



Pennsylvania
**Department of
Environmental Protection**

October 10, 2024

VIA EMAIL

Kimberly Kaal, Environmental Manager
Shell Polymers Monaca
300 Frankfort Road
Monaca, PA 15061

Re: Administrative Completeness Determination
Plan Approval Application No. 04-00740D
Shell Chemical Appalachia, LLC
Shell Polymers Monaca Site
Potter and Center Townships
Beaver County

Dear Kimberly Kaal:

On September 13, 2024, the Department of Environmental Protection (Department) received the above referenced application for the Shell Polymers Monaca Site in Potter and Center Townships, Beaver County.

The Department has reviewed your Plan Approval application for administrative completeness and has determined the application to be administratively complete pursuant to 25 Pa. Code §127.12d, meaning that it contains information, maps, fees, and other documents requested in the plan approval application regardless of whether the information, maps, and documents would be sufficient to justify the issuance of a plan approval.

Although your application is accepted as administratively complete, it is possible that additional information may be required for the Department's technical review of your application. The Department will notify you prior to formally drafting your Plan Approval. You may amend your plan approval application to incorporate any changes at your facility until your permit has been drafted.

If you have any questions concerning the permit application review process, please contact me at 412.442.4028 or asandy@pa.gov. You may also follow your application through the review process via eFACTS on the Web at: <https://www.ahs.dep.pa.gov/eFACTSWeb/default.aspx>.

Sincerely,

Alexander Sandy/AS
Air Quality Engineering Specialist
Air Quality Program

cc: PA-04-00740D (A. Sandy)
Operations – (V. Shaffer)
Community Relations Coordinator (L. Camarda)
Environmental Justice (E. Green)
Region Director (E. Gustafson)
BAQ Air Quality Modeling and Risk Assessment Section (A. Fleck)
BAQ Permits (V. Trivedi)
BAQ New Source Review (S. Wenrich)
OnBase



Pennsylvania
**Department of
Environmental Protection**

MEMO

TO Alexander Sandy
Air Quality Engineering Specialist
New Source Review Section
Air Quality Program
Southwest Regional Office

FROM Henry F. Bonifacio *HFB*
Air Quality Program Specialist
Air Quality Modeling and Risk Assessment Section
Division of Permits
Bureau of Air Quality

Stephen J. Steirer *SJS*
Air Quality Engineer
Air Quality Modeling and Risk Assessment Section
Division of Permits
Bureau of Air Quality

THROUGH Andrew W. Fleck *AWF*
Environmental Group Manager
Air Quality Modeling and Risk Assessment Section
Division of Permits
Bureau of Air Quality

DATE September 30, 2024

RE Determination of Administrative Completeness
PSD Air Quality Analyses and Inhalation Risk Assessment
Shell Chemical Appalachia LLC
Application for Plan Approval 04-00740D
Shell Polymers Monaca Site
Center Township and Potter Township, Beaver County

MESSAGE:

The Pennsylvania Department of Environmental Protection (DEP) received a plan approval application on September 16, 2024, from Shell Chemical Appalachia LLC (Shell) for several proposals at its Shell Polymers Monaca Site in Center and Potter townships, Beaver County.¹ The plan approval application was prepared by Landau Associates, on behalf of Shell. The

¹ Plan Approval Application for Shell Polymers Monaca. Shell Chemical Appalachia LLC, Monaca, Pennsylvania. September 13, 2024.

proposals included in the plan approval application are the Ethylene Maximum Achievable Control Technology (EMACT) Project to comply with the revised 40 CFR 63 Subpart YY, the Wastewater Treatment Plant (WWTP) Project to install permanent equipment to improve oil, grease, and volatile organic compounds removal from the wastewater, and the reconciliation of plan approval source descriptions and conditions as well as potential to emit calculations, referred herein as “Plan Approval Reconciliations,” based on Shell’s latest review of its “as-built” equipment and operations. The purpose of this memorandum is to notify the DEP’s Southwest Regional Office that the air quality analyses and inhalation risk assessment portions of Shell’s plan approval application have been determined to be administratively complete.

