UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 30 2008

REPLY TO THE ATTENTION OF:

AR-18J

Mr. William Presson, Acting Permit Section Supervisor
Michigan Department of Environmental Quality
Air Quality Division
P.O. Box 30260
Lansing, Michigan 48909-7760

Dear Mr. Presson:

Thank you for the opportunity to comment on the draft minor source construction permit for Marathon Petroleum Company, LLC. Overall, the U. S. Environmental Protection Agency is quite concerned with the lack of readily available information, both general and technical, provided as part of the public permit record in support of the draft minor source construction permit for Marathon Petroleum. EPA has appreciated the willingness of both the Michigan Department of Environmental Quality (MDEQ) and Marathon Petroleum to provide supplemental information upon request, however, the continued requests for clarification of information on existing tables, emissions calculations, as well as the need to request supplemental technical documentation to support the key component of this minor source construction permit, the netting analysis, has significantly impacted our ability to conduct a comprehensive review of this draft permit within the 30-day public comment period. In the absence of your granting our request for an extension, we must document this overarching concern and the potential ramifications. The fact that this information was not readily available as part of the public record leads us to question the foundation of the various decision points in this permit process, including the decision to accept the netting analysis that led to MDEQ's proposing to issue a minor source construction permit. It is not clear from our review to date that MDEQ and Marathon Petroleum have sufficient information to support all decisions made in this permitting action. We are open and desirous of further information exchange after the close of the comment period in order to resolve our concerns prior to permit issuance and avoid the need for continued EPA investigation after the permit is issued.

In addition to our overarching concerns, the following are EPA's comments on the draft minor source permit for Marathon Petroleum Company LLC:

1. The statement of basis states that the facility is using the actual-to-potential method in the netting analysis for most modified emission units, with the exception of the flares. Is this correct? EPA is concerned that the emissions resulting from the netting analysis for most emission units are significantly

smaller than their respective potential to emit. For example, permit PTI# 28-02A (unrelated to this project) set allowable emissions for the FCCU. However, Tables 3-1 through 3-10 appear to use projected actual emissions for the netting calculations. Please explain this inconsistency. This is very important because according to the new source review reform rules, there are additional recordkeeping practices required for those emission units that use projected actual emissions versus potential to emit to net out of prevention of significant deterioration. See 40 C.F.R. § 52.21(r)(6).

2. Page 30 of the permit contains a Federally Enforceable limit as .20 lb/mmbtu NOx limit. This limit is different than the .05 lb/mmbtu NOx limit that the facility has projected. Please provide an explanation as to why you are using different emission factors for the same pollutant to calculate emissions.

3. There are discrepancies among the emission calculations used in the netting analysis, without explanation. An example of this discrepancy can be seen for VOC emissions estimates contained on Table 3-2, including boilers and heaters.

4. Permit PTI# 262-02 authorized modifications that are considered part of the refinery expansion as listed on Table 3-12. Units that were affected by that permit include storage tanks (FG Crude Tanks and FG Naphtha tanks) that were modified, and the thermal oxidizer which was installed on the FCCU. These modifications caused an increase in emissions according to the permit. However, the emissions do not appear on tables 3-1 through 3-6, and do not seem to be part of the contemporaneous increases which make up the netting analysis. Please explain.

5. Permit PTI# 236-02 under the Contemporaneous Emission increases table (on the table 3-12 page) does not list any associated emissions increases. Note 2 on Table 3-12 states that associated increases were not included because they have already been included under the coker project, however, no further information has been provided to explain why or how the increases were considered under the coker project. Is there somewhere else within the permit application materials that discusses the coker project? Have those emissions been already included as part of the contemporaneous increases? Please explain.

6. It appears that Marathon Petroleum has received numerous construction permits within the last 5 years that have not been considered as part of the contemporaneous emissions increases within the netting analysis. Those permits include: 9-92B, 223-96B, 223-96C, 302-05, 421-95B, 303-01A, 302-05A, 245-07, 223-06, 175-06. Were any emission units actually modified that resulted in increased emissions as part of these permits? Were they just revisions to permits? Please explain.

