

**Proposed Project Summary  
for Indeck Niles, LLC  
November 7, 2016**

The Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), is asking for comments on a proposed air permit for a new natural gas-fired combined-cycle electric power plant for Indeck Niles, LLC. We will accept comments on the proposed air permit until the end of the public comment period on December 7, 2016, or if a public hearing is requested in writing, until the end of the public hearing. We will review all comments before we make a final decision on the proposal.

**What is the company asking to do in the permit application?**

The company is requesting to be able to build a new power plant which would produce electricity by burning natural gas fuel in a combustion turbine. A permit is needed for installation of such a power plant.

**What equipment is proposed to be installed?**

The proposed new plant will consist of the following equipment:

- Two combustion turbine generators (CTG)
- Two heat recovery steam generators (HRSG)
- One auxiliary boiler
- Two fuel heaters
- One diesel-fired emergency reciprocating internal combustion engine
- One emergency diesel fire pump engine
- Three water/condensate storage tanks
- Two diesel fuel tanks
- One aqueous ammonia storage tank
- Up to 44 space heaters
- One closed-cover parts washer

**What fuels will be used in the process?**

The proposed turbine generators, heat recovery steam generators, auxiliary boiler, fuel heaters, and space heaters will all burn natural gas. The proposed emergency engine and fire pump engine will burn diesel fuel.

**Will emissions control equipment be installed?**

A CTG combusts natural gas to cause the turbine blades to spin, which in turn rotates a shaft connected to an electrical generator. The exhaust from the CTG is hot, so a HRSG is used to convert the heat energy into steam. The HRSG also contains additional burners that can increase the heat energy for additional steam if desired. One CTG and one HRSG make up a CTG/HRSG train and the steam from both trains is sent to a steam turbine to generate more electricity. To control nitrogen oxides (NO<sub>x</sub>) emissions, each train will be equipped with dry low NO<sub>x</sub> burners and selective catalytic reduction. To control carbon monoxide and volatile organic compound emissions, each train will be equipped with an oxidation catalyst.

The auxiliary boiler will be equipped with low NO<sub>x</sub> burners and flue gas recirculation to control NO<sub>x</sub> emissions.

### **What laws and regulations apply to the project?**

Air quality laws and regulations protect public health and the environment. In the review of this application, the AQD applied the following state and federal air quality laws and regulations:

- State and federal regulations for Prevention of Significant Deterioration.
- State rules for Toxic Air Contaminants.
- State rules for Volatile Organic Compounds.
- State rules for Particulate Matter.
- Federal National Ambient Air Quality Standards (NAAQS) and Federal Prevention of Significant Deterioration Increments.
- Federal regulations for natural gas-fired turbines, natural gas-fired boilers, and stationary reciprocating internal combustion engines.

The AQD believes the proposed project will comply with all of these rules and regulations.

You can get more information on each in the Public Participation Fact Sheet.

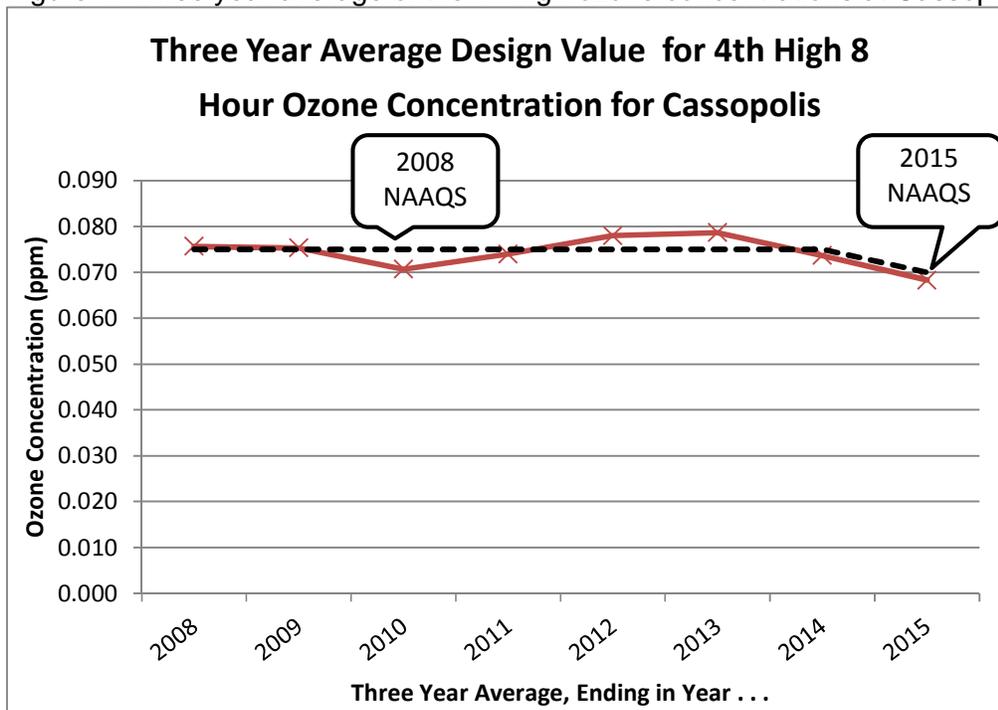
### **What is the current air quality in the area?**

