *See also* Bureau of Air Quality Visuals and Trends, DEP, <http://cedatareporting.pa.gov/reports/powerbi/Public/DEP/AQ/PBI/25%20Year%20Site%20%20Level%20Emission%20Inventory%20Report>

²⁵ Pennsylvania is required to compile an annual inventory of greenhouse gas emissions in the Commonwealth by the Climate Change Act. According to the 2025 Pennsylvania Greenhouse Gas Inventory, Pennsylvania sources were responsible for emissions of 253 million metric tons of carbon dioxide equivalent. *See* Commonwealth of Pennsylvania, Pennsylvania Greenhouse Gas (GHG) Inventory, <https://www.pa.gov/agencies/dep/residents/climate-change/ghg-inventory> (last visited Sept. 24, 2025). This Facility’s proposed emissions are 17 million tons, which is 6% of 253 million tons.

²⁶ Commonwealth of Pennsylvania, *Pennsylvania Climate Action Plan Update 2024*, <https://www.pa.gov/agencies/dep/residents/climate-change/pa-climate-action-plan> (last visited Sept. 24, 2025).

²⁷ DEP, *Climate Change in PA*, <https://gis.dep.pa.gov/ClimateChange/index.html> (last visited Sept. 24, 2025).

²⁸ *Id.*

²⁹ DEP, *Climate Impacts Assessment 2024*, <https://www.pa.gov/agencies/dep/residents/climate-change/impacts> (last visited Sept. 24, 2025).

Given the colossal climate impact of this Facility, the Department's only defensible action under the ERA is to exercise its trustee duties to conserve and maintain Pennsylvania's resources, including its air and its climate, and deny the plan approval.

If the Department nonetheless moves forward with the plan approval, while maintaining their legal remedies, Commenters submit that the Department must condition the plan approval on measures that will significantly reduce the Facility's climate impact.

The Department has, in the past, imposed specific conditions on a draft plan approval permit based on its trustee obligations. For example, Diversified Production LLC filed an application to DEP for an air plan approval for construction and initial operation of a well pad and natural gas fired power plant in Elk County that would be used to generate electricity for an accompanying cryptocurrency mining operation adjacent to state Game Lands. The construction and operation of the well pad and electricity production Facility would generate considerable noise and emissions. The Pennsylvania Game Commission, local residents, and environmental groups submitted comments regarding the impact of noise coming from the Facility on hunting and bird nesting habitat and other matters. DEP issued the air plan approval and included noise monitoring and control measures, including a condition limiting noise from the cryptocurrency mining operation. As support for these conditions, the Department pointed to its public trust obligations under Article 1 Section 27.³⁰

If the Department issues this plan approval contrary to its ERA duties, it must nevertheless mitigate these greenhouse gas emissions and condition the plan approval on Applicant's development of renewable energy resources.

II. The Department Has Not Complied with Its Environmental Justice Participation Policy.

The Applicant agrees that this project is located in or within a 0.5 mile radius of an environmental justice community as defined by the Department. Additionally, this Application is a trigger permit as defined in DEP's environmental justice policy.³¹ There is no question that DEP's environmental justice participation policy applies here. The Department's actions thus far

³⁰ See Department of Environmental Protection, No. 24-00197A (Final Plan Approval Dec. 28, 2023) (Attachment 2); see also DEP Comment Response document, No. 24-00197A (Dec. 28, 2023) (Attachment 3); Comments of Clean Air Council, Natural Resources Defense Council, and Earthjustice, No. 24-00197A (July 31, 2023) (Attachment 4).

³¹ DEP, Environmental Justice Office, *Environmental Justice Policy* (Effective Date Sept. 16, 2023), <https://greenport.pa.gov/elibrary//GetDocument?docId=5600403&DocName=ENVIRONMENTAL%20JUSTICE%20POLICY.PDF%20%20%3cspan%20style%3D%22color:green%3b%22%3eCOMMENTS%20DUE%20OCTOBER%2029%2c%202023%3c/span%3e%20%3cspan%20style%3D%22color:blue%3b%22%3e%28NEW%29%3c/span%3e>. See Appendix C.

during this permit review conflict with the community participation that the policy is designed to promote.

This environmental justice community was not appropriately involved in the permitting process from the Applicant's statements in the Application. For example, the Application includes the following:

4700-PM-CEE0001 10/2023 Application	
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 PennEnviroScreen tool. To see specific EJ areas, select the appropriate year of your submittal from the themes box on the right.	
2. Have you informed the surrounding community prior to submitting the application to the Department?	☒ Yes ☐ No
Method of notification: <u>Local meetings and press release</u>	
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.	

Application at pdf 155, Appendix A at 4.

An applicant can only believe that unaddressed community concerns are “not applicable” if the applicant has not engaged with the community and heard its concerns. If the Applicant and the Department were not aware at the time this Application was revised and refiled in August 2025, they should by now fully be aware that the community has concerns. At the September 17th hearing, discussed further below, community members identified many concerns. These concerns include questions about the chemicals that will be emitted from the power plant's operations, PM pollution, the health risks their children will face, why there is no fence-line monitoring proposed or required, why no community benefits agreement has been discussed, the efficacy and reliability of pollution control technology, and the back-up diesel generators allowed at the Facility. These concerns must be specifically addressed by the Applicant and by the Department in order for the participation promised by the environmental justice participation policy to have any meaning.

The environmental justice policy is supposed to ensure that community questions are answered and community voices are heard before the project begins. On September 17, 2025, after the Department issued the Draft Plan Approval signaling its intent to issue the permit, the Department held a “meeting” at which representatives from the developer and the Department were available to answer questions, and then the Department took public comment in a “hearing”

immediately following the meeting. At a minimum, this one-time only event violates the spirit, if not the letter, of the environmental justice policy.

At the “meeting” portion of the September 17 event, residents’ questions were not answered. The panel could not even compare the pollutants anticipated to be emitted from this new Facility to the pollutants that were emitted from the former coal-burning plant. This level of unpreparedness at the only community meeting involving the Department is unacceptable. Second, even if the “meeting” had provided answers to community questions, residents could not have factored those answers into their public comments, because the only opportunity to be heard followed immediately, without any time for residents to take the information provided by the Department and evaluate it before testifying. The Department has come to the community only once, and thus asked the residents to come with all their questions and then provide all their public comments at the same time. This undermines the goals of the public participation process and devalues community questions and input. A subsequent opportunity to provide written comments does not cure this problem because the public participation strategy “should be designed to facilitate the participation of all residents within the Area of Concern and the EJ Area census block group(s),” and some residents may face barriers to submitting written comments.³² The community deserves better than this, and the Department’s environmental justice policy requires more.

III. The Applicant Failed to Properly Conduct an Alternative Analysis as Required by New Source Review Regulations.

The Applicant did not conduct the alternatives analysis as required under 25 Pa. Code § 127.205(5) because it failed to properly evaluate alternative sites and alternative energy sources and failed to demonstrate that the benefits of the Facility will significantly outweigh the environmental and social costs.

Under the major New Source Review regulations, applicants are required to conduct an alternatives analysis:

For a new or modified Facility which meets the requirements of and is subject to this subchapter, an analysis shall be conducted of alternative sites, sizes, production processes and environmental control techniques for the proposed Facility, which *demonstrates that the benefits of the proposed Facility significantly outweigh the environmental and social costs* imposed within this Commonwealth as a result of its location, construction or modification.

³² *Id.* at 8.

25 Pa. Code § 127.205(5) (emphasis added); *see also* 42 U.S.C. § 7503(a)(5). The Department may not issue a plan approval unless the applicant demonstrates that the alternative analysis requirement is met. 25 Pa. Code § 127.205(5).

In the Application's discussion of alternatives, the Applicant states that it did not consider any alternative sites for the proposed Facility. Application at pdf 35. Failing to evaluate *any* alternative sites is enough on its own to show that the Applicant's alternatives analysis is woefully insufficient to comply with the regulation, which explicitly requires an analysis of alternative sites. *See* 25 Pa. Code § 127.205(5). The Applicant tries to sidestep its regulatory obligations by stating that no other site was considered because this is a project to "redevelop the Homer City Generating Station," but then goes on to discuss the benefits of the former coal-plant in comparison with a greenfield or brownfield site. Application at pdf 35. This is a completely backward approach to the required analysis of alternatives. The proposed project is for the construction of a combined-cycle power plant, and the Applicant is required to evaluate alternative sites for that project. Comparing the merits of the Homer City site's zoning, access to power lines, and water availability with generic greenfield or brownfield sites does not fulfill this requirement.

The Applicant also dismisses the prospect of alternative power production processes, such as wind and solar, out of hand based on alleged intermittent availability without additional battery storage and amount of energy production capability within the same footprint. Application at pdf 36. Again, limiting the footprint of the proposed project to the Homer City site is a backward approach to alternatives analysis and cannot be used to dismiss the use of alternative fuels. *Id.* The Applicant also seemingly acknowledges the existence of battery storage to allow wind and solar sources to provide a rapid-response dispatch of power and yet fails to evaluate this alternative or explain its immediate rejection of battery storage. *Id.* Abundant literature exists that renewable energy plus storage is not intermittent; is safer, more cost-effective, and quicker to build; and emits no air pollution. This alternative must be evaluated under Pennsylvania regulations to be compliant with the law.

Lastly, the Applicant makes no attempt to demonstrate that the benefits of the proposed project significantly outweigh the environmental and social costs imposed within the Commonwealth, as required by 25 Pa. Code § 127.205(5). The Application's alternative analysis does not even mention costs, let alone demonstrate that the alleged benefits significantly outweigh the costs. Application at pdf 35–36. The only benefits discussed by the Applicant are vague claims of a positive economic impact from workers constructing the project, the reuse of the Homer City property, and less visually impactful stacks than the previous coal-fired facility. *Id.* These purported benefits are ill-defined. The Application's alternative analysis contains zero discussion of the environmental and social costs of the hundreds of tons of local air pollutants and millions of tons of greenhouse gases the proposed Facility will emit on an annual basis. *See* Application at pdf 17–18, 35–36. The stacks have already been demolished, so the status quo is one of no

coal-fired plant stacks. Because the Applicant has failed to demonstrate that the benefits of the project significantly outweigh the environmental and social costs, the Department cannot issue a plan approval.

IV. The Applicant Failed to Properly Evaluate the Additional Impact of Associated Growth.

The owner or operator of a proposed source is required to provide additional impact analyses evaluating the impact of growth associated with the project. The owner or operator must provide an analysis of: (1) “the impairment to visibility, soils, and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification;” and (2) “the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.” 40 C.F.R. § 52.21(o)(1), (2).

This Draft Plan Approval would allow the construction of the largest gas-fired power plant in the United States. Nevertheless, the Applicant conducted, and the Department approved, an insufficient and cursory review of the potential for growth associated with the project, ultimately concluding that there were no quantifiable additional emissions from unknown expected growth. Application at pdf 145.

The EPA provides guidance on evaluating the amount of expected associated growth and estimating the secondary air pollution emissions which would likely result from this permanent residential, commercial, and industrial growth.³³ For example, predicting the amount of residential growth involves evaluating “the size of the available work force, the number of new employees, and the availability of housing in the area.” NSR Workshop Manual at D.3–4. After evaluating the expected growth, an applicant must develop an estimate of the secondary air pollutant emissions which are likely to result from the expected growth. *Id.* An applicant should generate emissions estimates by comparing existing sources and consulting sources such as other PSD applications and manufacturers’ specifications. *Id.* at D.4. This estimate of emissions is then used to conduct the required analyses of impacts on air quality, visibility, soil, and vegetation. *Id.*

The Application for this project fails to conduct a proper analysis of the associated growth and its impacts. Instead, the Application’s discussion of projected residential and commercial growth-related impacts from the project consists of a short paragraph stating that workers will mostly already live in the area and that due to the “small number” of new workers moving to the area, no new housing requirements or commercial construction would be expected. Application at pdf 145. There is no estimate of the number of anticipated new employees, no support for the

³³ See New Source Review Workshop Manual, *Prevention of Significant Deterioration and Nonattainment Area Permitting*, Draft at D.3–4 (Oct. 1990) (“NSR Workshop Manual”), <https://www.epa.gov/sites/default/files/2015-07/documents/1990wman.pdf>.

assertion that the workforce would already live locally, and no evaluation of the existing availability of housing in the area or the existing commercial services.

Further, the Applicant acknowledges that there is “the potential for additional emissions in the area as the Project will provide some power to new data centers in the region,” but states that “[s]ince these projects are not well-defined nor quantifiable, growth expectations are unknown.” *Id.*³⁴ The Applicant makes no attempt at evaluating the amount of this associated industrial growth of data centers in the region, nor at estimating the expected emissions and their impact. The Applicant must predict how much growth is expected to occur and estimate the resulting emissions by consulting sources such as existing and proposed data center specifications and permits to estimate the approximate size or amount of data centers that the project’s power would support. The Applicant instead avoids evaluating the potentially significant impacts of the emissions from this associated growth by simply stating that the “growth expectations are unknown.” *Id.*

Similarly, the Applicant did not consider the potential for additional build-out of natural gas-related infrastructure in the area needed to supply the proposed project with fuel for its operation. Associated industrial growth includes growth in those industries providing goods and services and other industries necessary for the operation of the source. *See* NSR Workshop Manual at D.3.³⁵ Applicant did not evaluate the potential for the fuel demand of the plant to drive the drilling of new gas wells, the expansion or re-fracking of existing wells, or the construction of related natural gas infrastructure such as gathering lines, compressor stations etc. This type of associated industrial growth should be included in an evaluation of additional impacts.

The Department should require the Applicant to provide a complete and proper analysis of the impacts to air quality, visibility, soils, and vegetation from all growth associated with the proposed project.

