

FAQ

Proposed Permit to Install L'Anse Warden Electric Company 157 South Main Street, L'Anse, Michigan

Frequently Asked Questions (FAQ)

The Michigan Department of Environmental Quality (DEQ) has compiled this FAQ to answer the community's questions about the proposed Permit to Install for the L'Anse Warden Electric Company (LWEC) plant.

Contents

Contents	1
1. What changes has the LWEC proposed in this application?.....	1
2. Is the LWEC Plant currently in compliance with all air regulations?.....	1
3. Smoke has been seen coming from the LWEC exhaust stack. Is this smoke a violation of air quality rules? .	2
4. What are the pellets that LWEC is proposing to burn?.....	2
5. What emissions may result from burning the pellets?.....	2
6. Were Toxic Air Contaminants (TACs) Evaluated?.....	3
7. Will emissions increase when the pellets are used?.....	3
8. What air monitor does the MDEQ have in the Upper Peninsula?.....	3
9. Who should citizens contact with questions and/or complaints about LWEC?	3

1. What changes has the LWEC proposed in this application?

This proposed permit application includes the following requested changes:

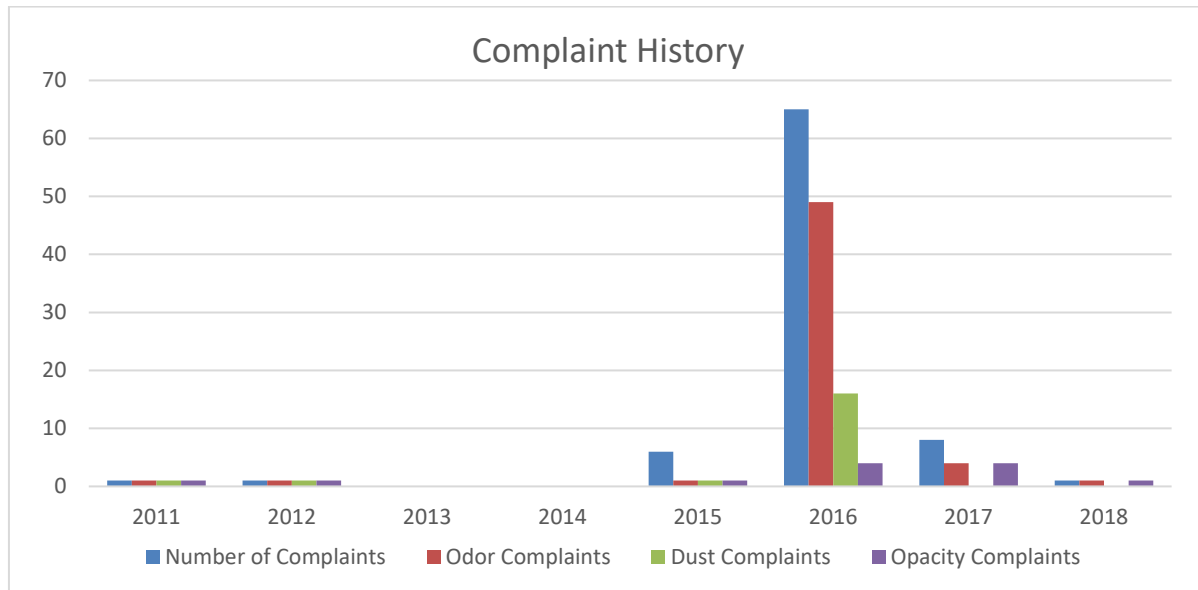
- The ability to burn up to 50,000 tons of engineered pellets (pellets) per year in the facilities' existing boiler.
- The installation of a control system called dry sorbent injection (DSI). The DSI will be used whenever the pellets are being burned. This system will allow hydrogen chloride (HCl) emissions to be continuously monitored.
- Changing the amount of material allowed to be burned from an hourly to a daily limit.
- Changes to the permit conditions to reflect comments received on the facilities' draft Renewable Operating Permit.

2. Is the LWEC Plant currently in compliance with all air regulations?

Yes, the plant is currently in compliance with all air quality regulations.

In the past, the Michigan Department of Environmental Quality (DEQ), Air Quality Division (AQD) has received complaints regarding dust and odors from the plant. In addition, LWEC exceeded its permitted HCl emission limit during a September 2015 stack test. To address the complaints and the exceedance of the HCl emission limit Violation Notices were issued and a Consent Order was entered into with LWEC. The consent order required LWEC to build an enclosure on the fuel conveyor belt to address dust fallout, prohibited using railroad ties treated with pentachlorophenol, and required additional testing of HCl emissions.

