

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



B147629971

FACILITY: Decorative Panels International, Inc		SRN / ID: B1476
LOCATION: 416 Ford Ave., ALPENA		DISTRICT: Gaylord
CITY: ALPENA		COUNTY: ALPENA
CONTACT: Dennis Werblow, Director of Corporate Environmental Affairs		ACTIVITY DATE: 06/16/2015
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: DPI and API inspection, FCE		
RESOLVED COMPLAINTS:		

On June 16, 2015, I inspected the DPI Hardboard Plant and the API Biorefinery in Alpena. This was an announced inspection at the request of United States EPA personnel, who had planned to inspect the facilities; originally I had planned to follow along as they did their inspection. However, they had transportation problems and weren't able to get to Alpena. I decided to go anyway and do an inspection on my own.

DPI appeared to be in compliance with their permits and Malfunction Abatement Plans at the time of my inspection. API also appeared to be in compliance with their permits and Malfunction Abatement Plans.

In discussions with DPI personnel, they said they have changed the media on Biofilter No. 3. This became too wet over the winter because DPI had to inject too much steam in order to keep the beds at their proper operating temperature. Because the beds became too wet the pressure drop across the beds became excessive. They were starting to get leaks because the new stainless steel covers on No. 3 biofilter were distorting and threatening to buckle. Changing the media corrected this. The covers are holding up properly now. In order to prevent this from happening in the future DPI is installing steam heaters, like radiators, in the biofilters so that they can heat the beds without having to use direct steam injection.

They plan to replace the media in the No. 1 biofilter in early July.

DPI:

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; flow was 12, 19, and 14 gallons, respectively.

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. The values I observed meet this requirement.

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 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.

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.

API Alpena Biorefinery:

EULIME, lime storage and handling with passive vent filter on the lime storage silo.

Condition IV.1 requires a vent filter to be installed and operating properly. Mr. Matt Konicek of API pointed this out to me. It appeared to satisfy the permit condition.

V.1 requires observing the vent for opacity when loading lime. Mr. Konicek told me (without prompting) that they observe opacity from this vent when loading.

EUTANK3, gasoline tank; gasoline is added to finished alcohol from the biorefinery as a denaturant. Mr. Konicek said they aren't using Tank3 for this purpose any more. Tank 3 is being used as a second shift tank. API has asked to have the new ROP revised to leave out this emission unit, as they are no longer using Tank 3 for gasoline. They will probably be installing a new above ground storage tank for gasoline-denaturant. It should be about 500 gallons capacity.

EUSLUDGEDEHYDRTR, wastewater treatment sludge dehydrator, located on the DPI site but operated by API. During the DPI inspection I looked at this and confirmed it was in place, with the ventur~~e~~ scrubber and condenser still in place.

Personnel from both DPI and API have discussed EUSLUDGEDEHYDRTR with me. It is a problem because it is probably not going to be able to vent its exhaust gasses to EUBOILER#1 or EUBOILER#2, as currently required by Condition III.5, since DPI is modifying these boilers to burn natural gas only. The companies are still considering options on how to handle this.

FGETHANOL, ethanol production equipment controlled by a wet scrubber. Condition III.1 requires the wet scrubber to be installed and operating properly. It was installed and appeared to be operating properly. Fresh water feed was at 1.6 GPM, according to their MAP the minimum is 1.2 GPM. Recirculation was 21.5 GPM, according to the MAP the minimum is 15 GPM.

The wet scrubber is an ordinary packed scrubber, using water with the addition of a biocide once a day to prevent algae etc. from clogging it. Scrubber water goes back into the alcohol process for distillation, thereby returning any alcohol captured to the process.

Scrubber pressure drop was 2.5 inches w.g.

FGNSPSVVa; a flexible group for equipment in light liquid and heavy liquid service. API has a leak detection and repair program as required by these regulations. Valves, pressure relief devices, and so on were labeled with numbered tags as required.

FGMON, Miscellaneous Organic Chemical Manufacturing equipment subject to NESHAPS Subpart FFFF. As far as I was able to determine, all the equipment subject to these regulations was routed via a closed vent system to the wet scrubber. This equipment has a leak detection and repair program, as required by Subpart FFFF

Notes:

The equipment appeared to be unchanged from previous inspections, although (in the case of Tank 3) some of its uses had changed, although the equipment itself had not. Maintenance appeared good.

NAME William J Rogers Jr

DATE 6/30/2015

SUPERVISOR 