V. The Department Failed to Establish Appropriate Emission Control Technology and Work Practice Requirements.

³⁴ The Applicant has made multiple quantified projections of job growth and development in its statements to the press. *See, e.g.,* Emily Marines, *More details shared on plans to repurpose former Homer City power plant as A.I. data center*, WJAC (July 17, 2025), <https://wjactv.com/news/local/more-details-shared-on-plans-to-repurpose-former-homer-city-power-plant-as-ai-data-center>. However, in the context of this plan approval, the Applicant is vague where these factors may be viewed as “costs” rather than “benefits.”

³⁵ NSR Workshop Manual. Although styled a draft, the NSR Workshop Manual was never finalized and has been consistently used by EPA and state agencies.

1. The Applicant's LAER/BACT/BAT Analyses Are Incorrect and Incomplete, Resulting in Impermissibly High Emission Limits.

The Applicant improperly analyzed Best Available Control Technology ("BACT"), Lowest Achievable Emissions Rate ("LAER"), and Best Available Technology ("BAT"), violating statutory and regulatory requirements. The Department should require the Applicant to correct its errors and omissions, and revise limits as necessary so that they align with applicable LAER, BACT, or BAT requirements.

The Clean Air Act prohibits the grant of a PSD permit unless "the proposed facility is subject to the best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility."³⁶ Through 25 Pa. Code § 127.83, DEP adopted the entirety of the federal PSD regulations promulgated in 40 C.F.R. § 52. Under 40 C.F.R. § 52.21(j), the Facility must meet the requirements for "[c]ontrol technology review."³⁷

Where major source Nonattainment New Source Review ("NNSR") is necessary, the LAER standard applies,³⁸ and where major source PSD is indicated, the BACT standard applies.³⁹ EPA regulations defined BACT as follows:

Best available control technology (BACT) means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the reviewing authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.⁴⁰

³⁶ Clean Air Act ("CAA") § 165(a)(4); 42 U.S.C. § 7475(a)(4) ("No major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless—the proposed facility is subject to the best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility").

³⁷ 40 C.F.R. § 52.21(j) (requiring "best available control technology"). *See also* NSR Workshop Manual, at B.1–B.75.

³⁸ 42 U.S.C. § 7503(a)(2); 25 Pa. Code § 127.205.

³⁹ 40 C.F.R. § 52.21(j)(2).

⁴⁰ 25 Pa. Code § 121.1.

EPA regulations define the more stringent LAER as “[t]he most stringent emissions limitation which is achieved in practice by such class or category of stationary sources.”⁴¹ Unlike BACT, the LAER standard does not consider economic, energy, or other environmental factors.⁴²

Pennsylvania additionally sets forth a BAT standard, which applies in the absence of a more stringent control technology requirement.⁴³ Pennsylvania’s Air Pollution Control Act (“APCA”) authorizes the Department “to require that new sources demonstrate in the plan approval application that the source will reduce or control emissions of air pollutants, including hazardous air pollutants, by using the best available technology.”⁴⁴ The corresponding regulations require that an applicant for plan approval demonstrate that “the emissions from a new source will be the minimum attainable through the use of the best available technology.”⁴⁵ Pennsylvania code defines Best Available Technology (“BAT”) as “[e]quipment, devices, methods or techniques . . . which will prevent, reduce or control emissions of air contaminants to the maximum degree possible and which are available or may be made available.”⁴⁶ The APCA defines an “air contaminant” as “[s]moke, dust, fume, gas, odor, mist, radioactive substance, vapor, pollen or any combination thereof.”⁴⁷ The purpose of the BAT requirement is “to minimize the emission of air contaminants in light of the design and operating features of the control technology.”⁴⁸

A BAT analysis is “an expansive, fact-specific inquiry” that DEP must conduct on a case-by-case basis.⁴⁹ The Environmental Hearing Board (“EHB”) has referred to the federal Environmental Protection Agency’s (“EPA”) BACT standards as “in certain respects...a federal analog of BAT.”⁵⁰ However, the EHB has also noted that the Department has broad discretion in BAT determinations to allow the analysis to go beyond that required by BACT.⁵¹ Nonetheless, the Department and applicants often employ the five-step top-down approach federally required for a BACT analysis when determining BAT.⁵² The Department must apply proper BACT analysis methodology when the top-down analysis is used to determine BAT.

The Applicant improperly excludes control levels from multiple comparable facilities when conducting the top-down BACT analyses. Among other inaccurate arguments, the Applicant

⁴¹ *Id.*

⁴² Memorandum from John Calcagni to David Kee, EPA Air Quality Management Division, *Guidance on Determining Lowest Achievable Emission Rate (LAER)* (Feb. 28, 1989), https://archive.epa.gov/airquality/ttnnsr01/web/html/n26_8.html.

⁴³ 25 Pa. Code § 127.12(a)(5).

⁴⁴ 35 P.S. § 4006.6(c).

⁴⁵ 25 Pa. Code § 127.12(a)(5).

⁴⁶ 25 Pa. Code § 121.1.

⁴⁷ 35 P.S. § 4003.

⁴⁸ *Snyder v. DEP*, 2015 EHB 857, 863, 2015 WL 9590755 *3.

⁴⁹ *Snyder*, 2015 EHB at 865, 2015 WL 9590755 *5.

⁵⁰ *Id.* at 866.

⁵¹ *Id.* at 865–66.

⁵² *See id.*

claims that a top-down BACT analyses should ignore control levels from facilities that received permits but were never constructed directly—a position which directly conflicts with EPA’s guidance. The Applicant and the Department ostensibly apply EPA’s top-down methodology in conducting each BACT analysis, which is detailed in EPA’s 1990 New Source Review Workshop Manual (“NSR Workshop Manual”).⁵³ The manual sets forth the following five steps for applying the top-down method to selecting BACT:

1. “Identify all control technologies;”
2. “Eliminate infeasible options;”
3. “Rank Remaining control options by control effectiveness;”
4. “Evaluate most effect controls and document results;” and
5. “Select BACT.”⁵⁴

EPA’s Environmental Appeals Board (“EAB”) opinions are instructive regarding the proper application of BACT, and the EAB has found that Step 1 requires the “broadest sense” of availability.⁵⁵ This includes but is not limited to, conducting a comprehensive RACT/BACT/LAER Clearinghouse (“RBLC”) search and carefully evaluating the options returned.⁵⁶

Step 2, eliminating the infeasible options, does not limit feasible options to those demonstrated in practice. In fact, in 1989 guidance, EPA confirmed that “Congress intended BACT to perform a technology-forcing function,” meaning that the requirements are intended to improve emissions control technology over time.⁵⁷ Following that intent would be impossible if BACT were limited to the control levels previously determined for other facilities. Thus, the applicant must first look at whether a control technology has been demonstrated in practice at a similar source to be successful at controlling a type of emission.⁵⁸ The EAB has stated that “the existence of a similar Facility with a lower emissions limit creates an obligation for the permit applicant and permit

⁵³ NSR Workshop Manual. Although styled a draft, the NSR Workshop Manual was never finalized and has been consistently used by EPA and state agencies.

⁵⁴ *Id.* At B.6.

⁵⁵ *In Re Knauf Fiber Glass, GMBH*, 8 EAD 121, 129–30 (EAB 1999).

⁵⁶ Other sources of information regarding pollution controls include state and local agency determinations, journal articles, trade publications, and vendor literature.

⁵⁷ Memorandum from John Calcagni to Directors, EPA Air Quality Management Division, *Transmittal of Background Statement on “Top-Down” Best Available Control Technology (BACT)* (June 13, 1989) (“1989 EPA BACT Guidance”), <https://www.epa.gov/sites/default/files/2015-07/documents/topdawn.pdf>.

⁵⁸ Letter from David Garcia, EPA, to Tonya Miller, TCEQ, *TCEQ Docket 2021-0942-AIR and SOAH Docket 582-22-0201 on Initial Application for Permit Nos. 158420, PSDTX1572, and GHGPSDTX198 for the Port Arthur LNG, LLC – Port Arthur LNG Facility in Jefferson County, Texas*, Enclosure at 4 (Aug. 31, 2022) (“2022 TCEQ Letter”), <https://www.epa.gov/system/files/documents/2022-09/2022%20BACT%20Clarification.pdf>.

issuer to consider and document whether the same emission level can be achieved at the proposed Facility.”⁵⁹

However, the inquiry must not end there. If a technology has not been demonstrated in practice, Step 2 then requires the permitting agency to determine whether a control technology is “available” and “applicable.”⁶⁰ A technology is available if it is commercially available.⁶¹ A technology is applicable if it is “soon to be deployed (e.g., is specified in a permit) on the same or a similar source type.”⁶²

In a 2022 letter from EPA to the Texas Council on Environmental Quality, EPA confirmed that:

EPA has long recognized that a control technology and associated limit is not always required to be operational or actually demonstrated in practice to be considered technically feasible and BACT... In the absence of clear supporting documentation showing why a control technology is technically infeasible or a limit based on that technology is otherwise unachievable for a particular source taking into consideration energy, environmental, or economic impacts, *a permitted BACT limit at a similar source* (especially one that is supported by a vendor guarantee), *can still be considered “achievable” consistent with 40 CFR 52.21(b)(12), even if a Facility subject to such a limit is not yet operational.*⁶³

Thus, a technology is demonstrably applicable once a permit is issued, regardless of subsequent construction or operation, and the Applicant and the Department have an obligation to investigate and evaluate permitted sources. As explained below, the Applicant did not properly apply BAT to ammonia slip or carbon monoxide, nor accurately determine LAER for nonattainment pollutants.

a. The Applicant Incorrectly Dismissed Similar Facilities in Determining BAT Emission Rates for Ammonia, Resulting in an Impermissibly High Limit.

⁵⁹ *In re Miss. Lime Co.*, 15 EAD. 349, 366 (EAB 2011) (quoting *In re Indeck-Elwood, LLC*, 13 EAD 126, 183 (EAB 2006)).

⁶⁰ NSR Workshop Manual at B.18.

⁶¹ 2022 TCEQ Letter.

⁶² NSR Workshop Manual at B.18.

⁶³ 2022 TCEQ Letter.

The Applicant applies the top-down BACT analysis methodology to determining BAT for ammonia slip.⁶⁴ Because the demonstration of applicability in a BACT analysis occurs when a permit is issued, the ammonia slip limit of 2 ppmvd in both the Killingly Energy Center permit referenced by the Applicant⁶⁵ and in the Renovo Plan Approval, discussed below, must be considered in the BACT analysis when evaluating similar facilities. That these facilities were ultimately not constructed is of no consequence to this obligation.

In April of 2021, the Department issued a permit for the Renovo Energy Center in Clinton County containing a more stringent emissions limit for ammonia slip than the 5 ppmvd limit that Homer City claims is BAT.⁶⁶ Although the proposed Renovo facility was much smaller than this proposed plant, the relevant factors are consistent across the facilities. Both facilities intended: (1) to use General Electric 7HA.02 combustion turbines, (2) to be arranged in a 1 by 1 configuration with their heat recovery steam generators, and (3) to use selective catalytic reduction (“SCR”) to control NOx emissions.⁶⁷ In evaluating BACT for Renovo, the Department determined that an ammonia slip limit of 2.0 ppmvd corrected to 15% O₂ was appropriate for the facility’s SCR system.⁶⁸ The Department confirmed that this limit was achievable and enforceable after consulting with the Connecticut Department of Energy and Environmental Protection (“DEEP”), which oversees two similar facilities currently in operation that each achieve the 2.0 ppmvd ammonia slip limit.⁶⁹ The Department also verified the capability of the system to meet the limit with the facility’s owner and the manufacturer of the SCR system. Additionally, the Department confirmed the above facts in its “response to comments” document for Renovo Energy Center, as follows:

The Department re-evaluated the SCR operating technology for controlling ammonia slip. The Department reached out to the Connecticut Department of Energy and Environmental Protection (DEEP) to obtain the current status of the CPV Towantic combined cycle power plant turbines. This Facility uses a GE turbine base model. Stack testing reports from the CPV Towantic Facility in 2018 demonstrated compliance with a 2 ppm ammonia limit. Connecticut DEEP indicates they have no reports suggesting that the Facility is not able to meet this limit on an ongoing basis. The same results were reported by the Salem Harbor CCGT plant and the

⁶⁴ Application at pdf 55.

⁶⁵ *Id.* at pdf 50.

⁶⁶ Attachment 5, DEP, *Plan Approval for Renovo Energy Center* (Apr. 29, 2021) (“Renovo Plan Approval”).

⁶⁷ *See id.* at 29, Section vii.

⁶⁸ Attachment 5 at 23.

⁶⁹ DEP, Air Quality Program, Northcentral Regional Office, *Comment Response Document, Renovo Energy Center, LLC Renovo Energy Center Generation Plant Plan Approval 18-00033B* at 26 (Apr. 29, 2021), https://files.dep.state.pa.us/RegionalResources/NCRO/NCROPortalFiles/CommunityInformation/Renovo_Comment_response_document_April_29_2021.pdf.

