Exhibit 4

Northern Michigan University
Ripley Heating Plant

RESPONSE TO COMMENTS DOCUMENT

May 12, 2008

PERMIT No. 60-07

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Table of Contents

Section **Page**

I. PUBLIC PARTICIPATION PROCESS

Northern Michigan University's Permit to Install application No. 60-07 is for installation and operation of a wood and coal fired circulating fluidized bed (CFB) boiler to provide heat and electricity and is proposed for location at Wright Street and Sugarloaf Avenue (1401 Presque Isle Avenue mailing address), Marquette, Michigan. The public participation process involved providing information for public review including a fact sheet, a background information document and proposed permit terms and conditions, a public comment period, an informational meeting and public hearing, and the receipt of written and verbal public comments on staff's analysis of the application and the proposed permit.

On October 19, 2007, copies of the Notice of Air Pollution Comment Period and Public Hearing, the Fact Sheet, and the draft terms and conditions were placed on the Internet at the Department of Environmental Quality (Department), Air Quality Division's (AQD) Home Page (http://www.michigan.gov/deq). In addition, a notice announcing the Public Comment Period, Public Informational Meeting, and Public Hearing was placed in the *Marquette Mining Journal*. The notice provided pertinent information regarding the proposed action; the locations of available information; a telephone number to request additional information; the date, time, and location of the Public Informational Meeting and Public Hearing; the closing date of the Public Comment Period; and the address where written comments were being received. The background information document was made available for discussion at the informational meeting before the public hearing.

The Informational Meeting was held immediately before the Public Hearing on November 27, 2007. A panel of representatives of the State's Air Quality Division was available to answer questions regarding the proposed project. The meeting began at 6:30 p.m. and concluded at approximately 7:15 p.m.

The Public Hearing was held on November 27, 2007, at the Marquette City Hall, City Commission Chambers, 300 West Baraga Avenue, Marquette, Michigan. The hearing began at 7:30 p.m. with Mark Feldhauser as the Hearings Officer and William Presson as the representative for Vinson Hellwig, the decision maker. Only comments on the proposed permit action were received. In addition, staff of the Air Quality Division was available outside the meeting room to answer any questions. Approximately 32 people were in attendance at the Public Hearing with 17 providing oral comments. The Public Hearing concluded at 8:27 p.m. In response to a request, the public comment period was extended for an additional 30 days and ended on December 27, 2007.

A total of 13 written comments were received during the Public Comment Period and the hearing.

The remainder of this document is a summary of the significant comments received during the public comment period and hearing regarding the proposed permit and the Department's response. Each individual comment is not listed separately. However, all significant comments are addressed. 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 second section discusses the Department's response to all other significant comments that did not result in changes to the final permit.

This Response to Comments document fulfills the requirements specified in 40 CFR 124.17.

II. SUMMARY OF COMMENTS RESULTING IN CHANGES TO THE PERMIT

II.1 Comment

The permit lacks limits for PM-2.5, a regulated air pollutant.

AQD Response

Although EPA guidance recommends the use of PM-10 as a surrogate for PM-2.5 because there is presently no approved method to measure PM-2.5, AQD agrees that it is appropriate to include limits on PM-2.5 emissions in the permit.

Condition Change

Special Conditions 1.1bb and 1.1cc have been added to include emission limits for PM-2.5. The following footnote has been added to the emission limits table to explain the basis for the PM-2.5 limits:

> PM-2.5 is established using PM-10 as a surrogate per the U.S. EPA Memorandum from John S. Seitz, Director Office of Air Quality Planning and Standards to Regional Air Directors, *Interim Implementation of New Source Review Requirements for PM2.5* (October 23, 1997)

Special Conditions 1.9 (testing) and 1.10 (monitoring) have been modified to include references to the new emission limits.

II.2 Comment

In the emission limit table, the listing of "Test Protocol" as the time period for the limits in units of "tons per year" implies a test period of one year.

AQD Response

The intent was to utilize the test results (in units of lb/MMBtu heat input) in combination with the monthly fuel usage data to calculate the emissions for the most recent 12 month period.

