REGION 8

DENVER, CO 80202

April 26, 2024

Mr. David Stroh
Manager, Permit Program
Division of Air Quality
North Dakota Department of Environmental Quality
4201 Normandy Street
Bismarck, North Dakota 58503

Re: Comments on PSD Permit for Epitome Energy, LLC – Grand Forks, ND

Dear David Stroh:

The Environmental Protection Agency Region 8 has completed its review of the Epitome Energy, LLC – Grand Forks Plant (Epitome) proposed Prevention of Significant Deterioration New Source Review permit. The public comment period for the Epitome permit runs from March 28, 2024, through April 27, 2024. The attached comments cover the body of the permit and the air quality modeling analysis completed for the proposed permit.

This permit action has been assigned to Julia Witteman and Catherine Collins. If you have any questions, or if you would like to schedule a meeting to discuss this matter further, please contact either Julia at Witteman.Julia@epa.gov or Catherine at Collins.Catherine01@epa.gov. We look forward to hearing from you and working with you on this permit.

Sincerely,

ADRIENNE SANDOVAL

Digitally signed by ADRIENNE SANDOVAL
Date: 2024.04.26 10:28:44 -06'00'

Adrienne Sandoval
Director
Air and Radiation Division

ENCLOSURES
1. Comments on Epitome Energy, LLC – Grand Forks Plant

cc: Jim Semerad

Comments on Epitome Energy, LLC – Grand Forks Plant

1) Table 1-1 on page 2 of the draft permit lists the control equipment to be used at the facility such as baghouses, mineral oil system, cyclones, etc. The draft permit does not include design and operating parameters to ensure performance and practical enforceability of the control equipment. EPA recommends that the draft permit include the appropriate design and operating parameters for the control equipment and appropriate monitoring, recordkeeping and reporting to ensure practical enforceability of the permit limits.

2) Sections 2.A and 2.B on pages 4 and 5 of the draft permit require the permittee to comply with "all applicable requirements" of the New Source Performance Standards subparts Dc, DD, IIII and JJJJ and the National Emission Standards for Hazardous Air Pollutants subparts GGGG, ZZZZ and DDDDD. EPA recommends that the permit incorporate by reference or identify the specific requirements of these subparts that are applicable to the permittee. EPA recommends adding to the permit the specific requirements of each NSPS and NESHAP subpart that the permittee is to comply with, and include all appropriate monitoring, recordkeeping, testing and reporting to ensure practical enforceability of the permit limits. If incorporating by reference, then EPA recommends including descriptive information, such as the title or number of the requirement, to ensure that any of the referenced material that applies to the facility is clear and is not reasonably subject to misinterpretation. Where only a portion of the referenced requirement applies then the permit should specify the relevant section.

3) Section 2.F: Emergency Engines on page 6 of the draft permit says that "for engines to be considered emergency stationary Reciprocating Internal Combustion Engine (RICE) under the RICE Maximum Achievable Control Technology rules (40 CFR Part 63 Subpart ZZZZ), engine operations must comply with the non-emergency operating hour limits as specified in the applicable subpart." If the permittee plans to consider these emergency engines (EU 55, 56 and 57) as emergency engines under the RICE MACT, then EPA recommends adding information to the permit stating such and include the appropriate RICE requirements and the appropriate monitoring, recordkeeping and reporting to ensure practical enforceability of the operating hourly limits.

4) Table 3.1: Permit Emission Limits on pages 7, 8, and 9 of the draft permit lists the emission limits for the different emission units but does not include any monitoring, recordkeeping, testing or reporting requirements. EPA recommends adding all appropriate monitoring, recordkeeping, testing and reporting requirements for all permit emission limits and requirements to assure compliance with the permit requirements.

5) Section 3.B: Solvent Loss Limit on page 10 of the draft permit contains the Volatile Organic Compounds solvent loss Best Available Control Technology (BACT) limit. Section 2.4.4 of the June 2023 permit application contains information on the proposed BACT selection and emission limit for control of VOC emissions from the extraction process. Table 2.7, on page 2.13 (pdf page 27 of 163) in this section of the June 2023 permit application shows seven BACT limits in the RACT/BACT/LAER Clearinghouse (RBLC) that are lower than the 0.15 gal/ton solvent loss

limit being proposed as BACT for this permit. The first and fourth paragraphs on page 2.14 (pdf page 28 of 163) of the June 2023 permit application both mention that the higher 0.15 gal/ton BACT limit was chosen because the lower 0.14 gal/ton BACT limits were for facilities in states with warmer climates "where the impact of the extreme winter weather conditions are less of an influential factor." It is unclear why a colder climate would make it more difficult for Epitome to meet the lower 0.14 gal/ton BACT limit. EPA recommends providing, in more detail, a justification for why a 0.14 gal/ton BACT limit is not technically feasible. Additionally, if there are economic reasons for the selection of the BACT limit, these economic reasons should be clearly described in the top down BACT analysis. If there were economic reasons for the selection of the BACT limit, EPA recommends providing the economic justification for the selection of the BACT limit.