The DEP is required under 25 *Pa. Code* § 127.12d to “determine if an application for plan approval is administratively complete” and “provide written notice of the completeness determination to the applicant within 30 days of receipt of an application.” Furthermore, this section of the *Pa. Code* states, “an application is administratively complete if it contains the necessary information, maps, fees and other documents requested in the plan approval application, regardless of whether the information, maps and documents would be sufficient to justify issuance of the plan approval.”

According to Shell’s plan approval application, the EMACT Project is subject to the Prevention of Significant Deterioration (PSD) regulations codified in 40 CFR § 52.21. These federal PSD regulations are adopted and incorporated by reference in their entirety in 25 *Pa. Code* § 127.83 and the Commonwealth’s State Implementation Plan codified in 40 CFR § 52.2020. According to 40 CFR § 52.21(b)(22), “[c]omplete means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.” Relevant to 40 CFR § 52.21(k) through (p) of the PSD regulations, Shell’s plan approval application includes the following air quality analyses relevant to the EMACT Project:

- Source impact analyses of the net emissions increases of carbon monoxide (CO), nitrogen oxides (NO_x), and particulate matter less than or equal to 2.5 micrometers in diameter (PM-2.5) due to Shell’s project;
- Additional impact analyses of the impairment to visibility, soils, and vegetation due to Shell’s project and associated growth; and
- Initial screening calculations to determine whether the net emissions increases due to Shell’s project would have negligible impacts on air quality related values (AQRV) and visibility in nearby federal Class I areas.

Shell’s plan approval application also includes revisions to the PSD air quality analyses that were included in Shell’s applications for Plan Approval 04-00740A, which was issued by the DEP on June 18, 2015, and Plan Approval 04-00740C, which was issued by the DEP on February 18, 2021. Shell revised the PSD air quality analyses to incorporate the EMACT Project, WWTP Project, and Plan Approval Reconciliations. Relevant to 40 CFR § 52.21(k) through (p) of the

PSD regulations, Shell's plan approval application includes revisions to the following air quality analyses relevant to these projects:

- Source impact analyses of the emissions of CO, NO_x, and particulate matter less than or equal to 10 micrometers in diameter (PM-10) due to Shell's projects;
- Additional impact analyses of the impairment to visibility, soils, and vegetation due to Shell's projects and associated growth; and
- Initial screening calculations to determine whether the emissions due to Shell's projects would have negligible impacts on AQRVs and visibility in nearby federal Class I areas.

Shell's plan approval application also includes a revision to the inhalation risk assessment that was included in Shell's applications for Plan Approval 04-00740A and Plan Approval 04-00740C. The revised inhalation risk assessment is required by Condition #035 in Section C of both plan approvals. To this end, Shell revised the inhalation risk assessment to incorporate the EMACT Project, WWTP Project, and Plan Approval Reconciliations. Relevant to these projects, Shell's plan approval application includes a revised inhalation risk assessment, which consists of the following:

- Exposure assessment of compounds of potential concern (COPC) utilizing air dispersion modeling; and
- Risk characterization that includes the calculations and evaluations of acute and chronic inhalation risks due to COPCs.

This determination of administrative completeness for the PSD air quality analyses and inhalation risk assessment portions of Shell's plan approval application does not prohibit the DEP from requiring Shell to submit additional information, if determined to be necessary, during the subsequent technical review.

If you have any questions regarding this administrative review, you may contact us (hbonifacio@pa.gov, 717.772.5968 for the PSD air quality analyses and exposure assessment and ssteirer@pa.gov, 717.772.5620 for risk characterization) or Andrew Fleck (afleck@pa.gov, 717.783.9243).

cc: Mark Gorog, SWRO Air Quality
Sheri Guerrieri, SWRO New Source Review
Viren Trivedi, BAQ Permits
Sean Wenrich, BAQ New Source Review