Following is a summary of recent complaints AQD has received about the facility:



3. Smoke has been seen coming from the LWEC exhaust stack. Is this smoke a violation of air quality rules?

Smoke or “opacity” is talked about as the amount (percentage) of the background that is hidden from the person viewing the smoke. By law and LWEC’s permit (both their current one and the proposed PTI No. 128-18) opacity is limited to 20% from their exhaust stack. Visible emissions of less than 20% are not a violation, while emissions of greater than 20% are a violation.

4. What are the pellets that LWEC is proposing to burn?

The pellets (see photo to the right) are made by Convergen Energy, who now owns LWEC. The pellets are made from non-recyclable industrial label and packaging materials (mostly paper/cardboard and plastics). No post-consumer material is used to make the pellets. They are classified by the U.S. Environmental Protection Agency (USEPA) as a non-hazardous secondary material (“non-waste fuel”) under the Alternative Fuels Program for purposes of the Resource Conservation and Recovery Act. Visit the DEQ’s public comment webpage at www.deq.state.mi.us/aps/cwerp.shtml to read the letter from the USEPA relaying this information.



5. What emissions may result from burning the pellets?

The burning of all materials, including the proposed pellets, results in the emissions of regulated air pollutants. Regulated air pollutants include particulate matter (PM), particulate matter less than or equal to 10 microns in diameter (PM10), particulate matter less than or equal to 2.5 microns in diameter (PM2.5), nitrogen oxides (NOx), volatile organic compounds (VOCs), sulfur dioxide (SO2), carbon monoxide (CO), lead, fluorides, and sulfuric acid mist. Based on the amount of pellets LWEC is proposing to burn, the projected emissions of all regulated emissions, except for NOx, are projected to decrease or remain nearly constant.

Also emitted when any material is combusted are Toxic Air Contaminants (TACs). A total of 89 different TACs are projected to be emitted by LWEC. The amount and magnitude of each varies by the amount and type of fuel burned.

The proposed permit requires LWEC to perform emissions testing while burning the engineered fuel pellets, to verify that emissions of PM, SO₂, NO_x, lead, HCl, arsenic, manganese, and nickel meet their allowed limits. HCl, arsenic, manganese, and nickel are all TACs.

6. Were Toxic Air Contaminants (TACs) Evaluated?

Yes, LWEC's proposed emissions of 89 different TACs were evaluated under this application and all were found to be meeting their respective health-based screening levels. The amount and magnitude of each varies by the amount and type of fuel burned. The review was done assuming the maximum possible emissions of each TAC. Allowed screening levels, which are developed by the AQD, are concentrations in the air that are not expected to be harmful to public health. As part of the required stack testing LWEC must test for HCl, arsenic, manganese, and nickel, which are considered TACs, while burning the pellets.

7. Will emissions increase when the pellets are used?

Projected emissions of nitrogen oxides (NO_x) will increase by approximately 3.86 tons per year.

This value is dependent on the projected capacity of the boiler in the future as well as other factors such as how much of each allowed fuel is actually burned. Just because LWEC may be allowed to burn up to 50,000 tons per year of pellets, they may not actually burn that amount. As such, there may not be an increase in actual NO_x emissions. The emissions of all other regulated pollutants are projected to decrease or remain nearly constant, however depending upon actual operations they may not.

While the 3.86 ton per increase seems like a big increase on its own; it represents 1.4% of the boilers past actual emissions, and it represents 9.65% of what USEPA considers to be a "significant" emissions increase.

8. What air monitor does the MDEQ have in the Upper Peninsula?

The MDEQ has an air monitoring station located at the Seney Wildlife Refuge which measures ozone and fine particulate matter (PM_{2.5}).

9. Who should citizens contact with questions and/or complaints about LWEC?

Citizen complaints should be directed to:

- Ed Lancaster – 906-250-5124 or via e-mail at lancastere1@michigan.gov
- Joe Scanlan – 906-458-6405 or via e-mail at scanlanj@michigan.gov.

It is recommended that you contact the AQD as soon as you observe a problem, to allow available staff to investigate the complaint while it is still on-going.

Michigan's Environmental Justice Policy promotes the fair, non-discriminatory treatment and meaningful involvement of Michigan's residents regarding the development, implementation, and enforcement of environmental laws, regulations, and policies by this state. Fair, non-discriminatory treatment intends that no group of people, including racial, ethnic, or low-income populations, will bear a disproportionately greater burden resulting from environmental laws, regulations, policies, and decision-making.

Meaningful involvement of residents ensures an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.