



February 17, 2023

Jim Miller, Regional Director
Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222
jamesmill@pa.gov
Via Certified Mail and Email

RE: Request for Immediate Pennsylvania Department of Environmental Protection Action to Abate Violations of the Clean Air Act and Pennsylvania Air Pollution Control Act at the Shell Chemical Appalachia LLC, Shell Polymers Monaca Plant in Beaver County, Pennsylvania

Dear Regional Director Miller,

The Environmental Integrity Project (EIP), Clean Air Council (CAC), and Eyes on Shell respectfully request that the Pennsylvania Department of Environmental Protection (DEP) take immediate action to abate illegal volatile organic compounds (VOCs) and nitrogen oxides (NOx) emissions, visible emissions from flaring, and other violations of the Clean Air Act and Pennsylvania Air Pollution Control Act (APCA) by Shell Chemical Appalachia LLC (Shell) at the Shell Polymers Monaca Plant (Plant) in Beaver County, Pennsylvania.

The violations of the Clean Air Act and the APCA at the Shell Plant are significant and have been ongoing for at least the past several months. Shell's emissions exceed 12-month site-wide VOC and NOx limits, violate the prohibition on visible emissions, and violate other permit conditions. Unfortunately, there is no sign that Shell is taking appropriate action to stop illegal pollution at the Plant. Earlier this week, on February 13, 2023, the Plant's High Pressure Elevated Flare emitted large plumes of black smoke for several hours in violation of the law.¹

Shell's illegal pollution and significant flaring events pose an unacceptable risk to workers and the communities living near the Shell Polymers Monaca Plant. We urge DEP to (1) immediately issue an order directing Shell to temporarily cease operations at the Shell plant until Shell demonstrates the plant will be operated in compliance with the law; and (2) take all necessary and appropriate enforcement action to fully address ongoing violations and ensure compliance going forward.

I. Significant and Ongoing Violations at the Shell Plant Exceed Limits that Are Meant to Protect Public Health.

The communities living near the Shell Plant are exposed to elevated levels of dangerous air pollutants because Shell is violating emission limits imposed by DEP to protect public health. As

¹ Breathecam.org, "Shell Plastics East" (2023-02-13 15:28-18:13).

DEP has acknowledged through notices of violation, Shell is releasing harmful pollutants from the Plant, including VOCs and NOx, in quantities that are prohibited under Shell's Plan Approval.²

Shell's permit imposes site-wide, 12-month rolling emission limitations of 516.2 tons of VOCs and 328.5 tons of NOx.³ Shell emitted 522.982 tons of VOCs during the 12-month period ending in September 2022; 666.296 tons of VOCs for the 12-month period ending in October 2022; and 739.528 tons of VOCs for the 12-month period ending in November 2022.⁴ The Plant emitted 512.203 tons of VOCs during the month of September 2022, alone—nearly reaching the 12-month limit during a single month.⁵ VOCs contribute to smog and can cause nausea, nerve damage, and other health problems.⁶ Shell emitted 345.446 tons of NOx during the 12-month period ending in December 2022, including 310.215 tons NOx between August and December 2022, alone.⁷ NOx can cause irritation of the eyes, nose, throat, and lungs, and can trigger shortness of breath, asthma attacks, nausea, and other health problems.⁸

In addition, Shell has regularly reported prohibited visible emissions from the Plant's flares.⁹ Flares are pollution control devices designed to destroy organic pollutants in waste gases, which include hazardous pollutants and smog-forming compounds, through the combustion process. However, when a flare is not operating properly, they release dangerous air pollution, including fine particulate matter, benzene, hexane, formaldehyde, mercury, arsenic, and other organic hazardous air pollutants.¹⁰

The Clean Air Act and Shell's Plan Approval prohibit visible emissions from the Plant's flares and incinerators that exceed 0% opacity for more than five minutes during any consecutive two-

² PADEP, Notice of Violation Re: PA-04-00740C, Shell Petrochemicals Complex (Dec. 14, 2022) <https://files.dep.state.pa.us/RegionalResources/SWRO/SWROPortalFiles/Shell/12.14.22/04-00740%20Shell%20NOV%2012.14.2022.pdf>; PADEP, Notice of Violation Re: PA-04-00740C, Shell Petrochemicals Complex (Feb. 13, 2023) https://files.dep.state.pa.us/RegionalResources/SWRO/SWROPortalFiles/Shell/Shell_NOV_2.13.2023.pdf.

³ Plan Approval PA-04-00740C, Section C, Condition No. 005.

⁴ PADEP, "Shell Chemical Appalachia LLC Petrochemicals Complex, Beaver County," *12-month Rolling Emissions Totals—December 19, 2022 (Excel)*, <https://www.dep.pa.gov/About/Regional/SouthwestRegion/Community%20Information/Pages/Shell-Petrochemical-Complex-.aspx>.

⁵ *Id.*

⁶ EPA, "Volatile Organic Compounds' Impact on Indoor Air Quality" <https://www.epa.gov/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality>.

