L'Anse Warden Electric Company

RESPONSE TO COMMENTS DOCUMENT

October 31, 2016

PERMIT No. 67-16

ADMINISTRATIVE CONSENT ORDER

MDEQ No. 35-2016

Rick Snyder, Governor

Air Quality Division
Michigan Department of Environmental Quality

INTERNET: http://www.michigan.gov/air

Lynn Fiedler, Chief
Air Quality Division
Constitution Hall, 2nd Floor, South Tower
525 West Allegan Street
P.O. Box 30260
Lansing, Michigan 48909-7760
Phone: 1-800-662-9278
Fax: (517) 373-1265

Table of Contents

Section **Page**

I. PUBLIC PARTICIPATION PROCESS

The Michigan Department of Environmental Quality (MDEQ) held a public comment period and hearing for draft Permit to Install (PTI) application No. 67-16, and draft Administrative Consent Order MDEQ No. 35-2016 for the L'Anse Warden Electric Company (LWEC), located at 157 South Main Street in L'Anse, Michigan.

The MDEQ proposed entry of a Consent Order with LWEC to resolve air pollution violations of existing Renewable Operating Permit MI-ROP-B4260-2011 and issuance of a permit to remove pentachlorophenol (PCP) treated wood as an allowed fuel. The violations were associated with emission limits and fugitive dust. Compliance testing conducted on September 22 and 23, 2015, showed that EUBOILER#1 exceeded the emission limits for hydrogen chloride (HCl). During late January and early February 2016, the MDEQ conducted multiple investigations responding to complaints of fugitive dust from LWEC. On February 8, 2016, a violation notice was issued to LWEC for allowing the release of fugitive dust from fuel conveyance equipment. The proposed Consent Order requires the construction of several enclosures to minimize fugitive dust emissions and the proposed Consent Order and draft PTI 67-16 require testing for HCl emissions.

The public participation process involved providing information for public review including a Fact Sheet, a proposed project summary, proposed permit terms and conditions, draft Consent Order, as well as a public comment period, and the receipt of written public comments on staff's analysis of the proposed actions.

On August 24, 2016, copies of the Notice of Air Pollution Comment Period and Public Hearing, the Fact Sheet, the proposed project summary, draft Consent Order, and the draft terms and conditions were placed on the MDEQ, Air Quality Division (AQD) New Source Review Permit to Install Application Page (http://www.deq.state.mi.us/aps/cwerp.shtml). Also on that date, the MDEQ mailed letters to persons who had previously expressed interest. In addition, a notice announcing the Public Comment Period and Public Hearing was placed in *L'Anse Sentinel and the Daily Mining Gazette*. The notice provided pertinent information regarding the proposed actions; the locations of available information; a telephone number to request additional information; the date, time, and location of the Public Hearing; the closing date of the Public Comment Period; and the address where written comments were being received.

Two informational meetings were held regarding the draft PTI and proposed Consent Order. The first meeting was held on September 8, 2016, and the second meeting was held on September 28, 2016. Both informational meetings were held at the L'Anse Area High School in L'Anse, Michigan. Both informational meetings started at 6:00 pm. The September 28th informational meeting was held at 6:00 pm to 7:00 pm, prior to the Public Hearing.

The Public Hearing was held on September 28, 2016, at the L'Anse Area High School in L'Anse, Michigan. The hearing began at 7:00 pm with Mr. Steve Casey as the Hearings Officer and Ms. Lynn Fiedler as the Decision Maker. Only comments on the proposed permit and draft order were received. In addition, staff of the AQD was available to answer any questions. Approximately 50 people were in attendance at the Public Hearing and some provided oral comments. The Public Hearing concluded at approximately 9:30 pm.

In addition to the testimony, a total of 16 written comments (including e-mails) were received during the Public Comment Period and Hearing.

The remainder of this document is a listing of the significant comments received and the AQD's response. The first section discusses the comments received that resulted in changes to the final permit terms and conditions and the basis for each change. The last section discusses the AQD's response to all other significant comments that did not result in changes to the final permit.

II. SUMMARY OF COMMENTS RESULTING IN CHANGES TO THE PERMIT AND THE CONSENT ORDER

Comment
Did the Air Quality Division evaluate all emissions from LWEC?