PSEG Bridgeport plant with the same GE turbine. As a result of this updated evaluation, the Department approached Renovo Energy Center. Renovo Energy Center discussed with the manufacturer and they agreed to propose a revised emission limit for ammonia slip of 2 ppm. The Department established the ammonia slip limit of 2 ppm in the plan approval.⁷⁰

Notably, the Department's determination in its response to comments on the proposed Renovo facility belies the Applicant's claim in its top-down analysis that it could exclude from consideration ammonia slip limits for facilities employing GE Model 7HA.01 turbines. The Applicant specifically stated:

The turbines at CVP Towantic are GE Model 7HA.01 units and are permitted with a 2 ppmvd @ 15% O₂ ammonia slip. This predecessor to the proposed 7HA.02 units has a lower operating temperature which results in lower NOX emissions from the turbine exhaust. The comparatively higher uncontrolled NOX emissions from the 7HA.02 turbine itself leads to straining the capabilities of the SCR system to maintain an outlet concentration of 2.0 ppmvd @ 15%O₂.⁷¹

The Department did not arbitrarily include the facilities with the 7HA.01 turbines in its analysis when implementing the lower limit for Renovo Energy Center. Rather, the Department conferred with that applicant, who then confirmed with the manufacturer that the limit was possible, subsequently accepting the 2 ppmvd limit. Here, the Applicant's claim that the SCR system could not perform similarly—that it would be strained to meet a 2 ppmvd slip limit—makes very little sense. First, “straining the capabilities” does not imply that the limit is impossible to meet, just that it requires extra effort. Second, the Applicant's claim that the system would be strained because uncontrolled NO_x levels may be higher for the 7HA.02 turbine is not supported by how the turbines will be configured and operated. Ammonia slip (i.e., the unreacted portion of the ammonia left over) is a function of how the ammonia vapor is uniformly mixed with the inlet exhaust gases before they pass through the catalyst with no channeling or bypassing of the catalysts around the edges of the catalyst.⁷² Thus, mechanical distribution, mixing, sealing, and so forth are what govern how much unreacted ammonia might slip past the catalyst—not the amount of uncontrolled NO_x coming into the SCR catalyst. Third, specialized ammonia reduction catalysts are available on the market that can react with the ammonia slip past the SCR

⁷⁰ *Id.*

⁷¹ Application at pdf 55.

⁷² John L. Sorrels, *Chapter 2: Selective Catalytic Reduction*, EPA, Table 2.2 (June 2019), https://www.epa.gov/sites/default/files/2017-12/documents/scrcostmanualchapter7thedition_2016revisions2017.pdf (“Sorrels Chapter 2”).

catalyst and reduce that slip to 2 ppm or even lower.⁷³ In fact, by using ammonia reduction catalysts, even higher levels of ammonia slipping past the SCR catalyst can still be “caught” and prevented from being emitted to the ambient air.⁷⁴

Of course, SCR systems for processes of this scale are not one size fits all. They are custom designed and sized to meet the needs of each individual process. The type and quantity of SCR catalyst needed, the placement of the catalyst in the gas path, the cross-sectional area, space velocity past the catalyst, and a myriad of other design and operational issues are not off-the-shelf specs, but rather part of the custom design of an SCR system for a given application. General Electric’s website, in discussing the SCR solutions the manufacturer can provide, emphasizes customization, stating, for example, that the “shape, quantity, and in-duct location of the static mixing blades are tailored to customer process-conditions, ductwork arrangement, and emissions requirements. This upgrade requires less tuning and ends up being more flexible than conventional designs.”⁷⁵ Therefore, the Applicant simply needs to work with its SCR manufacturer to appropriately design the SCR system to meet a 2 ppmvd ammonia slip limit under all conditions where ammonia is injected into the exhaust gases, and perhaps also with ammonia reduction catalyst vendors to determine whether additional reduction beyond 2 ppmvd is feasible. There is no evidence in the record of the Application or Draft Plan Approval that the Applicant worked with GE or any other manufacturer to customize turbines to reduce ammonia slip below 5ppmvd @15% O₂.

Additionally, if a technology is available, then the permit applicant “is in the best position to provide an initial justification why an available technology is not ‘achievable’” for its proposed source.⁷⁶ Thus, the ammonia slip limit from the Renovo and Killingly permits apply unless the Applicant can demonstrate concretely why that limit is infeasible here. The Applicant has made no such showing, eliminating available and applicable control technologies with improper justifications and alluding to technological barriers that do not exist—all the while ignoring technologies like ammonia reduction catalysts that can even further reduce ammonia slip. Therefore, correcting the top-down analysis used to determine BAT for ammonia slip results in a limit of 2.0 ppmvd @15% O₂.

The practical implications of excessive ammonia concentrations include both health risks and diminished quality of life for people living, working, or recreating in the vicinity. The Company and the Department failed to consider the potential impacts on local air quality considering the

⁷³ See, e.g., Johnson Matthey, *Ammonia slip catalysts (ASC)*, <https://matthey.com/products-and-markets/energy/stationary-emissions-control/ammonia-slip-catalysts> (last visited Sept. 25, 2025); Alec Miller, *SCR and Advanced Ammonia Slip Catalyst*, Johnson Matthey (June 11, 2015), <https://www.aqmd.gov/docs/default-source/Agendas/aqmp/control-strategy-symposium/pm2-5-miller.pdf?sfvrsn=2>.

⁷⁴ *Id.*

⁷⁵ GE Vernova, *Selective catalytic reduction (SCR) for power*, <https://www.gevernova.com/steam-power/services/aqcs/upgrades/nox> (last visited Sept. 25, 2025).

⁷⁶ 1989 EPA BACT Guidance at 4–5.

cumulative impact of the proposed Facility having seventeen devices emitting ammonia, not just a single SCR with a limit of 5 ppm. EPA has described ammonia in the context of being an SCR reagent as having a “pungent odor” at concentrations of 5 ppm and above.⁷⁷ Thus, particularly on days with sub-optimal air dispersion, downwind communities could be subjected to persistent foul odors and other potential impacts.

In sum, the Department must lower the ammonia slip limit for the proposed Facility’s SCR systems from 5.0 ppmvd @15% O₂ to no higher than 2.0 ppmvd @15% O₂ and incorporate a corresponding hourly limit into any final permit, as this represents BACT for this technology.⁷⁸

b. The Department Must Lower the VOC Emission Rate for the Combined Cycle Turbines Because the Applicant’s Chosen Limits Exceed LAER.

The Applicant selectively ignored relevant RBLC search results when conducting its LAER analysis, allowing it to claim that LAER for the VOC emission rate for the combined cycle turbines without duct firing is 1.0 ppmvd. In reality, the Applicant identified multiple facilities with maximum combined cycle combustion turbine VOC emission rates without duct firing of 0.7 ppmvd. Similarly, the limit of 1.5 ppmvd with duct firing does not reflect LAER. The Department must lower the permitted VOC emission rates accordingly.

Federal regulations define LAER as “[t]he most stringent emissions limitation which is achieved in practice by such class or category of stationary sources.”⁷⁹ A LAER analysis is conducted in the same manner as a BACT analysis, except that the cost of the control technology is relevant only if the cost is so exorbitant that it would prevent construction of the Facility.⁸⁰ “[I]f some other plant in the same (or comparable) industry uses that control technology, then such use constitutes de facto evidence that the economic cost to the industry of that technology control is not prohibitive,” and cost drops out of the analysis.⁸¹

Without Duct Firing

The Applicant errs by eliminating facilities which achieve lower emission rates from its LAER determination by relying on specious technical reasoning and a misunderstanding of the principles and law underlying LAER determinations. Specifically, the Applicant inappropriately

⁷⁷ Sorrels Chapter 2, Table 2.2.

⁷⁸ See Section 3.d. below regarding continuous monitoring for ammonia slip.

⁷⁹ 25 Pa. Code § 121.1.

⁸⁰ Memorandum from John Calcagni to David Kee, EPA Air Quality Management Division, *Guidance on Determining Lowest Achievable Emission Rate (LAER)* (Feb. 28, 1989), https://archive.epa.gov/airquality/ttnnsr01/web/html/n26_8.html.

⁸¹ *Id.*

disregards the limits at those facilities based on claims that the turbines were either significantly smaller or have inherently different emissions profiles than the GE 7HA.02 turbines proposed for this Facility.⁸²

The Applicant's RBLC search results contain four facilities that achieve a VOC emission rate of 0.7 ppmvd @15%O₂ without duct firing. These facilities include Chickahominy Power LLC, Renovo Energy Center LLC, Killingly Energy Center, and West Deptford Energy Station.⁸³ The Applicant's analysis of LAER for VOC emissions omits the C4GT Facility's Option 1,⁸⁴ a GE 7HA.02 capable of 0.7 ppmvd VOC emissions @ 15% O₂. Yet the Applicant included the Facility's Option 2, a Siemens SGT6-8000H, in its attached RBLC search.⁸⁵ The Applicant provides no rationale for ignoring Option 1, but regardless of the option ultimately constructed by C4GT, the applicant had already analyzed the potential VOC emission rate under Option 1 and the relevant permitting agency had already accepted that rate as LAER.

Once C4GT Option 1 is incorporated into the analysis, the technical feasibility of achieving a matching emission rate of 0.7 ppmvd at this proposed Facility is virtually indisputable. That is because both C4GT Option 1 and the proposed Facility here would employ the exact same base make and model turbine—the GE 7HA.02. Although the two facilities contemplate different maximum hourly fuel inputs, the emissions profiles likely match, and Homer City provided no evidence to the contrary.⁸⁶ Moreover, the proposed Renovo facility, which also would have used a GE 7HA.02 turbine, was designed to achieve a 0.7 ppmvd VOC emission rate without duct firing.

As detailed in the above section, whether or not a permitted facility ultimately became operational is inconsequential in identifying BACT/LAER/BAT. The designers of those facilities, applying good engineering practice, determined that the permitted emissions rates and technologies were feasible and met the requirements of BACT/LAER/BAT. Furthermore, turbines need only be substantially similar—they are not required to be identical in size, make, or model in order to be BACT/LAER/BAT. The history of BACT (and related controls such as BAT and LAER) rest on the concept of emissions and controls from “similar” sources, where the emissions of the pollutants in question would be from generally similar mechanisms. Emissions of VOCs from turbines are the result of mechanisms such as incomplete combustion and/or generation of certain VOCs through combustion processes in the turbines followed by their reduction later in the oxidation catalyst. As long as these combustion processes across various

⁸² Application at pdf 46–47.

⁸³ Application, Appendix D, Table D-3, at pdf 358.

⁸⁴ Sometimes a facility receives an approval that allows it to have multiple options for the turbine ultimately chosen for the proposed facility. In those cases, all approved options appear in the RBLC.

⁸⁵ See Attachment 6 RBLC, C4GT entry. *See also* Application, Appendix D, Table D-3 at pdf 356.

⁸⁶ *See* Attachment 6 RBLC, C4GT entry, note 34000 MMCF/YR throughput converted to MMBtu/hr assuming 8760 hours of operation and 1020 btu/scf natural gas HHV. *See also* Application Appendix C average hourly heat input per turbine at pdf 335.

turbine models and manufacturers are the same — and they are for the various GE models as well as models from competitors like Siemens and Mitsubishi — the VOC emissions from the combustion process would be comparable. In addition, it is crucial to recognize that the ultimate VOC emissions to the atmosphere is not what is emitted from the turbine, but rather what remains after those emissions are reduced in the oxidation catalyst. Thus, the type and quantity of oxidation catalyst is the far greater determinant of VOC emissions to the ambient air. Properly designed oxidation catalysts can and will reduce VOC emissions to the desired degree regardless of the inlet VOC to the oxidation catalyst, making the Applicant’s argument about turbine makes and models completely moot. The burden of proof lies on the applicant to prove that a technology is not feasible, and they failed to do so here.

Including the RBLC search results described above, which were impermissibly excluded from HCR’s LAER analysis, clarifies that LAER is 0.7 ppmvd @15% O₂ without duct firing. Thus, the body of evidence demonstrates that the GE 7HA.02 is capable of achieving 0.7 ppmvd @15% O₂ without duct firing. Homer City has offered no documents from GE demonstrating that some variation at its proposed Facility renders this limit unachievable. Thus, the Department must lower the permitted VOC emission rate for the combined cycle turbines without duct firing to 0.7 ppmvd @15% O₂.

With Duct Firing

The VOC emission rate with duct firing in the proposed permit is 1.5 ppmvd @15% O₂, which exceeds LAER based on the RBLC search results. Those results clearly indicate that similar facilities achieve 1.4 ppmvd. However, due to the non-standardized nature of RBLC reporting, further investigation in the RBLC and beyond is required to determine whether some facilities have an emission rate limit as low as 1.0 ppmvd with duct firing.

The RBLC results include rates labeled “Emission_Limit_1” (hereinafter referred to as “primary emission rate”) and “Emission_Limit_2” (hereinafter “secondary emission rate”).⁸⁷ In some cases, a result specifies the conditions under which the primary or secondary rate applies, such as whether it is with or without duct firing. In other cases, that information is omitted, so either limit could potentially apply when there is duct firing. In other cases, there is only a single overall limit reported. These ambiguous emission rates which may or may not apply with duct firing include rates as low as 1.0 ppmvd. Examples include:

1. Lincoln Land Energy Center (1.0 ppmvd primary and 1.1 ppmvd secondary),
 2. New Covert Generating Facility (1.0 ppmvd overall),
 3. Middlesex Energy Center (1.0 ppmvd overall, using a GE 7HA.02 turbine),
- and

⁸⁷ Attachment 6 RBLC.

4. Lackawanna Energy Center (1.0 ppmvd overall, using a GE 7HA.02)

There are additional examples in the RBLC search results attached as Attachment 6 RBLC. Note that the Middlesex and Lackawanna facilities above use the same base model turbine as proposed for this Facility. The Department should require the Applicant to investigate whether the emission rates reported for the above facilities apply with duct firing. If so, then the corresponding lower emission rate might represent LAER.