Condition Change

Special Conditions 1.1c, 1.1f, 1.1h, and 1.1j have been corrected and a footnote has been added to the emission limit table to clarify the calculation method for compliance with the annual emission limits. The footnote follows:

> compliance with the tpy limit will be determined by calculating the emission rate using the stack test results expressed in lb/MMBtu heat input and the 12-month heat input for each fuel based on monthly fuel usage records.

II.3 Comment

It appears that storage piles of wood or coal fuel may be allowed. This could potentially cause problems for the neighbors such as dust from the coal or odors from a wet pile of wood.

AQD Response

Northern Michigan University described the fuel delivery and storage process in the permit application. Fuel will be delivered to protected areas enclosed on three sides and transferred from there to storage silos. There is no plan to have storage piles at the site.

Condition Change

Special Condition 3.1 has been changed and Special Condition 3.2 has been added to make the fuel transfer plan a part of the permit:

3.1 The permittee shall install, operate, and maintain an enclosure around the wood and coal unloading ~~and storage~~ areas and shall utilize procedures to minimize the generation and transport of fugitive emissions from this operation.

3.2 The permittee shall not stockpile wood or coal on site outside of the fuel silos. Use of an unloading area to facilitate the unloading and transfer of wood or coal to the fuel silos is considered to be normal operation.

II.4 Comment

There was an incorrect analysis of the maximum potential hazardous air pollutant (HAP) emissions. The entire University should have been included as the source.

AQD Response

At AQD's request, Northern Michigan University re-evaluated the estimated HAP emissions for the proposed CFB boiler, the existing boilers. While reviewing the potential HAP emissions for the proposed solid fuel fired boiler, it was determined that the total HAP emissions were over estimated in the permit application. The combined maximum potential emission of each HAP for each fuel type was used as the estimated total emission level without regard to the amount of each fuel that might be burned on an annual basis. That is, the potential HAP emissions from firing 100% coal were added to the potential HAP emissions from firing 100% wood in the proposed CFB boiler.

The actual maximum potential HAPs would occur with 100% wood firing, which would be 14.55 tons per year. Any reduction in wood usage, with a corresponding increase in another fuel, would reduce the total HAPs because each of the other fuels have a total HAP (on a pound per million Btu basis) that is substantially lower than that for wood.

Northern Michigan University provided new data concerning other sources of HAPs to include the entire University as the source. The existing Ripley Heating Plant, 34 miscellaneous boilers, and 12 emergency generators were included in this additional inventory. Potential HAP emissions from these sources were calculated to be 4.40 tons per year. The total HAP emissions estimate, including the equipment not inventoried in the original permit application is 18.95 tons per year. The University is not a major source for HAPs.

Condition Change

The following enforceable conditions were added to the permit to limit HAP emissions:

Emission Limits

	Pollutant	Limit	Time Period	Equipment	Testing/ Monitoring Method	Applicable Requirements
9.4a	Each Individual HAP	Less than 9.9 tpy *	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC 9.5	R 336.1205(1)
9.4b	Aggregate HAPs	Less than 24.9 tpy *	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC 9.5	R 336.1205(1)
	* Beginning on startup of EU-CFB-BOILER, and continuing for the first 12 calendar months, this limit applies to the cumulative total HAP emissions. Thereafter, the limit shall become a 12-month rolling limit.					

9.5 The permittee shall keep records for FGFACILITY of individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.

III. SUMMARY OF SIGNIFICANT COMMENTS

A. Public Health and Environment Concerns

A.1 Comment

A comment asked that the health of the people of Michigan be considered first, for both the present population and to consider how pollution levels may affect people in the future.

AQD Response

The Federal Clean Air Act Amendments of 1990 and the State of Michigan Air Pollution Control Rules both contain laws that are in place to protect public health and the environment. The AQD reviews all sources of air contaminant emissions to make sure that these laws are met. Staff reviews emission estimates and all supporting documentation for accuracy during technical review of the permit application and determines if the emissions are environmentally acceptable. Finally, a Permit to Install is developed to ensure continuous compliance with all applicable state and federal air quality regulations.