AQD Response
Under the original permit application (Permit 168-07) all processes subject to permitting requirements were evaluated. These processes were the ash system, the fuel handling system, and the boiler. This evaluation did not include any emission units considered exempt by the facility. Based on comments received during the comment period, the AQD staff is evaluating emissions from other processes, such as the pneumatic conveying system to determine if review under a permit application is required.

In order to assure emissions from the pneumatic conveying system have been adequately characterized and evaluated, LWEC has proposed to discontinue the use of the pneumatic conveying system and instead use trucks to convey material from the fuel yard to the receiving hopper at the boiler, as was done under the original permit. This method of conveying the material will cause no greater impact from the fuel feeding operation since the unloading will be performed in an enclosed and unpressurized area.

The Consent Order includes requirements to disable the pneumatic conveyance system, and to notify the AQD of any action taken. It also includes provisions for the restart of the pneumatic system.

Comment
On page 7 of the draft permit, the table under "Material Limits" has conditions for the fuels used by the facility "as received". The term "as received" is not clear in this usage and is not defined in the permit. Please define "as received" and explain how MDEQ proposes to use this term to ensure the facility complies with the terms in this portion of the permit.

AQD Response
The term "as received" is now defined in the permit as "the heating value of the solid fuel shall be determined with the ash forming materials present and the moisture content at the time of delivery".

The term "as received" is specified in the permit to assure that the company is accurately portraying the heating value of solid fuels and using the same value to calculate the maximum annual throughput to the boiler under special condition III.1. The maximum annual heat input is based upon an "as received" basis which includes any inherent moisture in the solid fuels. Moisture in the fuel will reduce the overall heating value of the solid fuel when compared to the heating value on a dry basis. The use of the term "as received" is used to assure that actual emissions are calculated and reported correctly.

Comment
The upper portion of the main exhaust stack appears to be damaged. What affect does this have on the dispersion modeling done for the facility?

AQD Response
Dispersion modeling was performed in 2007 with the conversion to biomass. The results of that modeling indicated emissions from the facility met all the National Ambient Air Quality Standards (NAAQS). Since the comment was received, the modeling results were reevaluated. This evaluation was based on a lower stack height to account for the damaged condition of the existing stack. Results show the emissions from a lower stack height continue to meet the NAAQS and the standard for HCl

The AQD has added a condition to Section IX "Other Requirements" which requires the repair of the stack by the earliest date possible but no later than September 30, 2017.

Comment
Comments were received concerning past stack testing at the facility. Included were concerns that past stack tests were not conducted at permitted levels of railroad ties and tire-derived fuel.

AQD Response
Stack testing should be done at maximum production levels or at a minimum at production levels representative of normal operations. The company has stated the boiler is not capable of operating at the production levels contained in the previous permit. A maximum throughput rate of 17 tons per hour of railroad ties has been added to the permit to better reflect the boiler capacity.

SUMMARY OF SIGNIFICANT COMMENTS

Comment
Several comments were received about odors coming from both the plant and fuel yard. Citizens are concerned with the actual and potential effects the odors are having on their health and their ability to enjoy the outdoors.

AQD Response
The AQD has received public complaints about odors from the facility. Although some odors are normal and expected, facilities are not allowed to have air emissions that cause an unreasonable interference with the comfortable enjoyment of life and property. The presence of odors does not necessarily indicate negative health effects. There are some compounds that have a very low odor threshold and have low toxicity, such as turpentine and acetone. Therefore, the detection of odor is not indicative of an adverse health affect. Detected odors may not be long-lasting, so it is very important that residents call in complaints to the AQD in a timely manner. Please contact AQD staff at 906-228-4853 during business hours or 1-800-292-4706 during evenings or weekends. The AQD inspector will investigate complaints as soon as possible. The investigation is done using a proven fair and objective process to characterize the odor as normal operation or as one that requires further inquiry to determine the source.

Comment
Testing/sampling at the facility needs to be performed more frequently.

