

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

B147659608

FACILITY: Decorative Panels International/Alpena Biorefinery		SRN / ID: B1476
LOCATION: 416 Ford Ave., ALPENA		DISTRICT: Gaylord
CITY: ALPENA		COUNTY: ALPENA
CONTACT: Tim Rombach (as of Oct 2020) , Sr Environmental Engineer		ACTIVITY DATE: 03/10/2021
STAFF: Becky Radulski	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: FY21 inspection and records review		
RESOLVED COMPLAINTS:		

Traveled to B1476 Decorative Panels International (DPI) on March 10, 2021 to conduct a FY21 scheduled inspection to determine compliance with MI-ROP-B1476-2015a. Present for the inspection was Tim Rombach, Senior Compliance Manager, DPI.

Decorative Panels International manufactures hardboard. Their facility includes an outdoor raw material storage area, a storage silo area, and four digesters where wood is cooked and ground to make pulp. The wastewater from Decorative Panels International's wood pulping operation contains wood sugars. To put this waste material to productive use American Process Incorporated built their Alpena Biorefinery adjacent to Decorative Panels International. The Alpena Biorefinery has been closed and no longer operates.

## LOCATION

B1476 Decorative Panels International (DPI) and American Process Incorporated (API) are located adjacent each other at 416 Ford Avenue and 412 Ford Avenue, respectively. The site is located directly on the shore of Lake Huron at the mouth of the Thunder Bay River. Across the river is the municipal waste water treatment facility, and a large salt storage pile. Downtown Alpena is south and west. Heavy residential areas are located to the north, west and south. Other industry is located to the northwest, including LaFarge.

## REGULATORY DISCUSSION

MI-ROP-B1476-2015a is a sectioned permit – Section 1 is Decorative Panels International, Section 2 is American Process Incorporated. The ROP is new for renewal, at which time the Section 2 will be removed.

B1476 is Major for CO, NO<sub>x</sub>, PM, SO<sub>2</sub> and VOCs because the potential to emit for each exceeds 100 tons per year.

**B1476 is Major for HAPs because the potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, is equal to or more than 10 tons per year.**

**B1476 is not subject to Prevention of Significant Deterioration (PSD) regulations.**

**DPI: EUPRESS2S, EU3PRESS-AREA, and EU3 BAKEOVEN are subject to the National Emission Standard for Hazardous Air Pollutants for Plywood and Composite Wood Products promulgated in 40 CFR Part 63, Subparts A and DDDD.**

**DPI: EUBOILER#1, EUBOILER#2, and EUBOILER#3 are subject to the National Emission Standard for Hazardous Air Pollutants for Industrial Boilers and Process Heaters promulgated in 40 CFR Part 63, Subparts A and DDDDD.**

**DPI: EUFIREPUMP is subject to the National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ.**

**API (no longer operating): EUETHANOLFERM, EUBEERCOLUMN, EURECTIFIER, EUMOLSIEVE, and EUETHLOAD are subject to the National Emission Standard for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing promulgated in 40 CFR Part 63, Subparts A and FFFF.**

## **INSPECTION NOTES**

**DPI was operating during the inspection. The plant was viewed from Ford Avenue prior to entering. Wind direction was toward the northeast, no odor was detected at Ford Avenue. Steam was visible from several stacks.**

**The ESP Stack was blown over in spring of 2020. Exhaust from Boilers 1 and 2 (only burn natural gas) were temporarily routed to the old stack while the ESP stack was rebuilt, via a PTI 54-20. Boiler 3 was shut down until the new stack could be in place, as Boiler 3 requires the ESP to operate.**

## **RECORDS**

**EUTRIMMER/PBRUSH – double trimmer and panel brush controlled with Ducon dual scrubbers.**

**Emission Limits:**

**EUTRIMMER/PBRUSH has a PM limit of 0.10 pounds per 1000 pounds exhaust gasses, dry basis. Compliance with this limit is determined during testing. In 2014 the EU demonstrated compliance; testing took place in August of 2019 also demonstrating compliance.**

**Material Limits:**

**None.**

**Process/Operational Restrictions:**

**EUTRIMMER/PBRUSH cannot operate without the Ducon scrubbers operating properly. The facility is required to monitor flow rate and pressure drop across the scrubbers. The facility tracks both as required.**

**Design/Equipment Parameters:**

**The facility must equip the scrubbers with a flow rate monitor, alarm and pressure drop instrument. The facility has this equipment in place and meets this condition.**

**Testing:**

**PM testing is required every 5 years. Testing was performed most recently in 2019 to demonstrate compliance with this condition.**

**Monitoring/Recordkeeping:**

**The facility is required to monitor and record water flow rate and pressure drop. An alarm must sound if the flow rate falls below 10 gpm. The facility has this equipment in place and meets this condition.**

**Reporting:**

**The facility completes semi and annual reporting as required.**

**Stacks:**

The stacks were viewed and appear to meet the requirements based on visual observation.