Regardless, this Facility should be able to achieve 1.4 ppmvd with duct firing. This limit was the rate for C4GT's option 1 with duct firing, which should have been included in the Applicant's RBLC results.⁸⁸ Renaissance Energy Center also appears to have a permitted rate of 1.4 ppmvd with duct firing, as well as Greenville power station.⁸⁹ Thus, unless the Applicant provides concrete evidence of technical infeasibility, LAER for the VOC emission rate for the combined cycle turbines with duct firing is no higher than 1.4 ppmvd @15% O₂. The Department should change the permit to incorporate that limit, or a lower one if indicated after an investigation of the ambiguous RBLC search results discussed above. Where this ambiguity exists, the Department should reach out to other agencies to confirm whether or not a limit of 1.0 ppmvd is achievable with duct firing.

c. The Applicant Selected an Impermissibly High BAT Limit for Carbon Monoxide ("CO") by Ignoring Lower Emission Rates at Analogous Facilities.

In its BAT analysis, the Applicant identified numerous analogous facilities with CO emissions rates of 0.9 ppmvd, as well as several other facilities with limits equal to either 1 or 1.5 ppmvd. In fact, every facility identified in the Applicant's RBLC search that provided a ppmvd emission rate has a CO emission rate lower than 2.0 ppmvd.⁹⁰ Yet the Applicant ignored these results to select a maximum CO emission rate of 2.0 ppmvd.

The Applicant's justification for a CO emission rate that appears to be at least double the BAT does not even address the efficacy of control measures. Instead, the Applicant merely alleged that continuous emissions monitoring systems ("CEMS") for CO are unreliable at concentrations below 2.0 ppmvd.⁹¹ For several reasons, the Department must not accept this weak justification and must instead conform the permit limit with BAT.

⁸⁸ See Attachment 6 RBLC, C4GT entry.

⁸⁹ *Id.*

⁹⁰ Application, Appendix D Table D-2 at pdf 57.

⁹¹ Application at pdf 45.

First, all of the other facilities listed in the Applicant's RBLC search results, without exception, are required to meet limits under 2 ppmvd and as low as 0.9 ppmvd. This includes several facilities permitted with GE 7HA.02 turbines.⁹² These facilities inescapably demonstrate the technical feasibility of the lower CO emission rates. The Applicant has not offered any evidence of infeasibility, let alone evidence to support such a large deviation from the RBLC results.

Second, a BAT determination is not legally predicated upon monitoring technology but rather based on the abilities of the control technologies themselves. A facility cannot dismiss a technology simply because the continuous monitoring aspect is inconvenient. If continuous monitoring technology is, in fact, demonstrably unable to measure compliance, a facility could demonstrate compliance through conducting more sensitive stack testing at reasonably frequent intervals.

Finally, reliable CO continuous emission monitoring systems ("CEMS") exist with detection limits well below 2.0 ppmvd. In fact, as testing of natural gas fired turbines for at least the last decade has repeatedly demonstrated, emissions of CO are routinely below 2 ppm as measured using the same instrument analyzers as those used in CO CEMS systems. The Applicant's claimed concerns regarding the reliability of these industry-standard CEMS are not credible and warranted additional scrutiny from the Department.

To provide a random example, below is an excerpt from a recent Relative Accuracy Test Audit for CO from a gas turbine where the reference method (instrument) and plant CEMS results are shown in ppm corrected to 15% oxygen. In each of the tests, the Plant CEMS CO levels are well below 2 ppm and are able to be measured by the CEMS and instruments. The same analyzers are used in CO CEMS, and therefore there is no question that CO CEMS can accurately measure levels at 2.0 ppm or lower.

⁹² See generally, Attachment 6 RBLC.

**TABLE 5-5
RELATIVE ACCURACY TEST RESULTS
CO ANALYZER, PPM @ 15% O₂
GRAYS HARBOR ENERGY CENTER
GAS TURBINE 1**

Run Number	Date	Time	Montrose RM	Plant CEMS
Run 1	8/14/18	1023-1048	-0.09	0.04
Run 2	8/14/18	1057-1118	-0.11	0.03
Run 3	8/14/18	1128-1149	-0.10	0.01
Run 4	8/14/18	1159-1220	-0.11	0.00
Run 5	8/14/18	1230-1251	-0.22	0.00
Run 6	8/14/18	1304-1325	-0.23	0.00
Run 7	8/14/18	1333-1354	-0.10	0.00
Run 8	8/14/18	1411-1432	-0.03	0.00
Run 9	8/14/18	1444-1505	-0.14	0.01
Run 10	8/14/18	1515-1536	-0.20	0.01
Run 11	8/14/18	1545-1606	-0.20	0.00
Run 12	8/14/18	1618-1639	-0.18	0.00

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In this particular test a relative accuracy of 0.2 ppm was calculated for the Facility's CO CEMS.⁹⁴ This relative accuracy being for measurements below 0.05 ppm, as seen in the table above. This clearly demonstrates the ability of available CO CEMS devices to accurately measure CO concentrations below 1.0 ppm.

For these reasons, the Department must lower the maximum CO emission rate for the combined cycle combustion turbines to reflect BAT, which is 0.9 ppmvd @15% O₂ or below for combustion turbines of this class.

2. DEP must add work practice requirements necessary to maintain the functionality of the SCR catalyst.

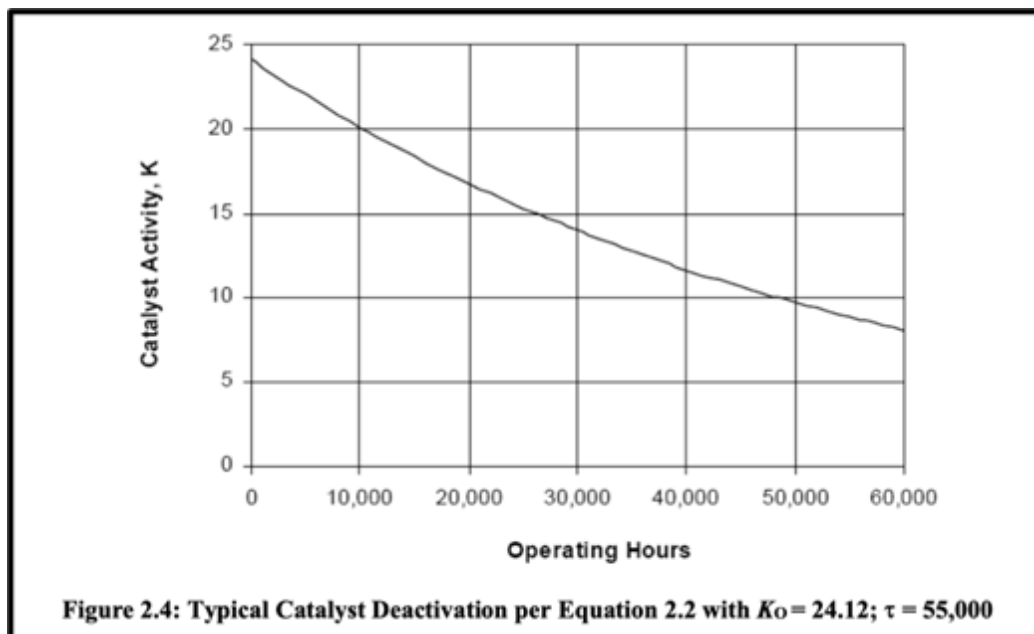
EPA's *Air Pollution Control Cost Manual* explains the relationship between ammonia slip and SCR catalyst degradation as follows:

⁹³ Montrose Air Quality Services, *Source Test Report 2018 Source Evaluation and Relative Accuracy Testing Grays Harbor Energy Center Gas Turbines #1 And #2, and Auxiliary Boiler Elma, Washington* at 28 (Oct. 3, 2018), https://efsec.wa.gov/sites/default/files/2025-05/20181009_RATARptA2.pdf.

⁹⁴ *Id.*

Ammonia slip does not remain constant as the SCR system operates but increases as the catalyst activity decreases. Properly designed SCR systems...maintain low ammonia slip levels, approximately less than 2 ppm. While ammonia slip levels in operating permits are typically in the range of 2 to 10 ppm, in actual practice lower slip levels are achieved, and the **slip levels approach permitted levels only when the catalyst is near the end of its service life.**⁹⁵

There are several common mechanisms of catalyst deactivation and the loss of reactive surface area. These include thermal sintering, which is “a permanent loss of catalyst activity due to a change in the pore structure of the catalyst” that may occur at temperatures as low as 450 degrees Fahrenheit; blinding, plugging, and fouling by ammonia salts and other particulate matter that binds to the catalyst at sites that would otherwise be available for NO_x reduction; erosion of the catalyst material; and simple aging.⁹⁶ As shown in the graph below, catalyst activity also tends to decrease as the number of operational hours increases.



For SCRs that must operate continuously year-round, the EPA recommends operators develop a catalyst management plan (“CMP”) that includes a schedule to replace aging catalysts, as well as management of other SCR equipment.⁹⁸ To maximize efficiency, EPA recommends that

⁹⁵ Sorrels Chapter 2 at 24 (emphasis added).

⁹⁶ *Id.* at pdf 27–28.

⁹⁷ *Id.* at pdf 25.

⁹⁸ *Id.* at pdf 29.

facilities conduct an annual inspection of the SCR system, which includes inspecting “the catalyst, the reactor, and the complete NH₃ storage and injection system.”⁹⁹ DEP must add these conditions to the Draft Plan Approval, and also require the Applicant to tune and optimize the ammonia injection grid annually.¹⁰⁰ This would ensure “uniform flow rate/velocity and uniform NH₃/NO_x molar distribution,” without which NO_x reduction across the catalyst would decrease, with a corresponding increase in ammonia slip.¹⁰¹

VI. The Emissions Monitoring and Testing Requirements in the Draft Plan Approval are Insufficient to Ensure Compliance with Applicable Emissions Limits.

1. Stack Testing Every 5 Years Is Insufficient to Ensure Compliance with Emissions Limits for HAPs and PM.

Section 112(a) of the Clean Air Act sets the major source threshold for HAPs as the potential to emit 25 tons per year (“tpy”) in the aggregate or 10 tpy of any individual listed HAP.¹⁰² The proposed Facility would be a major source for total HAPs, with a potential to emit over 57 tpy.¹⁰³ It would also exceed the major source threshold for formaldehyde. Additionally, the potential to emit toluene is less than half a ton below the major source threshold.

Given the significant health injuries associated with human exposure to elevated concentrations of these HAPs, as described in a later section, assuring compliance with permitted limits is of major importance to the neighboring communities. Unfortunately, as far as Commenters are aware, no CEMS for HAPs are yet commercially available. This necessitates that the Department rely upon periodic stack testing for these pollutants.

However, the Draft Plan Approval requires the Applicant to measure emissions of total HAPs, individual HAPs, and condensable PM—another air pollutant which causes significant health and environmental harms—only during an initial performance testing, and then in subsequent tests only once every 5 years. Such an infrequent testing schedule is insufficient to verify ongoing compliance by a new major source facility. New facilities are often plagued by unanticipated issues that need to be ironed out over the initial years of operations. For example, the Shell Polymers Monaca Facility has had a long list of emissions violations since it was

⁹⁹ *Id.* at pdf 30.

¹⁰⁰ *See id.*

¹⁰¹ *Id.*

¹⁰² CAA § 112(a).

¹⁰³ Application at pdf 21.

brought online in 2022.¹⁰⁴ This makes more frequent testing until the Facility has proven its stability all the more important.¹⁰⁵

Additionally, regular stack testing is a useful tool for verifying the accuracy of CEMS installed for other pollutants. High quality laboratory-verified test results provide a useful ground truth value to ensure that installed CEMS have not drifted out of calibration.¹⁰⁶

Given the risk posed to public health by exposure to HAPs and PM, the Department should require the Facility to undergo annual stack testing for these pollutants until the Facility establishes a track record of compliance. At that point, the Department could step down the requirement to allow less frequent testing. Additionally, the Department should consider increasing the stack testing frequency for other pollutants to annually as well to ensure the integrity of ongoing monitoring systems.

2. The Department Should Require the Applicant to Perform Stack Tests Over a Range of Operating Conditions, Not Only at Maximum Capacity.

The Draft Plan Approval requires that “performance tests shall be conducted while the respective source is operating at maximum routine operating conditions.”¹⁰⁷ This is not sound testing practice. Pollutants generated in the combustion process in the gas turbine do not all behave in the same manner. For example, although NO_x emissions may be expected to increase with load, CO emissions or VOC emissions actually diminish as load increases given the higher combustion temperatures as load increases, which creates more NO_x while reducing the CO and VOCs.¹⁰⁸ Therefore, testing at maximum conditions may be appropriate for NO_x, but it is inappropriate for CO and VOCs.

¹⁰⁴ DEP, Facility Information, Notices of Violation (NOVs) section generally, <https://www.pa.gov/agencies/dep/about-dep/regional-office-locations/southwest-regional-office/southwest-community-information/shell/Facility-information#accordion-3f6124f4c8-item-58b28c5018> (last updated Sept. 18, 2025).

¹⁰⁵ See, e.g., *EME Homer City Generation LP Indiana County, Pennsylvania*, Petition Nos. III-2012-06, III-2012-07, III-2013-02 (EPA Jul. 30, 2014) at 45 (“EME Homer City Generation”), (stating that monitoring requirements should be “sufficient to assure compliance with permit terms and conditions”); *Sierra Club v. E.P.A.*, 536 F.3d 673, 675 (D.C. Cir. 2008) (holding that an annual monitoring requirement for a daily emissions limit would be inadequate under the Clean Air Act).

¹⁰⁶ EPA, Monitoring Insights, Relative Accuracy in EPA CAMD’s Power Sector Emissions Data at 1, 4–5 (May 10, 2022), <https://www.epa.gov/system/files/documents/2022-05/Monitoring%20Insights-%20Relative%20Accuracy.pdf>.

¹⁰⁷ Draft Plan Approval at 24.