6) The permit does not appear to have appropriate monitoring, recordkeeping, testing and reporting for the VOC solvent loss BACT limit. EPA recommends adding all appropriate monitoring, recordkeeping, testing and reporting to ensure compliance with the VOC solvent loss BACT limit. Additionally, Table 3-2: Allowable Solvent Loss Ratio Upon Start-up on page 10 of the draft permit allows 18 months after startup of the facility to reach the proposed 0.15 gal/ton limit, which, in EPA's experience, is an unusually long amount of time. EPA recommends reducing the time allowed after startup to achieve the VOC solvent loss ratio limit. If the 18-month period of time is appropriate, EPA recommends providing a justification for why that period of time is necessary.

7) Section 4: Emission Testing Requirements on page 11 of the draft permit requires initial performance testing of several emission units, but the permit does not require any subsequent periodic performance testing. EPA recommends adding periodic performance testing requirements for the emission units to the permit to assure compliance with the permit limits.

8) Sections 5.A and 5.B on page 13 of the draft permit requires the operation of "air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions." EPA recommends adding the good air pollution control practices or reference to the underlying regulation(s) into the permit so that the permit terms are enforceable.

9) Sections 5.E, 5.F and 5.G on pages 14 and 15 of the draft permit require the permittee to comply with "all applicable requirements" of NDAC 33.1-15-07, 33.1-15-08-01, and 33.1-15-17 for control of organic compound emissions, air pollution from internal combustion engines, and fugitive emissions, respectively. EPA recommends the permit incorporate by reference or identify in the permit any of these requirements that are applicable to the permittee and include appropriate monitoring, recordkeeping, testing and reporting to assure compliance with the permit requirements. If incorporating by reference, then EPA recommends including descriptive information, such as the title or number of the requirement, to ensure that any of the referenced material that applies to the facility is clear and is not reasonably subject to misinterpretation. Where only a portion of the referenced requirement applies then the permit should specify the relevant section.

10) The draft permit does not appear to have a particulate matter emission limit for the cooling towers but does contain a drift rate limit. In establishing the BACT limits for the cooling towers and in reviewing the RBLC there are many cooling towers that have both a drift rate limit and a particulate matter limit in terms of pounds per hour or tons per year. EPA recommends adding a particulate limit for the cooling towers, and any necessary monitoring, recordkeeping, testing and reporting to assure compliance with the limits into the permit.

11) The air quality modeling in the Air Quality Impact Analysis (AQIA) report asserts that no receptors are placed within the plant boundary as it is not ambient air, but no justification is provided as to how exactly this ambient air boundary will be established by the facility and if it is accurately represented in the modeling. The permit application does note of a proposed fence and signage to be put up around the facility, but no reference of this is present in the AQIA. Under 40 CFR 50.1(e), the definition of "ambient air" "means that portion of the atmosphere, external to buildings, to which the general public has access." EPA also released a Revised Policy on Exclusions from "Ambient Air" (December 2, 2019), which provides further insight on how to reasonably establish and justify the boundary of ambient air. Given that the AQIA for this project did not provide any justification or clarification on how ambient air is being established, EPA recommends adding this information to the report so that the modeling domain and receptor grid is appropriately defined.

12) The air quality modeling in the AQIA report represents the three cooling towers for the project, identified as emission points FS2A/FS2B/FS2C in Table 13, as point sources for input into the model. The June 2023 application for this project, however, has these pieces of equipment listed as "Area Source for Model (g/sec-m2)" (pdf page 139 of 163). EPA recommends that the AQIA verify that the model inputs are consistent with what was provided in the June 2023 application, and that any discrepancies or changes from the information provided in the June 2023 application be justified within the AQIA report.

13) The air quality modeling uses fixed background concentrations based on monitoring data collected at multiple locations around or before 2013. Background concentrations predict the total air quality concentration by representing the pollutant concentrations that are not included in the air quality modeling. 40 CFR part 51, Appendix W recommends using the most recent quality assured air quality monitoring data collected in the vicinity (i.e., monitor closest to and upwind) of the project to determine the background concentration. For many cases, the best starting point is use of the current design value for the applicable National Ambient Air Quality Standards (NAAQS) as a uniform monitored background contribution across the project area. Appendix W and EPA's Memorandum on the Additional Methods, Determinations, and Analyses to Modify Air Quality Data Beyond Exceptional Events[1] outline additional methods for determining representative background concentrations. EPA recommends adding information to the AQIA report to more clearly define the monitoring data used to determine the background concentrations (e.g., monitor names, dates, and calculations) and how the values align with EPA's air quality modeling guidance.

[1] Additional Methods, Determinations, and Analyses to Modify Air Quality Data Beyond Exceptional Events, April 2019, https://www.epa.gov/air-quality-analysis/clarification-memo-additional-methods-determinations-and-analyses-modify-air