AQD Response
HCl testing will be performed more frequently under the conditions of the permit and Consent Order, this includes testing on a quarterly basis for four quarters, followed by two semi-annual tests, followed by one test in the next three years. More frequent testing is required because the company failed their previous emission test for HCl. Previous test results indicate that emissions of other pollutants regulated in the permit, are well below their allowable emission rates and therefore, additional testing is not required.

Comment
Several comments were received concerning burning creosote treated railroad ties. The commenters were concerned that creosote is both an endocrine disruptor and is bioaccumulative. They questioned if creosote is a carcinogenic compound and what long term and short term effects the creosote air emissions will have upon people. Are the emissions of polycyclic aromatic hydrocarbons (PAHs) from the creosote at the facility harmful to people? What effects will these chemicals have upon the people who live near the LWEC facility?

AQD Response
Coal tar creosote is the most widely used wood preservative in the United States. Among the hundreds of chemicals that may be present in coal tar creosote, the PAHs compose about 75 percent of the mixture and are of particular interest. PAHs also occur in cigarette smoke, charbroiled meat, smoke from wood fires, asphalt roads, and automobile exhaust. Both coal tar creosote and PAHs are regulated as carcinogens. The constituents of creosote have a moderate level of persistence and bioaccumulation potential. However, microorganisms can break down PAHs in the environment after a period of weeks to months. Possible health effects from inhalation exposure to PAHs depend on the concentration in the air and the duration of the exposure. High short-term exposure levels could cause irritation of the eyes, nose and throat. The AQD restricts PAH air emissions so that the possible cancer risk to nearby residents is a lifetime risk of 1 in 100,000 or less. The LWEC permit restricts the combustion stack air emissions to ensure public health protection from cancer and non-cancer risks.

Comment
Many people who live near the LWEC facility have issues with headaches, breathing, sinus, constricting throats, and/or asthma. What effect is the facility having on these issues?

AQD Response
These symptoms can have many potential causes. The AQD applies and enforces federal and state regulations designed to protect the public health from these and other potential effects of air pollution. The AQD reviewed the maximum emission rates allowed by the permit and it showed them to be meeting the health based standards. While it is possible that facility emissions could be contributing to these symptom rates, the AQD is unaware of evidence that emissions have caused illnesses. Under the law, facility air emissions are not allowed to cause injurious effects to people. Therefore, the permit should ensure public health protection; residents should continue to report complaints to the AQD if they think facility emissions are affecting their health. The AQD inspector will investigate complaints as soon as possible.

Comment
Why isn't monitoring data used to make health assessments?

AQD Response
The permit for LWEC contains many enforceable conditions, such as emissions testing, that help ensure operations comply with the health protective limits. While ambient (outdoor) air monitoring may provide useful information about pollutant levels it is not an effective tool for determining compliance. For example, air monitoring can only detect elevated air pollutant levels if the monitor is actively collecting a sample at the same time the wind conditions are carrying emissions toward the monitor and, at the same time when impacts are unusually high. Additionally, for ambient air monitoring to be effective at detecting a problem, the monitoring and subsequent analysis would need to include the specific elevated air pollutant of concern, of which there may be many possibilities. Several air pollutants (such as particulate matter) have many potential sources, so an elevated measurement does not necessarily indicate the cause.
For these reasons, air dispersion modeling is the preferred method for assessing the public health impact associated with a facility's emissions.

Comment
The federal Agency for Toxic Substances and Disease Registry (ATSDR) has said there is likely harm to the public health from this facility, but a lack of data to show it.

AQD Response
The AQD and ATSDR are not aware of data showing harm to the public health from this facility. On July 21, 2015, the ATSDR sent a letter to a L'Anse resident responding to concerns about air emissions from the facility. In their letter ATSDR did not indicate that "there is likely harm to the public health from the facility." Rather they indicated that the data necessary to a public health evaluation was not available. ATSDR added that at that time they were not planning to conduct any additional public health activities related to the LWEC facility.

More recently, the ATSDR has agreed to work with the United State Environmental Protection Agency (USEPA) to evaluate the LWEC combustion stack emissions, the modeled ambient air concentrations associated with those emissions, and evaluate if those concentrations indicate any significant public health concerns. The ATSDR and USEPA will also collect, analyze and evaluate topsoil samples near the facility. It is estimated the results from both of these studies may be available by November 2016. The AQD will review the results, and it is our understanding the USEPA and ATSDR will provide the findings to interested local residents. The AQD will work with these other agencies to address any concerns raised by the data.