¹⁰⁸ GE Power Systems, *Gas Turbine Emissions and Control*, see generally graphs at 5–6. https://www.gevernova.com/content/dam/gepower-new/global/en_US/downloads/gas-new-site/resources/reference/ger-4211-gas-turbine-emissions-and-control.pdf (last visited Sept. 25, 2025).

In addition, as the Department should be aware, NO_x emissions, as well as those of CO and VOCs, are then reduced via the respective SCR and oxidation catalysts employed as control mechanisms. When these catalysts are not effective (i.e., when the exhaust gases are not hot enough to increase catalyst temperatures above the catalysts' minimum operating temperatures) they do not reduce NO_x¹⁰⁹ or CO/VOCs.¹¹⁰ Therefore, simply testing at maximum operating conditions misses the far greater levels of pollutant emissions at loads that are significantly lower than maximum, during times when the catalysts are not effective. These operations at lower loads include startup and shutdown events, and the emissions during such events count toward the annual emission limits for the Facility.

For these reasons, the Department should require the use of CEMS at all times for measuring emissions of NO_x, CO, VOC, ammonia, and filterable PM_{2.5}. For pollutants for which CEMS are not available, like condensable PM_{2.5}, the Department should require stack testing to be conducted at a range of loads annually, including loads that correspond to minimum operating temperatures for both the SCR and the oxidation catalysts, which will have different minimum operating temperatures, as well as at maximum operating loads.

Therefore, to effectively establish compliance with annual limits, determine the public's exposure levels for various pollutants, and perhaps even detect early signs of potential equipment malfunctions, the Department should require the Applicant to install and operate at all times CEMS for all pollutants where CEMS are available and also perform stack testing at various loads and operational stages, including during start-up and shut-down annually.

3. To Ensure Compliance with Hourly and Rolling Annual VOC and PM Emission Limits, the Department Must Require VOC CEMS.

The Department must require CEMS for VOC and filterable PM emissions from the combustion turbines. An emission limit is enforceable only if the Title V permit contains sufficient monitoring, recordkeeping, and reporting requirements "to enable regulators and citizens to determine whether the limit has been exceeded and, if so, to take appropriate enforcement action."¹¹¹ Establishing adequate means of testing, monitoring, recordkeeping, and reporting begins at the plan approval stage. Additionally, the Department must include adequate analysis

¹⁰⁹ Sorrels Chapter 2 at 20.

¹¹⁰ EPA, Air Emission Monitoring Knowledge Base, *Monitoring by Control Technique - Catalytic Oxidizer*, <https://www.epa.gov/air-emissions-monitoring-knowledge-base/monitoring-control-technique-catalytic-oxidizer> (last updated Jan. 30, 2025).

¹¹¹ *In the Matter of Orange Recycling and Ethanol Production Facility, Pencor-Masada Oxynol, LLC*, EPA Order on Petition No. II-2001-05 at 7 (Apr. 8, 2002), https://www.epa.gov/sites/default/files/2015-08/documents/masada-2_decision2001.pdf.

in the permit record and demonstrate a match between the permit’s monitoring conditions and the associated emissions limits.¹¹²

As EPA has instructed in the Title V permit context, “the time frame of the emission limits and the Permit’s compliance assurance provisions” must match to demonstrate compliance.¹¹³ EPA expressly stated that “it is unclear how compliance with hourly and annual emission limits [could] be demonstrated” without adequate monitoring between stack tests.¹¹⁴ Monitoring provisions must assure compliance with short-term hourly limits, which apply continuously at all times of operation.

The proposed project would be classified as a major source under Federal and Pennsylvania New Source Review (“NSR”) regulations. Therefore, the Facility must comply with BACT (for attainment pollutants) and LAER (for nonattainment pollutants) requirements for those NSR-regulated pollutants that trigger NSR applicability. Nonattainment New Source Review requirements apply to Homer City’s VOC emissions because the Project is proposed in the Northeast OTR [Ozone Transport Region] which is managed as a nonattainment area and VOC is a precursor pollutant of ozone, and because the Facility’s projected emissions of 332.16 tpy exceed the nonattainment major source threshold of 50 tpy.¹¹⁵ As such, the Applicant must meet the legal requirements for LAER for VOCs.

Emission limits defined within the permit must be practically enforceable, which means that there must be a “method to determine compliance, including appropriate monitoring, recordkeeping, and reporting”.¹¹⁶ If the monitoring requirements in the permit are not sufficient to detect when a limit is exceeded, then the limit is not practically enforceable. As EPA has explained, “[i]n order for an emission limit to be enforceable as a practical matter, the permit must clearly specify how emissions will be measured or determined for purposes

¹¹² *In the Matter of CITGO Refining and Chemicals Co., L.P., West Plant, Corpus Christi, TX*, EPA Order on Petition No. VI-2007-01, at 7 (May 28, 2009) (“CITGO Order”), (“In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record”), https://www.epa.gov/sites/default/files/2015-08/documents/citgo_corpuschristi_west_response2007.pdf.

¹¹³ *In the Matter of U.S. Steel Corp., Clairton Coke Works*, Order on Petition Nos. III-2023-5 & III-2023-6, at 10 (Sept. 18, 2023) (“Clairton Order”), https://www.epa.gov/system/files/documents/2023-10/us-steel-clairton-order_9-18-23.pdf.

¹¹⁴ *Id.*

¹¹⁵ See 40 C.F.R. § 81.457; Application, Appendix C, Table C-1, NSR Summary.

¹¹⁶ See, e.g., EPA, *Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Final Rule and Proposed Rule*, 67 Fed. Reg. 80, 186, 190–91 (Dec. 31, 2002). *Review of Final Rule Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act*, 88 Fed. Reg. 66,336, 66,340 (Sept. 27, 2023), <https://www.federalregister.gov/documents/2023/09/27/2023-21041/review-of-final-rule-reclassification-of-major-sources-as-area-sources-under-section-112-of-the#footnote-7-p66340> (citing John S. Seitz and Robert I. Van Heuvelen to EPA Regional Offices, *Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act*, from John S. Seitz and Robert I. Van Heuvelen to Regional Offices (January 25, 1995).

of demonstrating compliance with the limit.”¹¹⁷

This means that the proposed Facility “must be able to show continual compliance...with each limitation or requirement,” which requires “adequate testing, monitoring, and record-keeping procedures.”¹¹⁸ As discussed above; to comply with LAER, the Proposed Permit limits the emission rate for VOC from the turbines. It also includes hourly VOC emission limits of 8.7 lb/hr with duct firing and 4.5 lb/hr without duct firing.¹¹⁹

Yet, despite the need for a match between the timeframe of the emission requirements and the compliance assurance measures, the draft permit requires the Facility to only test whether it is complying with its hourly and continuous VOC emissions limits once every 5 years.¹²⁰ This is unacceptable, failing to meet the requirements of LAER, ensure compliance with short-term emission limits,¹²¹ or inform the risk to residents forced to live near this proposed site. The Facility’s VOC monitoring must be capable of tracking emissions continuously and during all operating conditions, including normal operations, startup and shutdown, and periods of operation when the oxidation catalyst is outside of its functional operating parameters (e.g. due to the operating temperature or pressure differential).

Moreover, even though the Draft Plan Approval identifies oxidation catalysts for VOC control, this must be paired with adequate monitoring to ensure the control technology is working as designed and meeting the purported control efficiencies expressed in the Application. The plant must use CEMS to capture daily and load-based variations.

Similarly, for PM emissions, the Draft Plan Approval provides hourly limits of 24.1 lb/hr with duct firing and 19 lb/hr without duct firing.¹²² The Draft Plant Approval also provides rolling annual emissions limits for PM from the combined cycle and simple cycle units, and Homer City would be a major source of these pollutants.¹²³ Yet the Draft Plan Approval requires stack testing for PM and VOC only *every five years*,¹²⁴ even though, as for VOC emissions, filterable PM CEMS are readily available.¹²⁵ Moreover, the Department did not

¹¹⁷ *In the Matter of Yuhuang Chemical Inc. Methanol Plant*, Order Responding to the Petitioners’ Request for Objection to the Issuance of a Title V Operating Permit, Pet. No. VI-2015-03, at 14 (Aug. 31, 2016), https://www.epa.gov/sites/default/files/2016-09/documents/yuhuang_response2015_0.pdf.

¹¹⁸ NSR Workshop Manual at A.5.

¹¹⁹ Proposed Permit at 87–88.

¹²⁰ Proposed Permit at 90.

¹²¹ Note that although the Proposed Permit exempts the Facility from some short-term limits during periods of start-up and shut-down, the emissions during those periods still must be measured to determine compliance with annual emission limits.

¹²² Proposed Plan Approval at 87.

¹²³ *Id.*

¹²⁴ *Id.* at 90.

¹²⁵ See, e.g., Thermo-Fisher Scientific, Thermo Scientific PM CEMS: A dual-sensing technology, <https://tools.thermofisher.com/content/sfs/brochures/EPM-PMCEMS-white-paper.pdf> (last visited Sept. 29, 2025);

justify its decisions by explaining how it could ensure that the Facility complies with the permitted emissions limits without additional monitoring.

The need for filterable PM CEMS is accentuated by the issue of turbine ablation. This is the process by which the rotors, stators, combustion chamber walls, and other turbine components in contact with high combustion temperatures and high turbulent flows in the turbine's gas path slowly lose material, including metals.¹²⁶ This lost material manifests itself as filterable particulate matter. The rate at which this occurs depends on a large number of factors and can vary greatly. In addition, filterable particulate matter is also created when exhaust gases flow past the SCR and oxidation catalysts, which have layers that can also erode over time.

These mechanisms are not captured by broadly estimated emissions factors. Measurements have confirmed that there are high degrees of variability of filterable PM and associated metal emissions from gas turbines.¹²⁷ Thus, using an emission factor alone to reliably confirm compliance is effectively meaningless. The turbine- and catalysts- specific nature of the filterable PM generation process makes it all the more important for filterable PM to be directly and continuously monitored on each turbine.

Therefore, in order to ensure that the permit limits are enforceable, the Draft Plan Approval must be revised to require VOC and filterable PM CEMS for the combustion turbines.

4. The Department Should Require CEMS for Ammonia Slip.

As addressed in more detail below, ammonia slip is a key parameter for determining the effectiveness of NOx control and also contributes to secondary formation of particulate matter. The Applicant has selected SCR to meet BAT requirements for NOx control, and tracking ammonia slip is a vital component of monitoring catalyst deactivation and control technology efficacy. Catalyst activity in the SCR decreases over time, which corresponds with a decreased NOx reduction reaction rate and an increase in ammonia slip.¹²⁸ Once ammonia slip reaches the design limit, the catalyst must be replaced, or a new catalyst must be added.¹²⁹

The Draft Plan Approval currently requires ammonia slip to be monitored only indirectly by

Teledyne Monitor Labs, LaserHawk, <https://www.teledyne-ml.com/en-us/products/lh360> (last visited Sept. 29, 2025).

¹²⁶ Graz Technical University, *Aeroengine Safety, 11.2.2.2 Combustion Chamber Damage*, <https://aeroenginesafety.tugraz.at/doku.php?id=11:112:1122:11222:11222> (last visited Sept. 25, 2025).

¹²⁷ EPRI, *Combustion Turbine Stack Trace Metals Testing Analysis*, at pdf 22–23 (Aug. 5, 2024), <https://restservice.epri.com/publicdownload/000000003002029941/0/Product>.

¹²⁸ Sorrels Chapter 2, § 2.2.2, at 2-24–2-27.

¹²⁹ *Id.*

monitoring inlet NO_x, outlet NO_x, and NH₃ injection rate, and then running that data through an equation.¹³⁰ To adequately meet BAT requirements for NO_x control, the Facility must consider the most effective emission limitations and control technology, including continuous monitoring of ammonia slip because the purpose of the BAT requirement is “to minimize the emission of air contaminants in light of the design and operating features of the control technology.”¹³¹ By adequately monitoring ammonia slip, the Facility can develop a catalyst management plan, which would ensure that the Facility is achieving the required NO_x removal while minimizing ammonia emissions to the environment. Since the Facility here is subject to BAT for NO_x emissions, the most stringent limits and control technologies must be included in this operating permit.

Ammonia slip control is also important because excessive air concentrations of ammonia can harm human health and the environment, and because ammonia is one of the four main PM_{2.5} precursor pollutant in Pennsylvania.¹³² Even if Indiana County currently is under the National Ambient Air Quality Standards for PM_{2.5}, minimizing emissions remains important for public health because ambient concentrations of PM_{2.5} correlate with increased levels of human health injuries and premature morbidity at concentrations as low as 5 µg/m³.¹³³

Continuous monitoring of ammonia slip is not only a readily available technology but is also required for comparable facilities throughout the state of Pennsylvania. For example, Invenergy’s Lackawanna Energy Center requires an “ammonia slip monitoring system on the exhaust of each combustion turbine and heat recovery steam generator in accordance with all applicable requirements specified in 25 Pa. Code Chapter 139 and the PADEP’s ‘Continuous Source Monitoring Manual.’”¹³⁴

For the above reasons, the Department should require the Applicant to implement readily available ammonia CEMS for all of the SCR control systems that will be installed at the proposed Facility.

VII. Construction of the Facility Prior to a Plan Approval is Unlawful.

¹³⁰ See DEP, Homer City Generation L.P., Draft Plan Approval at 91.

¹³¹ *Snyder v. DEP*, 2015 EHB 857, 863, 2015 WL 9590755 *3.

¹³² See 25 Pa. Code § 121.1 (including ammonia in definition of “Regulated NSR pollutant” as a PM_{2.5} precursor in nonattainment areas).

