

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

B147641320

FACILITY: Decorative Panels International, Inc		SRN / ID: B1476
LOCATION: 416 Ford Ave., ALPENA		DISTRICT: Gaylord
CITY: ALPENA		COUNTY: ALPENA
CONTACT:		ACTIVITY DATE: 07/25/2017
STAFF: Becky Radulski	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: scheduled inspection and records review		
RESOLVED COMPLAINTS:		

Traveled to B1476 Decorative Panels International (DPI) on July 25, 2017 to conduct a FY17 Partial Compliance Evaluation (PCE) scheduled inspection to determine compliance with MI-ROP-B1476-2015a. The inspection on 7/25/17 was for DPI only, Section 1 of the ROP. Present for the inspection was Bob Budnik, DPI Environmental Manager (989-356-8532, bob.budnik@decpanels.com). Mr. Budnik has been employed by DPI for 1.5 years.

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 treated to make ethanol.

LOCATION

B1476 is both Decorative Panels International (DPI) and American Process Incorporated (API). Both sites are located adjacent 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

The facility was observed prior to the inspection. Odors were noted in the residential area west of the facility. After the inspection an odor survey was performed and entered into MACES. The odor survey resulted in a level 2 sweet wood odor at Lake St and Ford Avenue, which is between biofilter #3 and the wet end of the facility.

Stacks were observed from Ford Avenue. Steam was noted at several stacks. The north stack for biofilter #3 had a white emission that was difficult to determine if it was steam or possibly particulate matter (PM). The white emission did not appear to disappear readily. A visible emission reading was not done on the emissions because the sun was not in the correct location for a reading.

Upon arrival at the lobby, called Bob Budnik. An aerial of the facility is in the lobby. We discussed the various emission unit locations, stacks and the overall process. I explained to Mr. Budnik the emission I noted at the stack to the biofilter #3. Mr. Budnik indicated that the unit was currently operating with no upsets, and that often due to Lake Huron, he has found the that steam emissions from that stack do not rise in the morning, but may sink. The stack would be observed during the inspection.

At the NE corner of the property is a company called Greenway, who uses hardboard dust from DPI mixed with wastewater treatment sludge to produce pellets. DPI uses some of these pellets in EUBOILER#3.

Met with Mr. Budnik in his office to discuss the ROP conditions and review records, and provided a tour of the facility. Emission units and control equipment were reviewed. Temperature sensors and differential pressure monitors were viewed. The north stack from biofilter #3 was no longer lofting white emissions. It is possible it is as Mr. Budnik indicated, and the early hours the steam was reacting to weather conditions. The stack emissions will be noted on future inspections.

It was noted as we walked around biofilter #1, that the 2 south beds were currently empty and media would be replaced shortly. The 4 north beds had recently been replaced. Four beds are required to be operating for the EU3PRESS-AREA to operate. Mr. Budnik indicated that DPI would be submitting testing protocol in the next few days to test biofilter #1. DPI indicated they are scheduled to test at the end of August and their test plan submittal would meet the 30 day requirement. The ROP testing conditions indicate a 60 day notification window, which was pointed out to Mr. Budnik. He indicated the tester had spoken to Karen Kajiya Mills, AQD TPU Supervisor, who said the 30 day timeframe would be allowed. Email between Radulski and Karen Kajiya-Mills on 7/26/17 indicates that the tester (Bureau Veritas) contacted her late Tuesday afternoon after I left DPI to request to test August 30-31.

RECORDS:

EUTRIMMER/PBRUSH with dual wet scrubbers. Condition III.1 prohibits operation without the Ducon scrubbers operating properly. IV.1 requires a water flow rate monitor on the scrubbers. The scrubber was installed and operating. The water flow rate monitor was operating and recorded flow at points A1, A3, and A5 on the scrubber.

IX.1 requires a written Malfunction Abatement Plan (MAP) for this equipment. We have an approved MAP on file. The MAP calls for liquid flow in the scrubber greater than 10 gpm, which were observed onsite.

FGMACTDDDD: All equipment on site subject to MACT DDDD, some emission units controlled by one of two biofilters and/or a Regenerative Catalytic Oxidizer (RCO), others uncontrolled.

III.1 requires maintaining the 3 hour block average 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 820 degrees f, 15 minute average 828 degrees f, and 3 hour block average temperature 815 degrees f. Pressure drop was 3" w.g. These values satisfy the MAP and the permit condition.

III.2 requires each biofilter to 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.

Note: There is no No. 2 biofilter.

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.

Condition IV.1 requires press enclosures for Lines 1 and 3 hardboard presses. These enclosures were in place. They were open but this was not a violation because the presses were not operating at the time of my inspection. Company personnel had opened the enclosures to perform maintenance on the presses.

Condition VI.1 requires monitoring and recording biofilter bed temperatures. The company is doing this as required.

Condition VI.2 requires monitoring and recording the RCO catalyst bed temperature. The company is recording the combustion chamber temperature, not the bed temperature. Company personnel pointed this out to me some weeks ago and asked for the condition to be changed to require combustion chamber temperature. They pointed out, correctly, that the underlying condition of 40 CFR 63.2269 allows recording the temperature in either of these two places, but we had named the wrong place in previous versions of their Renewable Operating Permit. This is not a violation because combustion chamber temperature satisfies the requirements of MACT DDDD. I will correct this condition in future drafts of the Renewable Operating Permit.

Condition IX.1 requires a Malfunction Abatement Plan. We have an approved MAP in our files.

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 7/25/17

SUPERVISOR SN