Comment
LWEC is most likely a major source of Hazardous Air Pollutants (HAPs) and should be regulated as such. If they are not a major source of HAP emissions, then please include a permit limit for individual HAPs to remain below the major source threshold, with an associated 12-month rolling time period as determined at the end of each calendar month for EUBOILER#1.

AQD Response
A comprehensive review of HAPs was performed in 2007, which included a detailed evaluation of toxic air contaminants as well. A facility is considered to be a major HAP source if potential aggregated HAP emissions are greater than 25 tons per year, or if a single HAP has potential emissions greater than 10 tons per year. The aggregated potential HAPs for LWEC do not exceed 25 tons per year. Total HAPs (including HCl) are estimated to be 16 tons per year; the largest single individual is HCl, which is estimated to be emitted at 8.9 tons per year and is limited by permit to less than 10 tons per year. Since the other HAPs, including aggregate HAPs, are substantially less than the major source emission threshold of 10 and 25 tons per year, no additional limits are necessary.

Comment
Why is/has the LWEC facility not been required to install scrubbers to control emissions?

AQD Response
The requirement to add emission controls would be implemented if the facility were subject to a state rule or federal regulation which specifically required emission control, or if an emission control were needed to comply with NAAQS or screening levels. With the current emission limits in the permit, the company is not required by any federal regulation or state rule to require the use of scrubbers.

Comment
Why is the LWEC facility allowed to burn railroad ties? The facility should only be allowed to burn natural gas.

AQD Response
LWEC is allowed to burn railroad ties because the combustion emissions were evaluated and found to be in compliance with all federal regulations and state rules.

Comment
Are railroad ties considered to be biomass and if so how and why?

AQD Response
Public Act 295, Michigan's Clean Renewable, and Efficient Energy Act of 2008, contains a definition of biomass, and the materials being combusted at LWEC meet that definition of biomass. Under Public Act 295, Biomass is defined as:

> " . . . any organic matter that is not derived from fossil fuels, that can be converted to usable fuel for the production of energy, and that replenishes over a human, not a geological, time frame, including, but not limited to, all of the following..."

Comment
The LWEC facility is allowed to burn 20 tons per hour of railroad ties. This equates to 480 tons per day, 72,000 tons per year, or 19 truckloads of railroad ties per day. The facility is also allowed to burn 4 tons per hour of tires, which equates to approximately 10,000 tires per day. These values seem excessive. Are the emissions from them safe?

AQD Response
Emissions from the proposed material throughputs of tire derived fuel, railroad ties, and wood materials was evaluated in 2007 and found to meet all applicable federal regulations and state rules, including those that were designed to provide public health protection.

Comment
The LWEC facility appears to be more of an incinerator than a power plant and as such it should be subject to the federal CISWI regulations. Please explain why it is not subject to those regulations. In addition the "Material Limits" table on page 7, condition 1 indicates that the facility shall use less than 50 percent of annual heat input of natural gas. The facility currently has claimed an exemption from the CISWI regulations as a small power-production facility per 40 CFR §60.2020(e). The facility indicated it is using less than 25 percent of the annual heat input of natural gas as stated in its small power-production facility filing with the Federal Energy Regulatory Commission for its CISWI exemption. Please verify the percentage amount of natural gas used by the facility and the status of its claimed CISWI exemption.

AQD Response
The regulations for Commercial and Industrial Solid Waste Incineration (CISWI) were first proposed in 1999, and became effective in 2000. Since the rules became effective, there have been seven corrections, amendments, and reconsiderations to the CISWI regulations. In 2007 the company stated that the facility was not subject to the CISWI regulations because they were recovering useful energy from the combustion of biomass and the then current regulations exempted such facilities from CISWI applicability. The AQD agreed with that determination based upon the regulations in effect at the time the permit application was submitted.