¹³³ EPA, *Policy Assessment for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter*, at 3–30 (May 2022), https://www.epa.gov/system/files/documents/2022-05/Final%20Policy%20Assessment%20for%20the%20Reconsideration%20of%20the%20PM%20NAAQS_May2022_0.pdf

¹³⁴ DEP, *Lackawanna Energy Center, Title V Operating Permit 35-00069* at 54 (Aug. 2, 2023), https://files.dep.state.pa.us/RegionalResources/NERO/NEROPortalFiles/CommunityInformation/Lackawanna_Energy_Center/Lackawanna_Energy_Center_TVOP_35-00069.pdf

As described in the Application, the Review Memo, and these comments, Nonattainment New Source Review (“NNSR”) and PSD apply to the proposed Homer City Facility. NNSR and PSD rules require the application of advanced technology (LAER and BACT) at stationary sources to reduce air pollution.

EPA recently issued a press release linking to what it described as new “guidance” for regarding the scope of the source for NSR/PSD.¹³⁵ This press release linked to a webpage,¹³⁶ which linked in turn to webpage with a table titled “Begin Actual Construction.”¹³⁷ This table included one item posted in 2025, a letter dated September 2, 2025 to the Maricopa County Air Quality Department regarding an issue involving TSMC Arizona Corporation (“TSMC”) (“MCAQD Letter”).¹³⁸

In the MCAQD Letter, EPA responded to an inquiry regarding the applicability of NNSR, in part, by finding that MCAQD could allow TSMC to undertake certain limited activities prior to obtaining an NSR permit. MCAQD Letter at 3. EPA accompanied this statement about what it “believes” with a series of caveats, including that the EPA “view” was based on “project-specific facts,” and that EPA was not taking a “final agency action” and creating no binding requirements. *Id.* at 3.¹³⁹ Nothing in the MCAQD Letter has changed federal and state NNSR and PSD law applicable to this Facility and cited in the Application and the Review Memo.

Both the Clean Air Act and the Air Pollution Control Act prohibit the applicant from beginning construction of the plant prior to issuance of a permit. *See, e.g.*, 42 U.S.C. § 7475(a) (barring construction of a major emitting Facility in an area subject to PSD requirements without a preconstruction permit); 42 U.S.C. § 7502(c)(5) (requiring permits for the construction of new or modified stationary sources in nonattainment areas); 35 P.S. § 4006.1(a) (barring construction of a stationary air contamination source without a written plan approval from the Department).

¹³⁵ EPA, *EPA Announces Permitting Reform to Provide Clarity, Expedite Construction of Essential Power Generation, Reshore Manufacturing* (Sept. 9, 2025), <https://www.epa.gov/newsreleases/epa-announces-permitting-reform-provide-clarity-expedite-construction-essential-power>.

¹³⁶ EPA, *Construction Activities Allowed Before Obtaining a Preconstruction Air Permit*, <https://www.epa.gov/nsr/construction-activities-allowed-obtaining-preconstruction-air-permit> (last updated Sept. 10, 2025).

¹³⁷ EPA, *Begin Actual Construction*, <https://www.epa.gov/nsr/begin-actual-construction-0> (last visited Sept. 18, 2025).

¹³⁸ EPA, Letter from Aaron Szabo to Philip McNeely, Maricopa County Air Quality Department (Sept. 2, 2025), <https://www.epa.gov/system/files/documents/2025-09/tsmc-arizona-begin-actual-construction-epa-response-letter.pdf> (“Szabo Letter”). All other items on the referenced table were from 2011 or earlier.

¹³⁹ EPA added that any construction activities prior to permit issuance would be solely at TSMC’s risk, as MCAQD retained discretion to deny the application; that MCAQD could not use TSMC’s time and resources expended on construction prior to obtaining a permit to justify a permit decision, including as to technology determinations; and that MCAQD could require TSMC to meet any conditions in the final permit due to design changes to emission units, even if it meant modifying or rebuilding structures that TSMC has begun building prior to obtaining a permit. MCAQD Letter at 3.

Indeed, as described above, both the Applicant and the Department have applied existing NNSR and PSD law. No lawful and rational basis exists for deviating from existing, governing law.

For the many reasons cited in these comments, the Department must withdraw the Draft Plan Approval. Further, beginning construction of any part of the proposed plant prior to the Department's issuance of the plan approval would be unlawful and subject to enforcement action.

VIII. The Air Quality Modeling For PM In the Application Is Flawed

The Application triggers PSD for PM_{2.5}, PM₁₀, and total particulates ("TSP"). See Application, Table 3-10.

The results of the modeling for PM_{2.5} (and PM₁₀) appear in Tables 8-1 and 8-2 below from the Application—the first showing comparisons to the relevant National Ambient Air Quality Standard ("NAAQS") and the second showing comparisons to the PSD increments (red box highlights added):

Table 8-1. Summary of NAAQS Analysis

Pollutant	Averaging Period	Rank	Scenario	Modeled Concentration (µg/m ³)	Secondary PM _{2.5} ⁽⁴⁾ (µg/m ³)	Ambient Background Concentration (µg/m ³)	Total Concentration ⁽³⁾ (µg/m ³)	NAAQS (µg/m ³)	Exceeds NAAQS?
PM ₁₀	24-hour	6 th	Base Case	6.48	--	54.0 ⁽¹⁾	60.48	150	No
			Worst Case	6.53	--	54.0 ⁽¹⁾	60.53	150	No
PM _{2.5}	24-hour	8 th	Base Case	4.38	0.144	19.0 ⁽²⁾	23.52	35	No
			Worst Case	4.41	0.144	19.0 ⁽²⁾	23.55	35	No
	Annual	1 st	--	0.85	0.009	6.8 ⁽²⁾	7.66	9	No

(1) Ambient background concentrations from the Johnstown, PA monitor, see **Table 6-17**.
(2) Ambient background concentrations from the Strongstown, PA monitor, see **Table 6-16**.
(3) Total concentration includes Project, nearby sources, and monitored background concentrations.
(4) Secondary PM_{2.5} concentrations for 24-hour and annual averaging periods, see **Table 6-15**.

Table 8-2. Summary of PSD Increment Analysis

Pollutant	Averaging Period	Rank	Scenario	Modeled Concentration (µg/m ³)	Secondary PM _{2.5} ⁽¹⁾ (µg/m ³)	Total Concentration (µg/m ³)	PSD Increment (µg/m ³)	Exceeds PSD Increment?
PM ₁₀	24-hour	2 nd	Base Case	6.60	--	6.60	30	No
			Worst Case	6.67	--	6.67	30	No
PM _{2.5}	24-hour	2 nd	Base Case	6.30	0.144	6.44	9	No
			Worst Case	6.70	0.144	6.84	9	No
	Annual	1 st	--	0.43	0.009	0.44	4	No

1) Secondary PM_{2.5} concentrations for 24-hour and annual averaging periods, see **Table 6-15**.

The locations of the maximum concentrations associated with each of the two analyses are shown in Figures 8-1 and 8-2 respectively (not reproduced here). Both locations are relatively close to the proposed plant and its new gas-fired combustion and simple cycle turbines.

The results are shown and highlighted in red boxes above. For the PM_{2.5} annual NAAQS, the final result, i.e., 7.66 ug/m³ is more than 85% of the NAAQS value of 9.0 ug/m³. For the PSD increment analysis, both of the total concentrations highlighted are large fractions of the increment value of 9.0 ug/m³—71% for the base case and 76% for the worst case presented.

These high percentages of the respective thresholds merit closer scrutiny. The Department must determine how robust (or not) these results are and what is the likelihood that the results might even be greater than the respective regulatory thresholds. That is, the Department must critically examine modeling issues before approving the analyses and the associated permit or Plan approval.

Dispersion modeling results depend not just on the model used, which in this case is EPA's AERMOD, but rather the various inputs to the model. The following critical inputs affect the results and conclusions:

- Emission rates used as inputs
- Meteorological data used to drive the dispersion of the emissions
- Background data used in the analysis

Each of these inputs is critical in ensuring the accuracy and robustness of the results presented and therefore the conclusions that have been drawn from those results—namely that neither the PM_{2.5} NAAQS or increments will be exceeded.

Here, the modeling conclusions that the PM_{2.5} NAAQS and increments will not be exceeded are not robust and are likely to be wrong.

PM_{2.5} Emissions Inputs Used in the Model

The emissions from the major sources of PM_{2.5}, i.e., the combined cycle (CC GE 7HA.02 units) and the aeroderivative simple cycle (Mitsubishi FT8 units) units are not technically supported. These sources—including their normal and also their startup/shutdown conditions or operating modes—comprise the largest PM_{2.5} emissions from the proposed Facility, as confirmed in Table C-1 in the Application. Using the Application's own numbers, out of the total 840.02 tons/year PM_{2.5} that will be emitted, the (7 GE 7HA.02 units) will emit 705.18 (or 83.95%) tons/year and the (10 FT8 units) will emit 132.45 (or 15.77%). Thus, these 17 units will collectively emit over 99% of the PM_{2.5} emissions.

However, none of the combined cycle or FT8 PM_{2.5} emissions, whether during normal mode or during startup/shutdown, are accompanied by any vendor guarantees from the respective manufacturers. There are no guarantees at all.

Rather, normal emissions for these units are taken from a spreadsheet shown in Appendix C showing various emissions values for different operating conditions—none of which have any guarantees. The emissions from Appendix C (Table C-4, C-5, C-7 etc.) are simply copied over and shown in Tables 3-1 (for the combined cycle units) and 3-2 (for the FT8s) of the Application. It is our understanding that the vendor for the 7HA.02s, GE, does not guarantee any PM emissions including PM_{2.5} emissions. The only “support” for the normal emissions from the combined cycle units is a Note 11 to Table C-4 which states that: “...Particulate values for baseload and part load conditions set to use 0.0054 lb/MMBtu based on highest lb/hr value.” The basis for the assumption of 0.0054 lb/MMBtu is not stated, and it is clearly not based on any testing by GE under all normal operating loads.

Startup and shutdown emissions, as discussed in Section 3.1.1.1 in the Application and as shown in Table C-5, are even more suspect. Again, the Application in Section 3.1.1.1 simply states that these numbers were “based on vendor provided emissions data.” But the vendor-provided emissions data per event (i.e., per startup or per shutdown), supposedly in Table C-5 for the combined cycle units are simply numbers on a table. There is no supporting information on how the vendor came up with these emissions, and it is not guaranteeing them in any manner at all. Moreover, while GE will not guarantee these startup or shutdown emissions for the combined cycle units, it does impose a number of qualifiers for when these emissions may even be valid. Some of these, included as notes to Table C-5, are:

- The plant is started using GE’s Rapid Response Lite auto-start sequence. Prior to start, the plant is in a ready-to-start condition, i.e., all plant equipment which is needed to be operating during startup is in a no-fault condition, operational and/or in automatic mode. Water levels and pressures in drums, hotwell and other vessels are within range and/or not in an alarmed condition. GT and HRSG Purge credit are available.
- The plant is previously shut down from steady state operation at base load using normal shutdown sequence in accordance with GE’s recommendations. The duration of the shutdown/non-operational/ standby period for the purpose of defining the start begins at termination of fuel flow to the GT during the plant shutdown. During the standby period, the plant is maintained as per GE-recommended procedures.

- The GT is kept at minimum emissions compliance load level until stack compliance is achieved.
- HRSG drum steam is not bled off for auxiliary services, steam seals, etc. during shutdown.
- HRSG stack damper remains closed during the shutdown period.

It is not clear how or why the plant and each combined cycle unit will be operated in the manner restricted by the notes above, so as to have any assurance of the non-guaranteed emissions estimates in Table C-5 will be met or be reliable.

Table C-11 which simply declares the startup and shutdown emissions from the FT8s is similarly unsupported by any data from its manufacturer, Mitsubishi.

Thus, without even emissions guarantees from the vendor, the emission estimates that purport to support the modeling are not reliable. Emissions at these units are not verified, because there is no monitoring of PM_{2.5} emissions from these units—across all of their operating conditions, such as by using a CEMS (for PM_{2.5}) along with high-frequency stack testing for condensable PM_{2.5}. This is a fundamental error that prevents the Department from issuing the Draft Plan Approval.

Meteorological Data Used in the Model

AERMOD requires as input, meteorological data that is representative at the site of the source. The most representative is data collected at the plant site. There apparently was no meteorological data ever collected at the Homer City site—not during the long history of the coal plant that operated there, or in support of this plan approval. Since the meteorological data used was not from the site, no matter how much support is provided indirectly, there are unquantifiable errors in how representative the data are from a different site—in this case from Johnstown Airport.

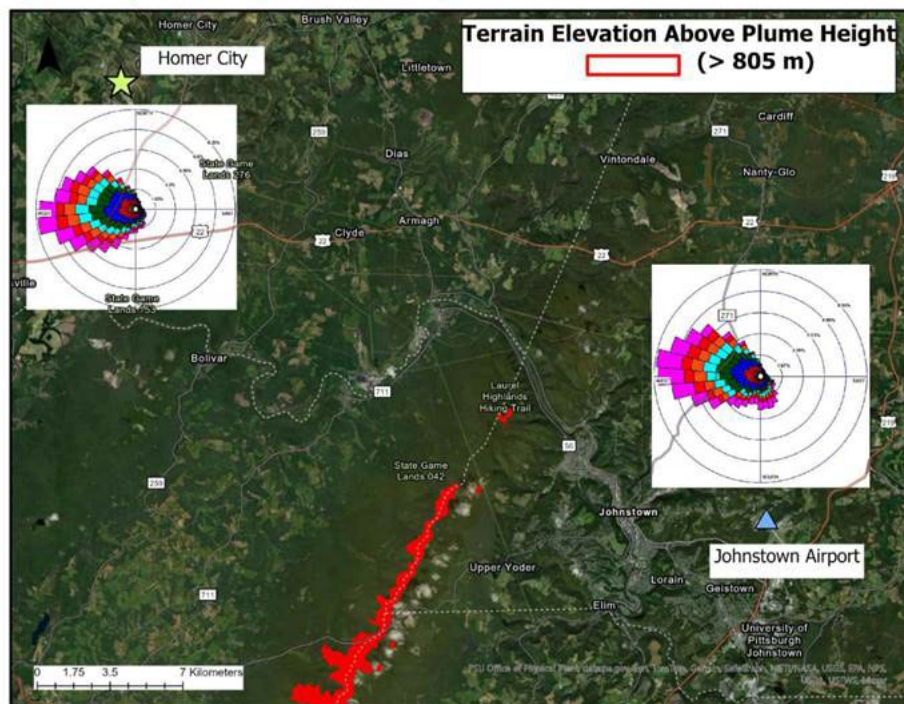
Prognostic models like Weather Research and Forecasting (“WRF”) should have been used for this Facility. The consultants who prepared the Application are familiar with WRF, as they have used WRF for the Johnstown site in their analysis. The DEP should require that the modeling analysis use WRF-derived meteorological data from the Homer City site in order to ensure a level of representativeness: this is the next-best option since onsite meteorological data was not collected.