The proposed new plant is located in Cass County, which is meeting all of the health protective NAAQS set by the United States Environmental Protection Agency (USEPA). Air quality standards are established for particulate matter equal to or less than 10 microns in diameter, particulate matter equal to or less than 2.5 microns in diameter, ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead. These standards are set at levels designed to protect public health.

It should be noted that on October 26, 2015, the USEPA revised the 8-hour ozone NAAQS from 0.075 parts per million (ppm) to 0.070 ppm. The MDEQ anticipates that Cass County will remain in attainment following the October 2017 USEPA designations.

The MDEQ has one monitoring site in Cass County in Cassopolis which monitors for ozone. Please see Figure 1.

Figure 1: Three year average of the 4<sup>th</sup> high ozone concentrations at Cassopolis.



### **Where can I find more information?**

There are two ways to find more information: the Public Participation Fact Sheet has more details about the project; the reviews that were completed; what the expected emissions will be; and how it will meet the rules and regulations and the AQD staff can provide additional information on request. The information available includes:

- A summary of the reviews completed by the AQD staff.
- What are the rules and regulations that apply to the proposed project?
- What are the air emissions from the proposed project?
- How will air quality and public health be protected?
- What will the proposed permit require the company to do?
- Example emission calculations.

### **How do the public comment period and public hearing work?**

The law requires the AQD to invite public comment on certain proposed permit actions. Under the law, the AQD must approve an air permit application if the project complies with all applicable state and federal air quality rules and regulations. Information about why this draft permit needs a public comment period is in the Public Participation Fact Sheet.

Public comment periods and public hearings allow people to comment on the AQD's evaluation of an application and on a proposed permit. The AQD will review all comments before we make a final decision on the permit application. Based on comments received during the public comment period and hearing, the AQD may issue the permit as proposed, deny the permit application, or issue a revised permit.

A public hearing will only be held if someone requests it. The AQD staff will be available at the public hearing, if one is requested, to answer any questions people have about the proposed permit.

Comments about air quality and the proposed permit that the AQD can consider include:

- Technical or mathematical mistakes.
- Other emission sources the proposed permit should include, and why.
- Why the equipment in the proposed permit would not meet the rules and regulations.
- Other rules or regulations the proposed permit should include, and why.
- Why the proposed permit should include more monitoring of emissions.
- Why the emission controls do not meet the rules and regulations.

### **Conclusion**

The AQD has evaluated the permit application and prepared a proposed permit for public review and comment. Based on the review conducted by the AQD, the proposed permit will ensure the facility will comply with the air quality requirements that apply. Therefore, we are proposing that the application be approved, subject to the requirements of the proposed permit.

However, before the AQD takes action on it, we are requesting comments from the public. The AQD will review all comments received during the public comment period and public hearing, if one is requested, and make a final decision on the permit application. If approved, the AQD may decide to add or change proposed permit conditions based on the comments.

For more information, please contact Catherine Asselin, AQD, at 517-284-6786.