A primary function of the AQD is to protect the health and welfare of all citizens of the State of Michigan. To accomplish this, the AQD utilizes the state and federal air quality rules and regulations that are in place to protect public health and the environment. The federal Clean Air Act includes the National Ambient Air Quality Standards (NAAQS) to protect public health. These standards define the maximum concentration of certain air emissions in the breathing zone that would protect the health of the most sensitive individuals, including those with heart, respiratory, neurological and asthma problems. The emissions from the proposed facility were evaluated and compared to the standards. The AQD concludes that the emissions will comply with all applicable federal air quality requirements and with all Michigan Department of Environmental Quality, Air Quality Division regulations.

In addition, chemicals that do not have an established NAAQS must meet the applicable AQD established health-based screening levels. Screening levels are developed to protect the public from cancer and non-cancer effects based on toxicological research. The best available information is used to establish safe exposure levels and exposure times that are protective against cancer and non-cancer health effects. Harmful health effects are not anticipated to occur over a lifetime of exposure for any pollutant concentrations that are below these health criteria. The emissions from the facility were modeled to determine impacts and were then compared to the applicable screening levels. Impacts from all emissions are well below the applicable health-based screening levels.

A.2 Comment

Did the permit review consider secondary impacts to plants, wildlife and the environment?
Note: Secondary impacts are also addressed in responses to Comments D.2 and K.4.

AQD Response

There are two types of federal air quality standards. The primary standard is designed to protect the health of the most susceptible individuals in a population, including the children, elderly and those with chronic respiratory ailments. The secondary standard is designed to protect public health and welfare and ensure quality of life. The function of the secondary standard is to limit economic damage as well as destruction to buildings, plants and animals.
The proposed emission limits are placed into a computer model to determine the ambient air concentrations and ground-level impacts for substances expected to be emitted from an emission source. In order for a facility to receive an air permit, these concentrations must fall below the federal NAAQS and the AQD's health-based screening levels. With concentrations below these health criteria, harmful health effects are not reasonably anticipated to occur over a lifetime of exposure. The emissions and impacts from the facility are well below these applicable health-based criteria.

Impacts of criteria pollutants below the national standards will not typically result in harmful effects to soils, vegetation and wildlife. It is highly unlikely that pollutant concentrations that are in compliance with the NAAQS will have significant effect on these parameters. The AQD compared the maximum facility impacts to EPA criteria for the impacts of air pollution sources on plants, soils and animals. The results indicate that the level of emissions associated with the facility is not expected to have any measurable effects on soils, vegetation and wildlife.

The NAAQS were established by the EPA to protect public health with an adequate margin of safety. These standards must protect the most sensitive individuals so they are set at the lowest level of observed effects from laboratory studies. All permits contain language that prohibits emitting air contaminants in quantities that cause injurious effects to human health or safety, animal life, plant life of significant economic value, or property. Thus an effect on public health and property from the facility is a violation of the permit. EPA provides the State authority to pursue civil penalties for such violations.

A.3 Comment

MDEQ should deal with the cumulative impact of these individual sources of environmental hazard and degradation within the Lake Superior basin.

AQD Response

The proposed facility is subject to the federal Prevention of Significant Deterioration (PSD) Regulations. The goal of the PSD program is to allow for economic growth while preserving air quality levels below the federally mandated standards (NAAQS). The regulations allow for a limited increase of sulfur dioxide, particulates and nitrogen oxide concentrations in ambient air without exceeding the national health standards. These amounts are called increments. Increment thresholds are derived at levels small enough to allow industrial growth while ensuring the NAAQS will not be exceeded. To maintain the potential for economic expansion in any area, it

has been the AQD's policy that one facility cannot exceed 80 percent of the available increment. The PSD regulations also require an air quality analysis where modeled concentrations from the facility are combined with other area pollution sources plus actual monitored background data. This cumulative concentration must be less than the NAAQS. The emissions inventory used for NAAQS and PSD Increment analyses includes actual and permitted sources which have a significant influence within the facility's significant impact zone. Typically, only sources within 20 kilometers are close enough to significantly impact proposed sources of this size. Non-permitted sources are not considered because they cannot legally emit. The modeling results from the facility, including other sources and background data, are well below the applicable increment and NAAQS thresholds.