While the Application attempts, at great length, to justify the use of the Johnstown Airport meteorological data, Section 6.6.3—discussing the evaluation of winds at plume heights—only compares impacts from the old coal plant stack heights and the combined cycle stack heights. The Application fails to consider the plumes from the lower stacks (see Table 6-2, Application at pdf

92, which confirms that the FT8s have 90 foot stacks while the combined cycle units have 190 foot tall stacks, Table 6-1, Application at pdf 91) of the FT8 units.

Since the impacts from the shorter, 90 foot stacks from the FT8's have not been analyzed, the conclusions presented in Section 6.6.3.2 that "...[W]ith the exception of a few rogue peaks along Laurel Ridge near the Laurel Highlands Hiking Trails, the rest of the surrounding terrain is below this level" are demonstrably unsupported. Thus, the map shown in Figure 6-9 excerpted below that only a few of the ridges shown in red will be impacted by the plumes from the Homer City plant is false. Far more than "a few rogue peaks" will be impacted by the plumes from the FT8 units.

Figure 6-9. Map of Terrain Heights Above Plume Height from CC Stacks



Background Concentrations Used in the Model

The Application compares the plant's impacts to the NAAQS, including background levels of PM_{2.5}. Table 8-1. In this case, as Table 6-16 excerpted below confirms, the Application used a PM_{2.5} monitor located in Strongstown, PA as the background monitor.

Table 6-16. PM_{2.5} Ambient Background Concentrations

Pollutant	Averaging Period	AQS Site ID	Local Site Name	2021-2023 Design Value (µg/m ³)	2022 Concentration (µg/m ³)	2023 Concentration (µg/m ³)	2024 Concentration (µg/m ³)
PM _{2.5}	24-hour ⁽¹⁾	420630004	Strongstown	19	13.5	29.2	14.2
	Annual			6.8	6.4	8.1	6.1

(1) Concentrations reflect the 98th percentile value.

The table confirms that the values recorded by this monitor were higher in 2023 than in prior years. The Application attributes the elevated 2023 levels as being due to Canadian wildfires. As a result, the PSD analysis did not include 2023 data.

As the Department is well aware, there is a formal process for adjusting monitored values to account for exceptional events like wildfires that may have affected specific monitoring data. In fact, the Department has submitted to the EPA a report¹⁴⁰ requesting adjustments to monitored data as noted in Section 6.9.2 of the Application. However, this report only requests that EPA adjust the monitored values for the York, Avalon, and Ritner monitoring sites. While recognizing that the wildfires may have affected the Commonwealth, it does not request any adjustments for the monitored data from 2023 for the Strongstown monitoring site.

Therefore, the Application and the Department must use 2023 monitored data from Strongstown unless and until: (i) the Department has formally requested any adjustments to the data, with support; and (ii) the EPA has approved any adjustments. Neither of these has occurred to date. The PADEP could have included adjustments to the Strongstown data in its February 2025 exceptional events analysis to the EPA. It did not do so. Until such time, the background values used in the PSD analysis for this Facility must include 2023 monitored values.

IX. The Department arbitrarily and unreasonably denied an extension in the public comment period, making it impossible for commenters to consider essential Department documents.

These comments are submitted to meet the deadline set by the Department's notice published in the Pennsylvania Bulletin on August 16, 2025 (55 Pa.B. 5903). Five days after this notice, on August 21, 2025, Clean Air Council submitted the following Right-to-Know request to the Northwest Regional Office:

¹⁴⁰ PA DEP, PM_{2.5} Exceptional Event Analyses for June 6–8, 2023 and June 28–July 1, 2023, February 2025, <https://www.ahs.dep.pa.gov/eComment/> (last visited Sept. 29, 2025).

Please provide records including but not limited to: pre-application communications, all correspondence, emails, electronic documents in any/all format(s), maps, plans, photographs, calendar entries, meeting agendas and meeting minutes, handwritten and electronic notes, and memoranda on (1) Homer City Generation, L.P. and (2) Homer City Redevelopment.

Attachment 7. On August 28, 2025, the Department sent an interim response to Clean Air Council, notifying the Council that the Department required an additional 30 days—until September 29, 2025—to issue a final response. Attachment 8. On August 29, 2025, Clean Air Council sought an extension in the time for comment on the Draft Plan Approval of 15 days after the deadline for the Department’s final response to this Right-to-Know request, to consider the responsive information in preparing comments. Attachment 9.

The Department denied this request by letter dated September 5, 2025, confirming that it would provide the requested documents by September 29, 2025. Attachment 10. That is, the Department selected the exact day that comments on the plan approval are due, and refused to extend the time for comments. The Department’s actions guarantee that essential information that the groups would use to comment on the plan approval—for the largest gas-fired power plant in the United States—will not be available to them before the comment deadline of September 29.

The Air Pollution Control Act requires the Department to provide a right to comment on all permits. 35 P.S. § 4006.1(b)(1). The Right-to-Know Law requires all Commonwealth agencies to provide public records to residents. 65 P.S. § 67.301. The opportunity for public comment on a plan approval, and public access to documents via the Right-to-Know Law, must work hand in hand. The Department’s denial of the extension requested by the Clean Air Council denies Clean Air Council its right to review essential documents prior to filing comments, and is contrary to the Air Pollution Control Act and the Right-to-Know Law.

Conclusion

The Department must withdraw the Draft Plan Approval for the Homer City gas plant because:

- Its issuance is inconsistent with the Department’s obligations under the Environmental Rights Amendment;
- The Department has not complied with its environmental justice policy;
- The Department failed to require an alternatives analysis;
- The evaluation of the impact of associated growth is fatally flawed;
- The Department failed to require appropriate emission control technology;

- Monitoring and testing requirements fail to ensure compliance with emission limits;
- Air quality modeling is fatally flawed; and
- The Department failed to provide for public participation as required by law.

Further, any construction of the Facility prior issuance of a plan approval is unlawful.

Sincerely,

Lawrence Hafetz, Esq.
Legal Director
Clean Air Council
1617 JFK Boulevard, Suite 1130
Philadelphia, PA 19103
lhafetz@cleanair.org

Jessica R. O'Neill
Managing Attorney for Litigation
Citizens for Pennsylvania's Future
1429 Walnut Street, Suite 701
Philadelphia, PA 19102
oneill@pennfuture.org

Zachary M. Fabish
Senior Attorney
Sierra Club
50 F Street NW, 8th Floor
Washington, DC 20001
zachary.fabish@sierraclub.org

Charles McPhedran
Senior Attorney
Earthjustice
1617 JFK Boulevard, Suite 2020
Philadelphia, PA 19103
cmcphedran@earthjustice.org

Tom Kloehn
Staff Attorney
Appalachian Mountain Advocates
6101 Penn Ave. Ste. 201
Pittsburgh, PA 15206
tkloehn@appalmad.org

Lauren Posey
Environmental Policy Advocate
Protect Penn-Trafford (PT)
3344 Route 130, Suite A, P.O. Box 137
Harrison City, PA 15636
lauren@protectpt.org

Melissa Marshall, Esq.
Community Advocate
Mountain Watershed Association
melissa@mtwatershed.com

Vanessa Lynch
Pennsylvania Campaign Coordinator
Moms Clean Air Force – PA Chapter
c/o Environmental Defense Fund
555 12th St. NW #400
Washington, D.C. 20004
vlynch@momscleanairforce.org

Andrew Welle, Esq.
Supervising Senior Staff Attorney
David Schwartz, Esq.
Staff Attorney
Our Children's Trust
P.O. Box 5181
Eugene, OR 97405
andrew@ourchildrenstrust.org
david@ourchildrenstrust.org

Attachment 2

From: [Latorraca Rodrigo_Mateo](#)
To: [Wells_Erin](#); [Regli_Brian](#); [Robinson_Samuel](#); [Finkel_Jacob](#); [Walters_Adam](#)
Cc: [Shirley_Jessica \(DEP\)](#); [Siger_Rick](#); [Ziadeh_Ramez](#); [Hanna_Michael](#); [Yablonski_TJ](#); [Fritz_Dana](#); [Kauffman_Gregory](#); [Donley_Frank](#)
Subject: RE: Homer City Meeting - May 30th 9:30 am
Date: Friday, May 24, 2024 11:43:27 AM
Attachments: [image001.png](#)
[image002.png](#)

Hello All,

Just sent out an invite for 5/29 at 3:30pm for the individuals directed below. Let me know if anyone else needs to be added to this call. Hope everyone has a great weekend!

Sincerely,

Mateo Rodrigo

Infrastructure Implementation Associate, Critical Investments

Office of the Governor

Commonwealth Keystone Building

| 400 North St, Plaza Level, Harrisburg PA 17120 |

| Work Cell: [REDACTED] |

www.pa.gov/critical-investments/

From: Wells, Erin

Sent: Friday, May 24, 2024 8:56 AM

To: Regli, Brian ; Robinson, Samuel ; Finkel, Jacob ; Walters, Adam

Cc: Shirley, Jessica (DEP) ; Siger, Rick ; Ziadeh, Ramez ; Hanna, Michael ; Yablonski, TJ ; Fritz, Dana ; Kauffman, Gregory ; Donley, Frank ; Latorraca Rodrigo, Mateo

Subject: RE: Homer City Meeting - May 30th 9:30 am

Brian and all,

My outlook calendar is up to date, that said, anything on Wednesday can be scheduled over for this call.

I appreciate the conversation regarding resources needed to provide a concierge level of service to a project of this size and scope. Two pad ready sites by February 2025 may be a heavy lift depending on specifics.

Thank you,

Erin

From: Regli, Brian <[REDACTED]>

Sent: Thursday, May 23, 2024 5:55 PM

To: We ls, Erin <[REDACTED]> Robinson, Samuel <[REDACTED]> Finke , Jacob <[REDACTED]> Walters, Adam <[REDACTED]>

Cc: Shirley, Jessica (DEP) <[REDACTED]> Siger, Rick <[REDACTED]> Ziadeh, Ramez <[REDACTED]> Hanna, Michael <[REDACTED]> Yab onski, TJ <[REDACTED]> Fritz, Dana <[REDACTED]> Kauffman, Gregory <[REDACTED]> Donley, Frank <[REDACTED]>

Latorraca Rodrigo, Mateo <[REDACTED]>

Subject: Homer City Meeting May 30th 9:30 am

Erin, Sam, Jacob, Adam:

Just off the phone with Andrew Shanahan – we are confirmed for next Thursday 9:30 am. We wil have our own briefing – just Governor’s Office (and Erin representing the DEP field office)

Office of the Governor

Commonwea th Keystone Bui ding

400 North Street, Plaza Level

Harrisburg PA 17120

Cell: [REDACTED]

From: Gustafson, Staci <[REDACTED]>

Sent: Thursday, May 23, 2024 4:27 PM

To: [REDACTED] Partridge, Toby <[REDACTED]> Moffett, Scott

<[REDACTED]> [REDACTED]

Cc: Crow, John <[REDACTED]> Selby, Cynthia A <[REDACTED]> McCauley, Stephen <[REDACTED]> Faith, Samuel C <[REDACTED]> Dyll, Darren <[REDACTED]> Stanton, Barry <[REDACTED]> Gross, Kar <[REDACTED]> Orr, Christopher <[REDACTED]> Peterson, Nicole <[REDACTED]> Doug as Beri Jr <[REDACTED]> Peters, Shawn <[REDACTED]> Branan, Jason <[REDACTED]> Roessing, Jason <[REDACTED]> Johnston, Sarah E <[REDACTED]> Yeakle, Kimberly <[REDACTED]> Decker, Tom <[REDACTED]> Koehle, E speth <[REDACTED]> Wells, Erin <[REDACTED]>

Subject: RE: DEP Permit Application Consultation Too (PACT) submittal for project name: Homer City Generation Station Redevelopment

Good afternoon, Homer City Redevelopment Team:

On behalf of the Indiana County Conservation District and Department of Environmental Protection (DEP) staff, we thank you for sharing your plans for the initial phase of the Homer City Generation Station Redevelopment Project in Black Lick and Center Townships, Indiana County. Based on the information you've shared, we offer the following comments and recommendations:

Mining Program

The main concerns of the mining program would be the continued operation of the active Homer City CRDA, the continued operation and maintenance of the treatment systems treating runoff & effluent from the CRDA and the long term financial assurance that this treatment will continue for as long as necessary.

A review of our files indicate that the latest renewal applications for the CRDA and its associated stormwater NPDES permit are in-house and under review. We do not anticipate any delays in conducting the reviews and reaching a final decision on these applications.