Subsequent revisions to the CISWI regulations removed the blanket exemption for recovering energy from the fuel stream. CISWI applicability is now based upon the use of materials designated as "solid waste". Railroad ties are considered to be a non-hazardous secondary waste and considered solid waste under the CISWI regulations.

The non-hazardous secondary material (NHSM) regulations are regulations which define solid waste and therefore what is subject to the CISWI regulation. The finalized NHSM regulations exclude the applicability of the CISWI regulations under the following conditions:

- The unit qualifies as a small power-production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)).
- The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity.
- The facility submits documentation to the Administrator notifying the Agency that the qualifying small power production facility is combusting homogenous waste.

On August 27, 2014, the company provided documentation to USEPA and the AQD that they meet the exemption criteria listed above, and the facility is not subject to CISWI regulations.

Lastly, AQD evaluated fuel usages as reported to the Michigan Air Emissions Reporting System. Based upon their reported fuel usages, natural gas usage is well below 25 percent of the annual heat input of all fuels used. The calculated percentages of natural gas heat input as compared to the annual heat input of all fuels from 2012 through 2015 were 0.16 percent, 0.20 percent, 1.13 percent and 0.14 percent, respectively.

Comment
Both the grinding operation and all material storage should be enclosed. Enclosing the grinding operation and the storage piles will minimize fugitive dust and help to keep any materials from leaching into the ground water and soil.

AQD Response
While there are advantages to covering the storage pile, including a reduction in the moisture content of the material allowing for a greater amount of energy from the wood fuels, the AQD does not have the regulatory authority under the Air Pollution Control Regulations to require the LWEC to enclose the storage piles. However, the MDEQ has estimated fugitive emissions from the grinding and determined the emissions are minimal.

The Storm Water Pollution Prevention Plan and former Scrap Wood Management Plan require complete enclosure of the processed railroad ties and tarping of the unprocessed pentachlorophenol railroad ties. The Water Resources Division sent a Compliance Communication to LWEC dated May 26, 2016, regarding concern with the inventory control of railroad ties and required a demonstration that water quality standards are being met. The letter required a work plan for a Short Term Storm Water Characterization Study for potential PCP and phenol derivatives by June 30, 2016. LWEC submitted the work plan on June 15, 2016, which was approved with modification on July 13, 2016. The results of the Study are due December 1, 2016. LWEC is no longer accepting/grinding PCP ties. All legacy PCP railroad tie storage have been removed for offsite disposal and the AQD has requested documentation of the current railroad tie storage.

Comment
The testing which has been performed is not valid, since the boiler was not tested at the maximum throughput rates specified in the permit.

AQD Response
Emission testing should be conducted at the maximum rated capacity of the process being tested or at a load representative of the operating capacity of the emission unit. In some situations it is not possible to run emission tests at the maximum rated capacity of the emission unit because of process variables such as the physical age of the emission unit. The latest emission testing done at LWEC was required by the USEPA. The USEPA approved the boiler load and fuel feed rates in the test protocol. One of the items evaluated as part of the testing protocol was the load at which the boiler was operating, and the ratio of the different fuels being fed into the boiler during the test. The throughput rates and operating load were determined by the USEPA to be representative of normal operation for purposes of showing compliance with permit limits. Subsequent to the last round of testing, LWEC has proposed revised maximum throughput rates which are more representative of normal operation.

Comment
Comments were received questioning how the LWEC facility will be able to accurately demonstrate proper fuel mix ratios during future emissions testing. In addition without being able to measure the exact amounts of fuel being fed to the boiler, LWEC's material feed rates, which are based upon "calendar day average" periods, are not practically enforceable. Commenters also stated that LWEC has not demonstrated it can meet its HCl emissions limits at the terms specified in the draft permit.

AQD Response
The boiler at the LWEC facility is capable of and routinely does burn multiple different fuels simultaneously. These fuels include natural gas, wood chips, ground-up railroad ties, and tire derived fuel (TDF). The wood chips, railroad ties, and TDF are all fed into the boiler from separate storage bins of each. The facility keeps records of how much of these materials are added to each bin on a daily basis. Based upon the amount remaining in each bin at the end of the day, they know how much of each was burned each day. Hourly feed rates are then calculated based upon the total fuel burned and the total hours the boiler operates. The facility does not have the ability to individually measure the specific amounts of each fuel burned each hour. This is consistent with how other similar facilities maintain their fuel usage records.