A.4 Comment

The facility will release considerable amounts of carbon dioxide and nitrous oxide and contribute to global warming.
Note: Greenhouse gas emissions are also addressed in responses to Comments E.7 and K.2.

AQD Response

There are no federal or state rules requiring limits on carbon dioxide or nitrous oxide emissions from electric generating units.

U. S. EPA has not promulgated national regulations limiting emissions of carbon dioxide (CO_2) or nitrous oxide (N_2O) as regulated pollutants under the Clean Air Act. Limits for either of these gases have not been established pursuant to the State of Michigan Air Pollution Control Rules. The air permit is a tool to provide enforceable limits for a specific facility to ensure that operation of the equipment covered by the permit will comply with all applicable federal air quality requirements and with all Michigan Department of Environmental Quality, Air Quality Division regulations. Emissions of CO_2 and N_2O were not evaluated or limited in the permit.

Carbon monoxide (CO) is regulated under the Clean Air Act and therefore was evaluated during the permit review process. Dispersion modeling shows maximum carbon monoxide impacts well below the applicable standard. Emissions below the NAAQS are not anticipated to cause negative effects on public health and the environment.

B. Air Toxics and Risk Assessment

B.1 Comment

AQD should evaluate the cumulative effect over time for impacts from the facility to the entire Lake Superior Basin. The multimedia risk assessment should look at all of the sources of contaminants before a decision is made.

AQD Response

The risk assessment approach was sufficiently detailed and conservative to describe potential risks from the facility. In the screening approach used, the facility emissions were assumed to occur at maximum permitted rates and people were assumed to be exposed by breathing the ambient air continuously for a 70-year lifetime at the point of maximum impact. The potential exposures and risks at the point of maximum impact were characterized, rather than the lesser impacts at other locations. The risk assessment approach followed USEPA guidance for performing risk analyses for the purpose of characterizing the potential high-end risk estimates. Available data on mercury levels in fish from area lakes were considered in the context of the incremental impact from the proposed facility's emissions.

The assessment of cancer risks posed by the facility's emissions followed the established procedure in the DEQ-AQD air toxics rules. Under those rules, the acceptability of cancer risks is based on the *incremental* risk posed on a *chemical-by-chemical* basis, without accounting for background exposures to carcinogens. There is no ambient air standard for acceptable *cumulative* cancer risk.

B.2 Comment

Has any consideration been given to the pollution's impact on food chain, agriculture crops, and livestock?

AQD Response

Yes. As part of the air toxics evaluation, consideration is given as to how detailed a health-based risk assessment will be conducted to adequately address concerns with proposed emissions. Point-source air emissions of some substances, particularly mercury, can pose a concern when they deposit to ground and surface waters. This can result in non-inhalation pathways of public exposure such as eating fish.

Mercury— The maximum allowed mercury emission rate (estimated 5.4 pounds per year) was evaluated by an AQD toxicologist. The methylation of mercury occurs in wetland soils and in water bodies and methyl mercury can accumulate in the tissue of fish. An exposure pathway of concern would be adults or children living in the area eating fish caught in the area. In order to determine if this could present a health problem, an assessment was conducted to see if there were any water bodies within a 6 mile (10 kilometers) radius from the facility where fishing could occur. The assessment of mercury impacts focused on the Forestville Basin of the Dead River, 0.75 km NW of the facility. The assessment was conducted using a computer modeling program to estimate mercury impacts to fish mercury levels and to recreational anglers who may eat the fish. This is the predominant indirect exposure pathway for mercury air emissions. The assessment found that the impacts would be minimal, and do not raise significant concerns.

C. Emergencies and Safety Concerns

C.1 Comment

Who should I contact to report a pollution emergency?

AQD Response

In addition to your local police and fire departments, you may call the Pollution Emergency Alert System (PEAS) at 1-800-292-4706. This telephone number is operated by MDEQ and is staffed 24 hours per day. Information received by the PEAS operator is quickly forwarded to the appropriate agencies.