It was discussed during the PACT meeting that HCPG would like to remove the existing "Temporary Ash Pile" located to the east of the coal storage stockpile, as well as any contaminated soils existing under the coal stockpile when it is removed, and mix the material with the coarse refuse being disposed of by Rosebud Mining on the CRDA. This activity is already authorized by the existing permit as long as the disposal is conducted in accordance with the terms and conditions of that permit. We would ask that at least four weeks prior to any of this material being moved to the CRDA that both the California District Mining Office and the New Stanton District Mining Office be notified. The notifications can be sent to Environmental Group Manager Troy Williams at [REDACTED] for California and to Environmental Program Manager Chad Meyer at [REDACTED] for New Stanton with cc's to me at [REDACTED] and District Mining Manager Dave Thomas at [REDACTED].

It was also discussed by HCPG that they may want to consider blasting during the later stages of demolition and reclamation of this facility. HCPG should be aware that any blasting activities must be conducted by a blaster licensed to operate and certified for demolition in Pennsylvania. In addition a Blasting Activity Permit (BAP) will need to be applied for at least 90 days prior to the anticipated start date for any blasting. If any storage of explosives and/or blasting agents beyond the use of "day boxes" is needed a separate Explosives Storage Facility permit and associated Security Plan will be required. If and when HCPG decides that it would like to use explosives on this project they should contact Explosives & Blasting Inspector Adam Snyder at [REDACTED] as early as possible for more detailed information.

It is our understanding that a new, appropriately sized treatment facility will be constructed as a part of this reclamation plan to treat the effluent from the ash pile, the CRDA and possibly the new occupants of the facility. The mining program would like to meet with the waste program to discuss treatment needs and the bonding of the facility once a more firm design is under review for the new treatment system.

Contact:

Sam Faith, District Mining Manager
California District Office
25 Technology Drive
Coal Center, PA 15423
[REDACTED] (office)
[REDACTED] (direct)

Waste Management Program

Coal Ash Landfill (Id. No. 300491) For construction/demolition and deconstruction projects, an evaluation should be made to determine what materials can be recycled, salvaged or processed for reuse. Demolition waste cannot be burned. Please refer to [DEP's web page for construction/demolition waste](#) for information pertaining to material recycling. The permittee shall properly characterize any waste generated as a result of the property demolition (25 Pa. Code Section 287.54). The permittee may disposal of Construction/Demolition waste at the permitted coal ash facility (id. no. 300491) consistent with the approved permit. Asbestos disposal is permitted at the coal ash landfill (id. no. 300491) and shall be carried out in a manner consistent with the approved permit and the regulations (25 Pa. Code Section 288.302). Uncontaminated soil, rock, stone, gravel, brick and block, concrete and used asphalt may be used as clean fill, refer to the web page link listed above for additional information. Any hazardous waste generated as a result of this project shall be managed in accordance with the applicable hazardous waste regulations and properly disposed of off site. The coal ash facility (id. no. 300491) is not permitted to accept and dispose of hazardous waste. It is illegal to abandon or dispose of self-luminous signs, except by transfer to companies licensed by the Nuclear Regulatory Commission or by an Agreement State. Manufacturers of the devices have radioactive materials licenses, which allow them to accept the return of the devices. Self-luminous signs cannot be discarded as municipal or residual waste, nor disposed of as a hazardous waste. Improper disposal can result in tritium releases to the environment or accidental human exposure. All radioactive exit signs must be segregated from the waste and disposed of properly. Radioactive exit signs can be identified by the labeling on the units and their ability to light without power.

Temporary Coal Ash Site (clean closure) A closure plan will need to be submitted to the Waste Management Program. The closure plan will need to address at a minimum, waste removal procedures, E&S controls, water quality management, site stabilization and clean closure standards for soil and groundwater. The applicant public notice requirements of 25 Pa. Code Section 287.151 will apply. The Department will implement the public notice requirements specified under 25 Pa. Code 287.152. DEP review timeframe is 60 days.

Contact:

Shawn Peters, P.E. | Environmental Engineer Manager
Department of Environmental Protection | Waste Management
Northwest Regional Office 230 Chestnut Street | Meadville, PA 16335
Phone: [REDACTED]

Waterways and Wetlands Program/ Indiana County Conservation District

The proposed redevelopment, outside of the current NPDES LOD, will need NPDES permit coverage for stormwater discharges associated with construction activities. A preapplication meeting to discuss the NPDES requirements (e.g. Common plan of Development, PAG02 vs IP, etc.) is recommended. Chapter 105 impacts associated with construction of the new development can also be discussed at the pre-application meeting.

for the Construction NPDES, as indicated at the end of the PACT tool meeting.

Contact:

Nicole Peterson, P.E. | Senior Civil Engineer
Department of Environmental Protection | Waterways and Wetlands
Northwest Regional Office
230 Chestnut Street | Meadville, PA 16335
Phone: [REDACTED]

Environmental Cleanup and Brownfields Program

Storage Tanks

Tank 003A, the 20,000 gallon heating oil tank, which is planned for demolition in 2026, will need to go through the upcoming in-service inspection, due on 5/20/2025. Tank 010A, the 6,000 gallon sodium hydroxide tank, has an in-service inspection coming up on September 14, 2028. Tank 022A, the 3,000 gallon heating oil tank, does not have a regular inspection cycle. When you are ready to permanently close any of these tanks, please remember to utilize Department certified tank handlers, and then submit the paperwork to change the registration to permanently closed status. If you have any questions, please do not hesitate to contact us.

You can find a list of certified tank handlers for the closure of your tanks on our website here: [Certified ST Companies - Report Viewer](#). Please remember to choose the certification category for the construction standard of your tanks.

Contact:

Lauren Aiello she/her | Environmental Protection Specialist
Department of Environmental Protection
Storage Tanks
Northwest Regional Office
230 Chestnut Street | Meadville, PA 16335
Phone: [REDACTED]

Land Recycling

Based on the historic use of this property, certain environmental liabilities may be present in contaminated soil and/or groundwater. If you wish to mitigate these liabilities through Pennsylvania's Land Recycling and Remediation Standards Act (Act 2), information can be found on the Department's website here: [Land Recycling Program \(pa.gov\)](#). Act 2 encourages the voluntary cleanup and reuse of contaminated commercial and industrial sites and is built on four cornerstones that break down redevelopment obstacles: Uniform Cleanup Standards, Liability Relief, Standardized Reviews and Time Limits, and Financial Assistance. Due to the sizable scope of your project, you are encouraged to reach out our Land Recycling team as soon as possible, as it is our goal to provide you the best possible guidance to help you reach your end goals and to help you keep your property attractive for future development.

Contact:

Barry Stanton, P.G. | Professional Geologist Manager – Land Recycling
Department of Environmental Protection
Environmental Cleanup and Brownfields Program
230 Chestnut Street | Meadville, PA 16335
Phone: [REDACTED]

Air Quality Program

The Air Quality Program is primarily concerned about asbestos abatement and fugitive emissions from demolition activities.

Asbestos

The Asbestos Link has information regarding the Greenport Online Asbestos Notification System and the Asbestos Abatement & Demolition/Renovation Notification Form.

A link to the Department's Asbestos Program can be found here: [Asbestos \(pa.gov\)](#)

Fugitive Emissions

A "dust management/mitigation control plan" shall be submitted. If demolition by blasting/implosion is conducted, this activity must be coordinated by Mining.

Concrete Recycling

It was mentioned during the meeting that concrete will be recycled throughout the project. One of the exemption criteria for Portable Crushers is the length or duration the crusher is on site. The language for this exemption is:

"Portable crushers that are controlled with properly located water sprays or with fabric filters, operated during daylight, and located on a site for less than 60 calendar days provided, however, that the crushers do not process materials containing asbestos. This exemption includes associated screens and drop points; tub grinders used to mulch grubbing waste; and internal combustion engines meeting the criteria for plan approval exemption described in Category 6 above."

The Department's entire Air Quality Permit Exemption document can be viewed here:

greenport.pa.gov/e-library/GetDocument?docId=3791499&DocName=01_AIR_QUALITY_PERMIT_EXEMPTIONS.PDF

Permitting Contact:

David G. Balog, P.E.
New Source Review Section Chief | Air Quality Program
Department of Environmental Protection
Northwest Regional Office
230 Chestnut Street | Meadville, PA 16335
Phone: [REDACTED]

Asbestos/Fugitive Emissions contact:

D. Scott Dyll | Air Quality District Supervisor
Department of Environmental Protection | Bureau of Air Quality
New Castle District Office

121 N. Mill Street | New Castle, PA 16101

Phone: [REDACTED]

Clean Water Program

Industrial Wastewater

Since the process Industrial Wastewater from the Homer City Generation Station is treated and discharged through an existing NPDES Permit, no changes should be necessary at this time for the demolition phase of the project.

Changes to the treatment facilities will require a Water Quality Management amendment prior to beginning construction.

Once the site has been cleared, a discussion can occur regarding changes to the existing NPDES Permit, or new NPDES permits, necessary for future development.

Contact:

Stephen A. McCauley, E.I.T. | Environmental Engineering Specialist

Department of Environmental Protection

Clean Water Program | Northwest Regional Office

230 Chestnut Street | Meadville, PA 16335

Phone: [REDACTED]

www.dep.pa.gov

Sewage Planning

To determine sewage facilities planning needs for the proposed development project, please submit an application mailer to the Department's Meadville office (link below). Projected sewage flows of over 800 gallons per day will require planning to be completed. An attached narrative explaining the anticipated domestic sewage flows and how they were calculated should be submitted with the application mailer. The Department will respond with the appropriate planning modules.

Alternatively, the developer may submit for consideration a sewage facilities planning exemption using the postcard mailer. In addition to a narrative explaining the calculation of flows, include a plot plan, completed PND (Pennsylvania Natural Diversity Inventory) search with any required clearances, and a letter from the collection/conveyance and treatment facilities assuring that there is adequate capacity for this project with verification that the project will not cause an organic or hydraulic overload now or 5 years into the future.

<http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=43634>

Contacts:

Cyndi Selby

Phone: [REDACTED]

or

Tomisa Kiskadden

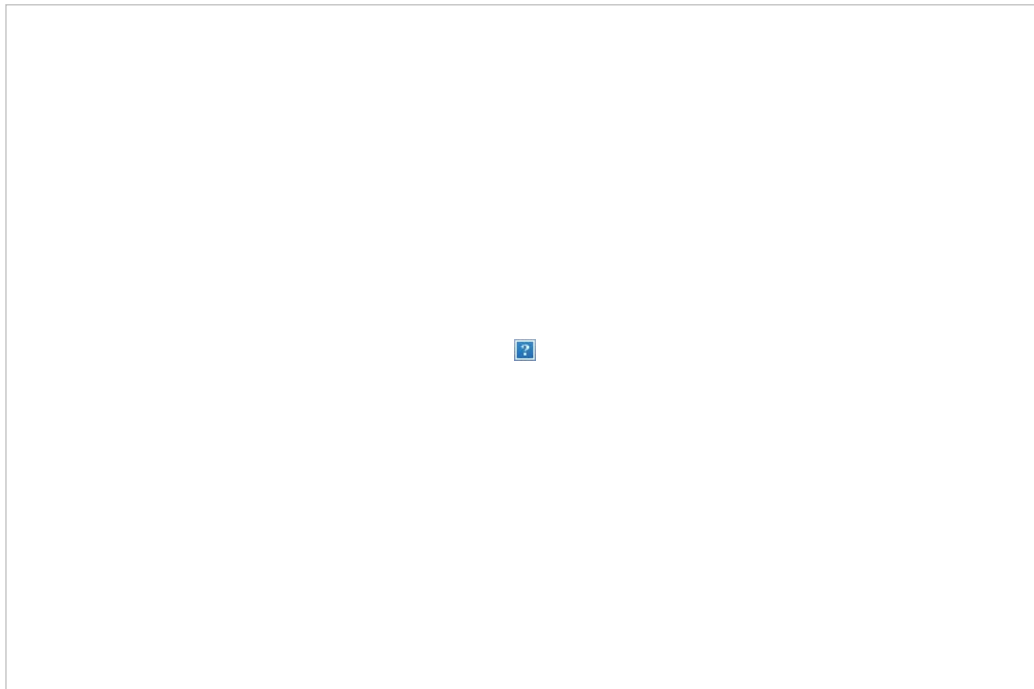
Phone: [REDACTED]

Oil and Gas Program

Since this phase of the project primarily involves the demolition and removal of existing buildings, the impact to oil & gas assets should be minimum. During the meeting, the permit applicants stated they were familiar with the Department's O&G mapping tool and the location of wells on their property. It would still be a good idea to share the link to the mapping tool: [PA Oil and Gas Mapping](#)

The applicants should take precautions when operating heavy equipment and conducting demolition operations in the vicinity of wells to avoid impacting the wells in a way that the casing could be bent or damaged. This is also the case for plugged wells. For example, it would be best to avoid dropping a large smokestack onto the location of a plugged well as the impact could damage the cement plug and allow the vertical flow of fluids and gases. Plugged wells have been identified on site (circled below)

If a previously unidentified abandoned O&G well is encountered during the project, please contact Jason Branan so that a well survey can be conducted.





Contact:

Jason J Branan | Oil & Gas Inspector
Dept. of Environmental Protection
P. O. Box 669
Knox, PA 16232
Phone: [REDACTED]

This summary is based solely on information provided to our office through the Permit Application Consultation Tool (PACT) and your pre-application meeting on Thursday, May 9, 2024. Any modifications to the project or other details not disclosed can affect your permitting needs.

If we can assist you further with this project, please contact me or any of the staff identified above.

Regards,

Staci Gustafson | Assistant Regional Director
Department of Environmental Protection | Northwest Regional Office
230 Chestnut Street | Meadville, PA 16335
Phone: [REDACTED]