⁷ PADEP, Notice of Violation Re: PA-04-00740C, Shell Petrochemicals Complex (Feb. 13, 2023); PADEP, Site_Level_Rolling_12_Month_Emissions_thru_2022_12_PADEP_Submission_20230119.

⁸ Agency for Toxic Substances and Disease Registry, "ToxFAQs for Nitrogen Oxides" <https://wwwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=396&toxid=69#:~:text=Top%20of%20Page-.How%20can%20nitrogen%20oxides%20affect%20my%20health%3F,or%20%20days%20after%20exposure.>

⁹ Malfunction Reports available at PADEP, "Shell Chemical Appalachia LLC Petrochemicals Complex, Beaver County," <https://www.dep.pa.gov/About/Regional/SouthwestRegion/Community%20Information/Pages/Shell-Petrochemical-Complex-.aspx> (June 23, 2022; September 6, 2022; September 8, 2022; September 8-10, 2022; September 18, 2022, September 21-22, 2022; October 24-26, 2022).

¹⁰ Air Quality Plan Approval Application, Petrochemicals Complex, Shell Chemical Appalachia LLC, Beaver County, Pennsylvania (May 2014).

hour period.¹¹ Shell has repeatedly violated this prohibition, including during the hours-long flaring event on February 13, 2023.¹²

II. DEP Must Take Immediate Action to Abate Illegal Pollution from the Shell Plant.

DEP must use the full extent of its authority to take all actions necessary to stop illegal pollution from the Shell Polymers Monaca plant and protect public health. DEP has broad authority to enforce the Clean Air Act and ACPA, including by issuing orders to “requir[e] persons to cease unlawful activities or cease operation of a facility or air contamination source which, in the course of its operation, is in violation of any provision of [the APCA], any rule or regulation promulgated under this act or plan approval or permit[.]” 35 P.S. § 4010.1(a). DEP may issue such orders “if it finds that the permittee or any person is in violation of any provision of [the APCA] or of any rule, regulation or order of the department” or, alternatively, if DEP “finds that any condition existing in or on the facility or source involved is causing or contributing to or is creating a danger of air pollution[.]” *Id.*

DEP is also authorized by the APCA to issue orders to the owner or operator of a source that is exceeding limits in a DEP-issued plan approval. 35 P.S. § 4004(9)(i). The “order may require the cessation of any operation or activity which is introducing air contaminants into the outdoor atmosphere so as to cause air pollution[.]” *Id.* The APCA also authorizes DEP to issue orders to abate public nuisance, which includes violations of DEP-issued plan approvals. 35 P.S. § 4013.

In recent years, DEP has exercised its broad authority to halt major operations for repeated and ongoing violations. For example, after a series of disastrous pipeline incidents, including sinkholes and drinking water contamination, DEP issued an order suspending construction activities on the Energy Transfer Mariner East 2 pipeline, on January 3, 2018.¹³ DEP lifted the order on February 8, 2018, only after exacting significant concessions from Energy Transfer to make the project safer.¹⁴

DEP should take a similar approach here by invoking its authority under the APCA to issue an order to “cease operation” of the Shell Polymer Monaca Plant. *See* 35 P.S. §§ 4010.1(a); 4004(9)(i). The violations at the Shell Plant are significant and ongoing for at least the past several months. Shell is violating the 12-month site-wide emissions limits for VOCs and NO_x, the prohibition on visible emissions, and other provisions of its permit.¹⁵ Shell’s illegal conduct

¹¹ 40 C.F.R. § 60.18(b)(1); PA-04-00740C, Section D, Source 205, Condition #001; Source 204, Condition #001; Source 206, Condition #002.

¹² Breathecam.org, “Shell Plastics East” (2023-02-13 15:28-18:13).

¹³ *See*

<https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/MarinerEastII/OrderSuspendingConstructionActivities010318.pdf>.

¹⁴ *See*

https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/MarinerEastII/Summary_of_Order/Sunoco%20Pipeline%20LP,%20Consent%20Order%20and%20Agreement%20-%20February%208,%202018.pdf.

¹⁵ Environmental Integrity Project and Clean Air Council, Notice of Intent to Sue the Owner and Operator of the Shell Polymers Monaca Site in Beaver County, Pennsylvania, for Violations of the Clean Air Act and the Air Pollution Control Act (Feb. 2, 2023); Environmental Integrity Project and Clean Air Council, Notice of Intent to Sue

needlessly endangers the public and cannot be explained as mere shakedown hiccups. Thus, DEP should take immediate action to abate illegal pollution and protect public health ordering Shell to temporarily cease operations of the Shell Plant until Shell demonstrates it will operate the Plant in compliance with the law. In addition, DEP must take all necessary and appropriate enforcement action to fully address ongoing violations and ensure compliance going forward.

Conclusion

For the reasons set forth above, EIP and CAC request that DEP immediately take all actions necessary to abate illegal pollution from the Shell Plant. We also respectfully request to meet with DEP to discuss this request. Please contact Sarah Kula for additional information or to arrange a meeting.

Sincerely,

/s/Sarah Kula

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