LWEC has completed several recent stack tests at their facility to verify emission rates. Both the draft permit and Consent Order require that several additional tests be performed to measure HCl emissions. Prior to any testing being performed, LWEC is required to submit a test protocol to AQD outlining which tests will be performed, the methods to be used, and how the testing will be completed, thus ensuring that proper testing will be done. In addition after the testing is completed, LWEC is required to submit to AQD a report outlining the specific testing done, the methods used, and the results measured, thus ensuring that proper and correct testing was indeed done. Both the AQD and USEPA reviewed and signed off on the test protocols from LWEC prior to their recent testing. The AQD reviewed and concurred with the results of the recent testing completed by LWEC.

Comment
Comments were raised about soot blowing at the LWEC facility. Specifically the commenters questioned what soot is and what effect soot blowing has upon emissions from the facility. The Consent Order should limit soot-blowing at the plant.

AQD Response
"Soot" is a generic term which describes a material collected in boilers combusting solid fuel. Materials such as ash, slag, inert materials, and unburned fuel/carbon, can collect in the small spaces between boilers tubes or on the boiler tube surfaces. When enough soot collects, it impacts the ability of the boiler tubes to transfer heat from the combustion zone and decreases the efficiency of the boiler by limiting the amount of steam produced. To alleviate this problem, compressed air is used to dislodge the collected materials. The process of soot blowing is not typically done all at once, but is done in a staggered fashion in different combustion zones of the boiler. Any material that is dislodged will pass through the electrostatic precipitator and will be collected as particulate matter. It is possible to dislodge a large amount of material from the soot blowing process under certain circumstances. In these cases the amount of dislodged material could overwhelm the control device, and could cause increases in opacity. The continuous opacity meter is not indicating spikes in visible emissions during soot blowing operations, or violations of the opacity standard. Visible emissions from the stack could also be the result of problems with the combustion control system for the boiler. Large swings in boiler load could result in the generation of unburned carbon which would be seen as visible emissions coming from stack. Again, review of continuous opacity monitoring data has not indicated that visible emissions are problematic. It should be noted that both state and federal visible emission standards are based upon a 6-minute average. In other words, the facility would have to have visible emissions in excess of 20 percent opacity averaged over six minutes in order to be in violation of the opacity limit.

Comment
The "Emission Limits" table on page 6 of the draft permit lists "test protocol" as the time period/operating scenario for the majority of pollutants. Without an appropriate averaging period, an emission limit of pounds per hour, tons per year, or grains per dry standard cubic feet is unenforceable and not protective of the environment.

AQD Response
The permit requires LWEC to submit test plans to the AQD for approval prior to conducting emission testing. In this way, the AQD ensures that the averaging time used in the emissions testing will correspond to the averaging time used to determine compliance with the emission limits.

Comment
On page 8, V. Testing/Sampling, condition 1, requires the facility to test and verify the emissions of particulate matter, sulfur dioxide, nitrogen oxides, lead, and volatile organic compounds once every five years. Due to the historic compliance issues at this facility, the USEPA recommends that this compliance testing be done every three years, similar to the frequency period of the hydrogen chloride testing.

AQD Response
The AQD agrees it is appropriate to require more frequent testing in those situations where there have been compliance issues. This is the approach which has been taken for HCl testing. Testing for other pollutants indicates compliance with permit limits with actual emissions well below allowable permit limitations. The frequency of testing for the other pollutants is appropriate based on previous testing results.

Comment
The draft permit is being issued concurrently with a draft Consent Order 35-2016, for violations of Michigan rule 901 related to the HCl permit limit and fugitive dust emissions. The draft Consent Order stipulates that the facility shall comply with an approved fuel procurement and management plan and an approved fugitive dust plan. This also applies to the operations taking place on the adjacent property to LWEC where the railroad ties are received, tested, chipped, and conveyed to the LWEC property receiving hopper. The draft Consent Order impacts the method of operation at the adjacent property regarding both the fuel procurement and management plan and the fugitive dust plan. In order to ensure the conditions in both referenced plans are permanent and enforceable, the chipper and railroad ties receiving and storage area should be included in this draft permit.