7. According to Section 8 of the application, Marathon Petroleum is proposing to implement certain actions that will generate potential emission reductions of PM

and PM10. The application implies that these actions are completely voluntary, though it is not crystal clear as to whether these voluntary measures are intended to be used in the netting analysis. Please clarify the reasons to why Marathon Petroleum is taking these actions.

8. It appears that the baseline emission estimates for the PM emissions at the FCCU inappropriately take netting credit for reductions required by the consent decree. The baseline actual emissions used in the netting analysis to estimate PM from the FCCU should have been decreased by the amount of reductions resulting from the consent decree. The same concern may apply to the NOx and SO2 baseline actual emission calculations resulting from the consent decree. More detailed information is needed regarding these units/unit, their baseline actual emissions, and the decreases as a result of the consent decree.

9. The crude vacuum heater is represented through out the emissions tables as one particular unit. According to additional information that we've received from Marathon Petroleum, it appears that the crude vacuum heater is two separate units, a crude heater and a vacuum heater. Would you please clarify? Also, if the crude vacuum heater is two units, how are these units represented in the netting analysis after taking into account the consent decree? More detailed information is needed regarding these units/unit, their baseline actual emissions, and the decreases as a result of the consent decree

10. NSPS/MACT Standards have not been incorporated correctly in the permit. For example, Table E-1.15, VI, contains language that states that the "permittee must comply with all provisions of the federal.." NESHAP 40 CFR Part 63 Subpart DDDDD. Permit conditions must clearly contain the particular NSPS or MACT within the specific conditions of each emissions unit. Table 4-1 is a useful table that illustrates the particular boilers that are subject to New Source Performance Standards Subpart J and Db. This table should be used as a template for NSPS and MACT applicable units.

11. The "Summary of Changes to Detroit HOUP Permit" states that the flares are using startup, shutdown, and malfunction emissions in the baseline calculations. There is no documentation explaining what malfunctions are and why they are being included. The baseline actual emissions and projected emissions from flares should only include pilot gas, purge gas emissions, and any emissions due to planned maintenance events. Also, EPA could not find information to support the netting calculations for the flares. Please provide additional information regarding the baseline actual emissions.

12. Page 28, I. - The coker flare is considered a unique emission group. However, the coker flare is a control device for the coker since it is a recovery flare system device. The emission limits for the flare should include emissions from the pilot and purge gases routed to coker flare for normal operations. There is no indication that the coker unit emission conditions in the previous section took into

account pilot and purge gases to the coker flare. The way the permit is written now, there aren't even pilot and purge gases coming off the flare, it is not being used.

13. Page 16 Section B. Testing Recordkeeping
1. item 3. Within 180 days after commencement of the trial operation of the Detroit heavy oil upgrade project (Detroit HOUP), ...

MDEQ needs to define what event triggers the commencement of the trial operation of the Detroit HOUP. Since this project is complex and has many units being installed and/or modified, the permit needs to be explicit as to what is to be considered the end of the project. Once that unit or activity is done and operational, we can conduct a netting analysis to assure that the project avoided PSD review appropriately.

14. Page 16, item 2. method/analysis.
Reference test method deemed appropriate by the Division.

The permit should prescribe a test method, such as for PM and PM10, it would be Method 5 and Method 201/202, or an alternative as approved by the Director in order to assure compliance. This would apply anywhere a test method is referenced for assuring compliance.

15. Page 23 V. 5. states, " The permittee shall submit to AQD District Supervisor,..., a Startup, Shutdown, and Malfunction Plan..."

Does the netting analysis and proposed Detroit HOUP include planned startup and shut down unit emissions (including planned flaring of emissions during start up and shut down) from all affected units during the proposed Detroit HOUP project netting timeframe?

EPA expects that MDEQ will address these issues in any final minor source construction permit issued. We look forward to continuing to work with you to discuss these issues. If you have any further questions, please feel free to contact me or have your staff contact Danny Marcus at 3 12-353-8781.

Sincerely yours,

Pamela Blakley

Pamela Blakley, Chief
Air Permits Section