C.2 Comment

What types of accidental releases does the air-use permit address?

AQD Response

A facility is required to comply with all permit conditions, including emission limits, at all times. General Condition No. 7 requires the facility to notify the District Supervisor, AQD, of abnormal conditions or malfunctions resulting in certain types of emissions in excess of a standard or limitation lasting more than one hour. This condition places a responsibility on the facility to investigate and self-report malfunctions that cause excess emissions. Specifically, the facility is required to give the AQD a written summary of the actions taken to correct and prevent recurring malfunctions. These actions become a part of the facility's preventive maintenance and malfunction abatement plan.

C.3 Comment

What is the emergency response plan if there is an accident with the ammonia that is to be used for nitrogen oxides reduction?

AQD Response

The facility may use either ammonia or urea for this air pollution control system. If ammonia is selected, the ammonia will be properly handled and stored. AQD has the authority to handle air quality issues and can only require the facility to address any excess in emissions that could result from a malfunction of the process. The Local Emergency Planning Commission, the HAZMAT team and the local fire department are available for other emergency concerns.

C.4 Comment

What are the requirements for evacuation if there is an ammonia release?

AQD Response

The dilute solution of aqueous ammonia used in a selective non-catalytic reduction system for control of oxides of nitrogen is not listed in the Clean Air Act as a substance reasonably expected to cause death, injury, or serious adverse effects to human health or the environment if accidentally released. Therefore, there are no air regulations which apply to the storage of this type of ammonia. The ammonia storage tank will have the necessary secondary containment measures (dikes, valved drains, etc) to prevent exposure to soil and groundwater. Local services are available for other emergency concerns.

C.5 Comment

What is being done to address accidental releases?

AQD Response

The federal Clean Air Act requires that many facilities file risk management plans (RMPs) with the U.S. Environmental Protection Agency (U.S. EPA) and work with the local emergency planning committee to ensure response plans are in place in the event of an emergency. Local governments and local emergency response entities, such as fire and police departments, have primary responsibility for first response during emergencies. MDEQ works with the primary responders in a support role during emergencies. The applicant has developed an emergency preparedness plan with local officials, which must be continuously maintained and updated annually, and has a RMP on file with the U.S. EPA.

Air-use permits ensure that worst-case air emissions from process operations meet the appropriate air pollution control requirements and health protective limits. AQD's primary responsibility is to ensure that a facility complies with all applicable control technology and health standards. Permit conditions require that a facility properly install, operate, and maintain production and control equipment and require monitoring and recordkeeping of critical parameters to ensure that proper equipment operation is maintained. Also, permit conditions require the installation of specific safety devices and require the periodic inspection of equipment for wear and deterioration. Once a permit has been issued, AQD makes periodic inspections and/or requires periodic stack testing to determine whether or not the facility is operating in compliance with its air-use permit. The permit conditions for this specific modified process include various monitoring, recordkeeping, reporting, and equipment/operational requirements in order to ensure compliance with emission limits. When violations are found, AQD takes enforcement action and makes certain they are addressed and corrections made promptly.

D. Dispersion Modeling

D.1 Comment

Has the AQD taken into account the several other plants that are proposed to be located in this county and surrounding areas and the affect the existing facilities and all the proposed plants together will have on the air quality? Is there a limit as to the amount of such facilities within an area?

AQD Response

Part of the modeling review includes looking at impacts from existing nearby sources and monitored background data. The background data is obtained from the nearest air monitor and is considered representative of the area. Each year the background monitor data is updated so it will include existing sources in the area. The AQD can only review emissions from those facilities that are allowed to operate under an approved permit to install or existed prior to the state permitting program. The modeling can not include any new facility that does not have a permit to install and, therefore, cannot legally emit pollutants to the atmosphere. If a facility submits an application for a permit to install for location in the area, the impacts from the proposed facility plus the background concentrations and any other facility that has a permit approved by the AQD will be analyzed for compliance with the NAAQS and PSD increment.

