From: Marcus, Danny
To: Tolliver, Kelcy J
Cc: Blanchard, Brian

Subject: RE: General Motors - Fort Wayne Assembly PSD permit# 003-47629-00036

Date: Wednesday, June 26, 2024 1:02:12 PM

Attachments: <u>image001.pnq</u>

image003.png

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Kelcy,

Thank you for sending the RTC. We have nothing further to add.

Danny.

From: Tolliver, Kelcy J <KTollive@idem.IN.gov>

Sent: Tuesday, June 25, 2024 10:39 AM

To: Marcus, Danny <marcus.danny@epa.gov>

Subject: RE: General Motors - Fort Wayne Assembly PSD permit# 003-47629-00036

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Hi Danny,

IDEM's responses to your comments are attached. Please let me know if this addresses the concerns of EPA or if more information is needed.

Thank you,

Kelcy Tolliver

Senior Environmental Manager|Office of Air Quality Indiana Department of Environmental Management KTollive@idem.IN.gov |(317) 234-6679

Help us improve!

IDEM values your feedback





Please consider the environment before printing this email.

From: Marcus, Danny < marcus.danny@epa.gov >

Sent: Monday, June 10, 2024 11:51 AM

To: Tolliver, Kelcy J < KTollive@idem.IN.gov">KTollive@idem.IN.gov>; Balogun, Josiah K < jbalogun@idem.IN.gov>

Cc: Blanchard, Brian < <u>Blanchard.Brian@epa.gov</u>>; Damico, Genevieve (she/her/hers) < <u>damico.genevieve@epa.gov</u>>; Danesh, Paymon < <u>Danesh.Paymon@epa.gov</u>>; Painuly, Priyanka < <u>Painuly.Priyanka@epa.gov</u>>; Valenziano, Beth < <u>valenziano.beth@epa.gov</u>>

Subject: General Motors - Fort Wayne Assembly PSD permit# 003-47629-00036

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hello,

We have completed our review of the draft PSD permit for the GM Fort Wayne Assembly plant. We'd like to provide you with the comments below:

- 1. The draft permit involves the modification of the 4 existing Reciprocating Internal Combustion Engines to fire Natural Gas. The engines are subject to a Best Available Control Technology limit of 0.5*ghp-hr*. Page 143 of the permit/TSD pdf-document includes various characteristics of the engines including the emission factors that address air emissions from the engines. However, missing from the page is the conversion factor that demonstrates how the BACT limit of 0.5*ghp-hr* is used to calculate the limited PTE of 43.30 TPY. Please include the conversion factor along with a discussion of the methodology used that summarizes how the BACT limit translates to the limited PTE amount listed within the table on page 143.
- 2. Section B of the Air Quality Analysis (AQA) under Appendix C provides and describes the inputs used in the air dispersion modeling for this project. While a majority of the inputs are defined and discussed, the actual modeled emission rates are not. There is no presentation anywhere in the report of what these actual modeled emission rates (g/s) are, or how they were derived. Without this information, it is unclear if the modeling analysis is set up properly or if the predicted impacts from the proposed project are accurate. EPA recommends that the modeled emission rates and information on how they are derived be included in the AQA, and any applicable justification be provided.
- 3. Table 2 of the Air Quality Analysis (AQA) under Appendix C shows the modeled results of the significant impact level (SIL) analysis for 1-hour NO2. The description on how this was derived states that:

To ensure that the hourly standards were protected, the highest hourly rate at each emission unit was modeled for each hour over the 5 years of meteorological data in order to match the highest hourly emissions with the hourly meteorological conditions. The highest 1st high concentrations for each pollutant and averaging time were estimated and compared with each pollutant's applicable SIL.

The maximum 1-hour NO2 modeled impact of 7.49 (µg/m3) provided in Table 2 seems to be the highest 1-hour impact from 2018. However, for the 1-hour NO2

standard based on the June 29, 2010, memorandum from U.S. EPA it is recommended that the SIL should be compared to either of the following:

- The highest of the <u>5-year averages</u> of the maximum modeled 1-hour NO2 concentrations predicted each year at each receptor, based on 5 years of <u>National Weather Service (NWS) data</u>; or
- The highest modeled 1-hour NO2 concentration predicted across all receptors based on 1 year of <u>site-specific meteorological data</u>, or the highest of the multiyear averages of the maximum modeled 1-hour NO2 concentrations predicted each year at each receptor, based on 2 or more years, up to 5 complete years of available <u>site-specific meteorological data</u>.

Section B of the AQA describes that the meteorological data used is the most recent 5 years of NWS data from Fort Wayne International Airport merged with upper air data from the Dayton, Ohio NWS station. However, it appears that a single year's highest 1-hour impact was chosen to be presented for comparison to the SIL instead of the 5-year average. Can you verify that IDEM intended on using a single year's highest 1-hour impact versus the recommended methodology described above for comparison to the SIL.

Please let us know if you'd like to have another follow up call to discuss. Thank you again for the opportunity to work with you on this draft permit.

Danny Marcus
Environmental Engineer
U.S. Environmental Protection Agency
Region 5 / Air and Radiation Division — Air Permits Section

Phone: (312) 353 - 8781