AQD Response
The inclusion of the Fuel Aggregation Facility (FAF) will be addressed in the Renewable Operating Permit. The Renewable Operating Permit will be revised in the near future.

Comment
The draft permit does not specify test methods for determining compliance with the various permit limits. Each applicable permit condition should specifically identify the respective test method that the source will use to demonstrate compliance with each emission limit in the permit.

AQD Response
The permit requires LWEC to submit test plans to the AQD for approval prior to conducting emission testing. In this way, the AQD ensures that the most up to date and appropriate test methods will be used in order to properly determine compliance with the emission limits.

Comment
What steps does the MDEQ go through after the close of the comment period in order to make decisions on the draft PTI and draft Consent Order?

AQD Response
After the close of the public comment period, the following steps will be followed:

- All written comments and oral testimony will be compiled and reviewed for consideration.
- A Response to Comments (RTC) document will be prepared. The RTC document will provide the MDEQ's position on each comment.
- The decision maker, based upon written comments and oral testimony, will take one of the following actions:
    - Permit/Consent Order denied.
    - Permit/Consent Order approved.
    - Permit/Consent Order will be approved with modifications.
- The interested parties will be informed of the permit decision and the location of the RTC and final permit conditions and Consent Order.

Comment
Why does the MDEQ and USEPA allow the burning of railroad ties, but Canada does not?

AQD Response
The MDEQ cannot provide a response on the allowance/disallowance of the Canadian government to the burning of railroad ties. The USEPA and the MDEQ allowance to burn railroad ties is based upon demonstrated compliance with all federal regulations and state rules.

Comment
What is the chemical and particulate composition of the stack discharge when it is dark with an obvious odor?

AQD Response
Any combustion source will produce products of combustion. The products of combustion can be broadly classified as gaseous pollutants, products of incomplete combustion, and particulate matter. These three categories can be further categorized as follows:

Gaseous pollutants (Nitrogen Oxides, Carbon monoxide, Sulfur dioxide, Volatile Organic Compounds, Greenhouse gases, Gaseous products of incomplete combustion, Acid gases),

- Particulate matter (Ash, Carbon, Metals), and;
- Products of incomplete combustion.

Excessive visible emissions could be caused by a number of factors including control device malfunction, or problems with combustion. Problems with combustion could result in increased emissions of unburned carbon, and products of incomplete combustion. There have been no opacity violations at LWEC.

Comment
The requirement to perform PM2.5 monitoring should be added into the Consent Order.

AQD Response
To date there has not been a violation of a PM2.5 emission limit and therefore, requiring monitoring was determined not to be appropriate for this enforcement action.

Comment
The $108,000 penalty should stay in L'Anse instead of going to the State of Michigan.

AQD Response
By law any penalty amount paid must be directed to the State's General Fund.

Comment
Instead of a penalty, a supplemental environmental project (SEP) should be implemented. The "village green bench" monitoring station is an excellent suggestion.

AQD Response
The AQD has no authority to require a company submit and implement a SEP. The submittal of a SEP is at the discretion of the company.

A SEP may be utilized by the company in lieu of a penalty. The use of a "village green" monitoring station was suggested by several parties as something which would have potential benefit to the community and could be implemented as a SEP in lieu of a penalty. The AQD discussed the possibility of utilizing a SEP and the company did not express a willingness to use this approach.

Even though the LWEC was not willing to develop a SEP, there are opportunities, via grants from USEPA, to allow tribal entities to perform their own air monitoring. Details on tribal air grants can be found at the following link:

https://www.epa.gov/caa-permitting/tribal-permitting-region-5.

Comment
Sediment/soil/water testing should be written into the Consent Order. Two annual samples should be taken, one after a snow melt, another after 2 inches or more of rainfall within a 24 hour period. Samples should be taken at multiple sites.

AQD Response
Issues and concerns related to water quality are not covered by this Consent Order or permit and should be directed to the MDEQ Water Resources Division of the Upper Peninsula District Office in Marquette. The AQD does not have the regulatory authority to address environmental issues which are not air related.