D.2 Comment

MDEQ has not provided sufficient analysis of the impacts from the proposed plant. Additionally the applicant must provide an analysis of impacts of the proposed plant on soils and vegetation, as well as commercial and industrial growth associated with the proposed modification. We note that there is no such information for this source, especially as to the impacts of the fuel acquisition, including impacts on endangered species. Class I impacts were not properly noticed to the federal land manager or the public.
Note: Secondary impacts are also addressed in responses to Comments A.2 and K.4.

AQD Response

Section 7 of the air use permit application submitted to the AQD dated February 5, 2007 by the Consultants (NTH) addresses secondary impacts from the project related to the four categories of 1) Associated Growth, 2) Soils, vegetation, and wildlife, 3) Visibility Impairment, and 4) Threatened and Endangered Species

1) Associated Growth – NMU will be receiving solid fuels for the new boiler via 40 ton trucks, delivered approximately once per day during the week, using established transportation routes currently used by logging trucks. The conclusion is that truck traffic will not increase significantly.
2) Soils, Vegetation, and Wildlife - Impacts of criteria pollutants below the National Ambient Air Quality Standards will not typically result in harmful effects to soils, vegetation and wildlife. It is highly unlikely that pollutant concentrations that are in compliance with the NAAQS will have significant effect on these parameters. The AQD

compared the maximum facility impacts to EPA criteria for the impacts of air pollution sources on plants, soils and animals. The results indicate that the level of emissions associated with the facility is not expected to have any measurable effects on soils, vegetation and wildlife.

3) Visibility – A quantitative analysis for impacts of fogging and icing from the proposed 7 MW cooling tower was performed using the Seasonal/Annual Cooling Tower Impact (SACTI) model. The analysis confirmed that excessive impairment to the surrounding community as a result of fogging and icing is not expected.
4) Threatened and Endangered Species – Requests for review by the State of Michigan MDNR Wildlife Division and by the U.S. Fish and Wildlife Service produced determinations that no impact is expected from the proposed project.

Additionally, the AQD conducted its own Class I visibility analysis for the States two Class 1 areas, Isle Royale and the Seney Wildlife Refuge using the CALPUFF model which is currently the "preferred regulatory model" recommended by EPA for evaluating long range impacts. The results predicted that there would be 2 days over 3 years at Isle Royale that would experience a change in the light extinction coefficient of slightly over 5%.

These results were forwarded to the Isle Royale Park Superintendent by email on May 4, 2007. This notification was completed in accordance with the terms and conditions of the September 28, 1988 letter from Vladas V. Adamkus, Regional Administrator, U.S. EPA to Robert P. Miller, Chief, Air Quality Division, Michigan Department of Natural Resources amending the U.S. EPA's delegation of authority to the State of Michigan to implement the prevention of significant deterioration (PSD) program.

Also, in April, 2008, AQD contacted the National Park Service regional Chief of the Planning and Permit Review Branch, John Bunyak regarding Isle Royale and the Fish & Wildlife Service, Air Quality Branch, Sandra Silva, Chief, regarding Seney Wilderness. Replies from both agencies indicated that "based on the emissions quoted in your message and the distance to the Class I area, we do not expect adverse impact to visibility or air quality related values" at Isle Royale National Park or Seney National Wildlife Refuge.

Additionally, the April 18, 2008 U.S. EPA approval of the Forest County Potawatomi Community's request for redesignation of parts of the tribe's reservation as a Clean Air Act Class I area has been considered by the AQD. The reservation is located at least 100 miles (160 kilometers) from Marquette. No additional evaluation is required.

The EPA New Source Review Workbook states that generally a NAAQS and PSD analysis would be required if emissions from a source increases pollutant concentrations by 1 ug/m3 or more (24hr avg) in a Class I area. The closest Class I area to the facility is the Seney National Wildlife Refuge located approximately 55 miles to the ESE. Modeling indicated that the maximum increase the 24-hr average SO_2 concentration from the facility at Seney would only be 0.42 ug/m3.

D.3 Comment

The PSD increment inventory was deficient. The application states that only the proposed CFB boiler proposed for the Ripley Plant and the existing boilers at the Ripley plant consume increment. The We Energies Presque Isle Power Plant (PIPP) was modified after the SO_2 major source baseline date. However, it is not included in the baseline and is "increment consuming". The modeling must be revised to account for the PIPP's status as a modified increment consuming source.

