

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

B147650661

FACILITY: Decorative Panels International, Inc		SRN / ID: B1476
LOCATION: 416 Ford Ave., ALPENA		DISTRICT: Gaylord
CITY: ALPENA		COUNTY: ALPENA
CONTACT:		ACTIVITY DATE: 08/20/2019
STAFF: Becky Radulski	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: DPI - scheduled inspection and records review		
RESOLVED COMPLAINTS:		

Traveled to B1476 Decorative Panels International (DPI) on August 20, 2019 to conduct a FY19 Partial Compliance Evaluation (PCE) scheduled inspection to determine compliance with MI-ROP-B1476-2015a. The inspection was for Section 1 (DPI) of the ROP, Section 2 (API) was inspected separately. Present for the inspection was Scott Ickes, Senior Compliance Manager, DPI, scott.ickes@decpanels.com, 989-356-8568.

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 takes the wastewater and steam to provide heat for processing it from Decorative Panels International. The biorefinery dries the wastewater sludge and returns this to Decorative Panels International, where it is used as fuel in the boilers. Wastewater is processed to make a molasses product.

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.

B1476 is Major for CO, NOx, PM, SO2 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: 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 lake, no odor was detected at Ford Avenue. Steam was visible from several stacks.

Mr. Ickes performed the walkthrough and discussed the ROP. While standing at Biofilter No. 1, the exhaust stack for Biofilter No. 3 white with what may have been a tail. The sun was not in the correct location for a reading, and the overcast sky made caused the exhaust to blend with the background.

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 and results are pending.

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 in 2014, and 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 (592 lb/hr reported for June 2019)

1000 lb/hr clarifier oil (0 reported for June 2019)

55 lb/hr Misc. waste oil (0 reported for June 2019)

2500 lb/hr hardboard dust (2370 lb/hr reported for June 2019)

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 not operating, only EUBOILER#1 and EUBOILER#3. 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 2017.

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. Mercury is calculated as required. For 2018, 1.88 lbs of mercury was reported.

Reporting:

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

Stacks:

SVBOIL123-STK58 is shared with EUBOILER1 and EUBOILER2. 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 825 degrees f, 15 minute average 851 degrees f, and 3 hour block average temperature 830 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; A, 75; B, 78; C, 75; D, 72; E, 80; and F, 79 degrees f. 15 minute average was 77 degrees f and 3 hour block average was 77 degrees f. I did not record the 24 hour block average but the values I did record were within the range specified by the MAP and in compliance with Condition III.2. Pressure drop across this biofilter was A, 11.7" WG; B, 10.4; C, 10.7, D, 9.7, E, 12.2, and F, 11.9. The MAP

calls for an average of 12 inches or less. Although one measured value was slightly above this, the rest are not. I will use enforcement discretion and not write this up as a violation.

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 Bed 1, 80; Bed 2, 79; Bed 3, 79; and Bed 4, 79 degrees f. 15 minute average was 79 degrees f. 3 hour block average was 79 degrees f. I did not record the 24 hour block average but the values I did record were within the range specified by the MAP and in compliance with Condition III.2.

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 1.8% instantaneous, 1.8% one minute average, 2.0% six minute average, 1.9% one hour average. These values are in compliance with permit conditions and Air Quality Rules.

The ESP power readings were as follows:

Zone 1, 276 VAC, 61 AAC, 42 KVDC, 160 mADC, 10.9 KW, 39 sparks/minute, no arcs.

Zone 2, 234 VAC, 38 AAC, 41 KVDC, 192 mADC, 5.1 KW, 19 sparks/minute, no arcs.

Steam loads 78 thousand pounds per hour for Boilers 1 and 2 combined. No. 1 was operating on standby burning natural gas. No. 3 was shut down. Steam loads were low because the presses were shut down for maintenance.

NAME Becky Radulski

DATE 8/20/19

SUPERVISOR 