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

MAR 2 8 2013

REPLY TO THE ATTENTION OF:

Mary Ann Dolehanty
Permit Section Supervisor
Michigan Department of Environmental Quality
Air Quality Division
P.O. Box 30260
Lansing, Michigan 48909-7760

Dear Ms. Dolehanty:

Thank you for the opportunity to provide the Michigan Department of Environmental Quality (MDEQ) our comments on the draft construction permit for Midland Cogeneration Venture (permit number 103-12). The Prevention of Significant Deterioration (PSD) permit is for the construction of two natural gas fired combined cycle combustion turbine generators with heat recovery steam generators. Below are our comments:

1) In the fact sheet for the Greenhouse Gas (GHG) Best Available Control Technology (BACT) analysis, page 17, MDEQ states that the combined cycle gas turbine "is expected to have a thermal efficiency of approximately 50 to 60 percent." Please explain the selection of thermal/energy efficiency of the selected gas turbine and heat recovery steam generator which will ensure that Midland Cogeneration Venture will operate as efficiently as possible for reduction of GHG emissions. Neither the draft permit nor the fact sheet identify which gas turbine was chosen as GHG BACT for thermal efficiency, and if the turbine was not the most efficient and lowest GHG emitting turbine, why the most efficient and lowest GHG emitting turbine was not selected.

2) In the fact sheet under the BACT analysis for Carbon Monoxide (CO) and Volatile Organic Compounds (VOC), pages 11 and 12 of the fact sheet, MDEQ deems Catalytic Oxidation (COS) as technically feasible, however, based on the combined annualized cost of the COS for CO and VOC, MDEQ does not provide its rationale why the cost basis of $8948 per ton removed makes the associated controls economically infeasible. Please explain the basis MDEQ used to eliminate these control technologies as economically infeasible.

3) The permit record indicates that MDEQ did not require the applicant to provide preconstruction monitoring data for Particulate Matter less than 2.5 microns ($PM_{2.5}$). Instead, MDEQ relied on a demonstration that the source's impact was below the Significant Impact Levels (SILs) to conclude the source does not cause or contribute to a

violation of the $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS) or increments. We believe it would be prudent for the MDEQ to consider the recent decision by the D.C. Circuit Appeals Court to vacate the $PM_{2.5}$ SILs and Significant Monitoring Concentrations (SMC) from the PSD regulations. *Sierra Club v. EPA*, No. 10-1413, 2013 WL 216018 (January 22, 2013). The Court vacated the language regarding the use of $PM_{2.5}$ SILs in section 51.166(k)(2) and 52.21(k)(2) of EPA's regulation after EPA requested an opportunity to correct this language. The vacature brings to question subsequent use of the $PM_{2.5}$ SILs in the manner described in these provisions by the EPA or other permitting authorities as the sole basis for satisfying the requirement for a $PM_{2.5}$ NAAQS or increment analysis in some circumstances. As a result of this action, MDEQ should examine whether it needs to supplement its analysis before applying $PM_{2.5}$ SILs to support the required demonstration.

Also, in its decision, the Court held that the EPA did not have the authority to use SMCs to exempt permit applicants from the statutory requirement to include ambient monitoring data in the PSD application to help determine whether a source would cause or contribute to a violation of any NAAQS or increment. In light of the Court's decision, we believe that permits issued on the basis of the vacated SMC provisions (or state regulations based on those provisions) would be inconsistent with the Clean Air Act and difficult to defend in administrative and judicial challenges. More information on the Court's decision and our recommendations for carrying out the PSD preconstruction review process for pending and future permits consistent with the court decision can be found on the EPA's New Source Review website at http://www.epa.gov/nsr/documents/20130304qa.pdf.

4) The tons-per-year potential emissions of Nitrogen Oxides (NOx) and VOCs are above the significant emission thresholds that define significant emissions of these pollutants as precursors for $PM_{2.5}$ and ozone. As a result, the potential impact of the NOx emissions on the secondary formation of ambient concentrations of $PM_{2.5}$ and the VOC and NOx emissions impact on ozone concentrations should be addressed as part of the required source impact analyses for the $PM_{2.5}$ and ozone NAAQS. While it may not be necessary or feasible to model the impacts of these precursors, their potential impacts on the $PM_{2.5}$ and ozone NAAQS should be addressed in the required analyses. Consultation with the modeling staff in Region 5 is recommended to help determine the appropriate level of analysis.

We would like to thank you again for working with us in making sure that these issues were resolved in a timely manner. If you have any further questions, please feel free to contact Constantine Blathras, of my staff, at (312) 886-0671.

Sincerely,

Genevieve Damico
Chief
Air Permits Section