**EUBOILER#3** – spreader-stoker boiler fueled by wood chips, natural gas, hardboard dust, waste oil, clarifier oil and sludge. The boiler is rated at 60,000 pounds of steam per hour.

#### **Emission Limits:**

The facility must test to demonstrate compliance with the following emissions: HCL, Mercury, PM, CO. The emissions were tested in 2017 demonstrating compliance with those limits.

#### **Material Limits:**

The boiler is limited to: 2000 lb/hr Wastewater treatment sludge, 1000 lb/hr clarifier oil, 55 lb/hr Misc. waste oil, 2500 lb/hr hardboard dust. Material usage is reported quarterly. Reported materials demonstrate compliance with this condition.

#### **Process/Operational Restrictions:**

Materials are limited to those in the Material Limit section. The cyclone and ESP must be operating properly for EUBOILER#3 to operate. During the inspection Boiler#3 was operating, along with EUBOILER#1 and EUBOILER#2. The ESP was operating as they share a common exhaust stack.

#### **Design/Equipment Parameters:**

The stack for EUBOILER#3 must have a COMS installed and operated properly.

#### **Testing/Sampling:**

Emissions from the stack must be tested to demonstrate compliance – a passing test took place in March 2021.

#### **Monitoring/Recordkeeping:**

COMS, daily fuel rate and total hours, and mercury emissions must be kept for EUBOILER#3. COMS is being monitored and recorded. COMS displays were available

to see during the powerhouse inspection. Daily fuel and hour rates are provided in the quarterly reports. These reports are reviewed each quarter.

**Reporting:**

The facility completes quarterly, semi and annual reporting as required.

**Stacks:**

SVBOIL123-STK58 is shared with EUBOILER1 and EUBOILER2. The stack was recently rebuilt as the old stack had blown over. The stack was viewed and appears to meet the requirements based on visual observation.

FGMACTDDDD - All equipment on site subject to 40 CFR Part 63 Subpart DDDD, Plywood and Composite Wood Products. Some emission units controlled by one of two biofilters and/or a Regenerative Catalytic Oxidizer (RCO), others uncontrolled.

**Emission Limits:****Material Limits:**

None.

**Process/Operational Restrictions:**

Three hour block averages for the catalytic oxidizer temperature above the minimum temperature established during a test. According to its MAP, the minimum RCO chamber temperature is 750 degrees f. At the time of my inspection the RCO chamber temperature was 817 degrees f, 15 minute average 833 degrees f, and 3 hour block average temperature 825 degrees f. Pressure drop was 3" w.g. These values satisfy the MAP and the permit condition.

Each biofilter must maintain the 24 hour block average biofilter bed temperature within a range established by testing. For No. 1 biofilter the established range is 73 to 87 degrees f. At the time of my inspection the biofilter bed temperatures were within the appropriate range. For No. 3 biofilter the established temperature range is 74 to 91 degrees f. At the time of my inspection the biofilter bed temperatures were within the appropriate range.

**The No. 1 Biofilter will have media replaced in summer of 2021.**

**Monitoring/Recordkeeping:**

**Press enclosures are required for Lines 1 and 3 hardboard presses. These enclosures were in place.**

**Reporting:**

**The facility completes quarterly, semi and annual reporting as required.**

**Stack/Vent requirements:**

**None.**

**FGBOILERS123, three boilers fueled by solid fuels and natural gas, also burning some waste materials generated onsite. Controlled by multiclones and an electrostatic precipitator.**

**Condition III.3 requires an electrostatic precipitator to be installed and operating properly. It is in place and operating as required.**

**Condition III.4 requires multiclones to be installed and operating properly. They are in place and operating as required.**

**Condition IV.1 requires an opacity monitor. This was installed and operating as required.**

**At the time of my inspection opacity was viewed and was in compliance with permit conditions.**

**Based on the inspection and records review, the facility appears to be in compliance with permit conditions.**

NAME \_\_\_\_\_

DATE \_\_\_\_\_

SUPERVISOR \_\_\_\_\_