AQD Response

The SO_2 major source baseline date was set by the Clean Air Act to be January 6, 1975. Emissions associated with modification at a major stationary source consume increment after this date. A comparison was made between the reported SO_2 emissions from PIPP for 1973 and 2006 which were found to be 15,274 tpy and 16,609 tpy respectively. This increase of 1335 tpy should not be part of the baseline and should be considered in the PSD increment analysis. New modeling was conducted by the AQD which added the 1335 tpy to the increment analysis and the results indicated that this change had no effect on either the 3-hr or 24-hr PSD maximum (100%) SO_2 PSD increment levels. However, the addition of the 1335 tpy did cause the annual PSD increment concentration to increase to approximately 10 percent which is still well below the State's 80% allowable Class II PSD increment criterion.

D.4 Comment

Emissions from fuel handling, cooling towers, diesel generator, silos, limestone crushing, ash handling, and fugitive road dust were not included in the modeling. The permit is defective.

AQD Response

The permit requires that these emissions be controlled. The modeling shows that they will be insignificant, and the permit would not change if they were included in the modeling.

fuel handling	The coal and wood will be unloaded directly from the delivery trucks into 3-sided enclosures to minimize fugitive emissions. Transfer from the silos to the boiler will be done in enclosed conveyance systems. Dust from coal or wood transfer points will be controlled with fabric filters. Once the coal and wood is received, it will be stored in dedicated silos, and each silo will be controlled with a vent filter.
cooling towers	A quantitative analysis for impacts of fogging and icing from the proposed 7 MW cooling tower was performed using the Seasonal/Annual Cooling Tower Impact (SACTI) model. The analysis confirmed that excessive impairment to the surrounding community as a result of fogging and icing is not expected.
diesel generator	The commenter appears to think this permit is one where a diesel generator is part of the project. That is not the case here.
Silos	The permit is for a 10 MW facility. Work practice standards such as the enclosed conveyors and storage silos with vent filters are the appropriate level of BACT based on the review for this case. Where a control standard is specified as BACT for material handling it is these same controls (vent filters).
limestone crushing	The commenter appears to think this permit is one where limestone crushing is part of the project. It is not. Limestone will be received via trucks and pneumatically transferred to a silo with a vent filter. Limestone will then be removed from the silo on an as-needed basis for co-firing into the bed of the CFB boiler.
ash handling	Ash removed from the CFB will be stored in a dedicated silo with vent filter. Ash will be loaded out of the ash silo periodically, and placed in covered trucks for final disposal off-site of the NMU campus.
Fugitive road dust	NMU will be receiving solid fuels for the new boiler via 40 ton trucks, delivered approximately once per day during the week, using established transportation routes currently used by logging trucks. The conclusion is that truck traffic will not increase significantly

D.5 Comment

Unless the permit includes hourly mass emission limits, hourly emission rates can not be used in the modeling. The maximum hourly heat input rate is not included in the permit as an enforceable limit.

AQD Response

The maximum hourly heat input rate and the hourly emissions are limited by the size of the equipment. A permit limit is not required.

D.6 Comment

NMU did not conduct the required preconstruction monitoring.

AQD Response

AQD's experience with monitoring in the Upper Peninsula shows consistent background levels across a large geographical area including the location of this facility. Therefore, AQD did not require pre-construction monitoring. No written waiver was requested by the permit applicant, and none was issued by AQD.

E. Best Available Control Technology (BACT) Review

E.1 Comment

Who determines the best available control technology (BACT)?

AQD Response

The BACT requirements are outlined in the federal PSD regulations, 40 CFR 52.21. The Michigan Department of Environmental Quality (MDEQ) is the permitting authority and is responsible for evaluating the BACT analysis. U. S. EPA has delegated to the MDEQ the authority to issue air use permits that comply with the federal PSD regulations.

There are also BACT requirements in Michigan's Air Pollution Control Rules, R 336.1224 and R 336.1702. The MDEQ ensures that the state BACT requirements are met.