Comment
It was the understanding of several commenters that USEPA was going to require the LWEC to install a meteorological tower and PM10 monitors, but has since backed off this requirement. The commenters would like this requirement added to the draft Consent Order.

AQD Response
The USEPA did issue a request under the Clean Air Act to have LWEC install ambient air monitors for PM10. Based on the violations this Consent Order will resolve, the AQD believes requiring ambient air monitors for PM10 is not appropriate or necessary. However, the USEPA may still pursue this under their authority if it is still a concern.

Comment
The fugitive dust control program lacks specificity and lacks criteria for determining when fugitive dust is an issue and should be upgraded. Records of fugitive dust should be recorded daily and sent to DEQ on a weekly basis for mandatory review.

AQD Response
The current fugitive dust control plan adequately covers all areas and processes at both the Generating Station and the FAF. The plan addresses fuel storage, fuel processing and handling areas, ash handling, and roadways. Visual observations of fugitive emissions at both the Generating Station and the FAF are to be taken daily and a log of these observations is to be kept on file for five years and be made available to the AQD. Roadways at both facilities are required to be swept weekly, as climate conditions allow, and all fuel transport trucks are required to covered or enclosed. Only self-unloading trucks may deliver to the Generating Station. The plan also limits the amounts of materials that may be stored outside at the Generating Station. In addition it requires that speed limit signs be posted at both facilities. The AQD has the right to request LWEC to update the plan as needed to address any new matters and/or any existing matters that are not adequately being addressed.

Comment
It is suggested that the MDEQ increase the number of both scheduled and surprised compliance inspections, including ones on windy days, at the LWEC facility. Will MDEQ respond in a timely fashion to citizen complaints?

AQD Response
The MDEQ staff typically conducts unannounced inspections. The frequency of the inspections is largely driven by past violations and the number of complaints received. The MDEQ makes every effort to respond to citizen complaints. Not all responses will result in a site visit/inspection.

Comment
The plant has had malfunctions with their current air pollution control device, which was never reported to the MDEQ. How can the facility be trusted to report equipment malfunctions? There is no evidence in MDEQ files of this malfunction having been filed by the company.

AQD Response
The MDEQ is not aware of nor does the records at LWEC indicate that there has been a malfunction of the current air pollution control equipment at the facility. Per their permit, LWEC is not allowed to operate their facility unless all required pieces of air pollution control equipment are installed and operating properly. Also as a requirement of their current permit, LWEC is required to operate all of their process and air pollution control equipment according to an approved malfunction abatement plan (MAP). The MAP includes keeping a Daily Operating Log which details equipment problems found, repairs done and/or corrective action taken, and scheduled and completed maintenance on the equipment. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction MDEQ has the right to request that the plan be updated. In addition, per Rule 912 LWEC is required to notify MDEQ of all abnormal operating conditions. Often times these notifications result in MDEQ staff investigating the situation.

This issue was discussed with the company on October 11, 2016. Based upon the discussion with the company and our review of plant records, there is no indication of a malfunction of the control equipment at LWEC.

Comment
Railroad ties have a chlorine content limitation of 400 parts per million in the draft permit. The company is using an X-ray fluorescence device to determine compliance with this limit and any wood material which has a chlorine content greater than 1600 parts per million will be rejected by the company as one possibly containing pentachlorophenol. Why is there such a large variation between the chlorine content contained in the permit and the limit being used by the company?

AQD Response
The X-ray fluorescence screening device is used as a screening device to measure the chlorine content of railroad ties in real time before the railroad ties are processed. Field studies have indicated that railroad ties which contain pentachlorophenol have chlorine concentrations greater than 400 parts per million. Therefore 400 parts per million of chlorine was set as a limit in the permit to distinguish between regular railroad ties, and ties containing pentachlorophenol.

The X-ray fluorescence screening device is biased towards reading higher concentrations of chlorine as compared to actual testing methods which measure chlorine content. It has been determined that a reading of 1,600 parts per million corresponds to an actual chlorine content of 400 parts per million. The X-ray fluorescence screening device will be re-calibrated according to manufacturer's recommendations to assure that proper concentrations of HCl are being measured.