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DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Stack Test Observation

N657833357

FACILITY: Almond Products Inc		SRN / ID: N6578
LOCATION: 17150 148th Ave, SPRING LAKE		DISTRICT: Grand Rapids
CITY: SPRING LAKE		COUNTY: OTTAWA
CONTACT: Chris Stebbins , Lead Engineer		ACTIVITY DATE: 02/12/2016
STAFF: April Lazzaro	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Observation of smoke testing of non-fugitive enclosure on EUDIPLINE2.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility around 10:15 to observe the smoke testing of the non-fugitive enclosure on EUDIPLINE2 and met with Chris Stebbins and Kim Cooper. The testing is required by Permit to Install (PTI) No. 361-06E, EUDIPLINE2 Special Condition (SC) V.3, that requires testing of the Natural Draft Openings (NDO) of the enclosure to ensure air flow is into the enclosure.

The testing was set to begin at 11:00, but I wanted to discuss the recent complaints received regarding the facility and the indoor air quality testing that the complainant conducted. Ms. Cooper was informed that complaints regarding odors were received in October, but after several times responding to the complaint (even going on a Sunday), they were determined to be unfounded as no odor was ever noticed at the residence. I explained that the complainant was specifically concerned about emissions from the sand stripper, and had tested for hydrogen fluoride and hydrogen chloride. The specific results of the test are unknown, but the complainant e-mailed to state that both were found in the home and car. I stated that I would let them know what if any results are received.

I also mentioned that I thought I saw smoke mixed with steam from a stack and we discussed that this is the wash heater stack. It was observed by Mr. Stebbins and I and only briefly did it look like some smoke was present. They stated they will have the burner tuned immediately.

Steve Byrd and Dave Englehardt of Network Environmental arrived at 11:00 to conduct the smoke testing. Basically they had flare style smoke tubes, which are lit and placed in a bucket inside the non-fugitive enclosure to ensure that all the smoke is captured by the enclosure. This dip line is enclosed on three of the four sides, with large access doors on one side that are kept closed and several duct openings for capture of emissions on the opposite side. The open side is to allow for parts to be brought in on an overhead conveyor to be processed. The air flow is drawn out of the system by the fan on the existing thermal oxidizer and ducted out the stack. The thermal oxidizer only needs to be on when the coating content of any coating applied is above 3.0 lb/gallon (minus water) as applied. The permit requires that the line be kept at a negative pressure. PTI No. 361-06E, EUDIPLINE2, Special Condition No. IV.3 states, "The permittee shall not operated EUDIPLINE2 unless the enclosure is installed, maintained and operated in a satisfactory manner to eliminate fugitive emissions. Satisfactory operation requires that the enclosure is operating at a pressure lower than all adjacent areas so that air flows into the enclosure through all NDOs. NDO is defined as any opening that is not connected to a duct in which a fan or blower is installed."

We walked around the enclosure and visually identified the NDOs. The enclosure was not enclosed between a couple of the tanks, which was seen by looking up into the line from the base of the catwalk. One of the areas had a fan installed, which was on and blowing air across the NDO. This was noted prior to the test, but we discussed that if the air flow was great enough to pull the smoke up and out, it wouldn't be an issue.

The first smoke bomb was placed just inside the opening to the NDO. A video was taken and accompanies this report on a data disk. The smoke did not get captured by the enclosure, and was seen exiting the enclosure at each NDO. Almond staff saw this, and got Roger Miller, Maintenance Supervisor, involved to see if modifications to air flow and ducts could be made to improve capture. Also, a cover was placed over the NDO between the two tanks that had the fan, and the fan was turned off. It was learned that the thermal oxidizer fan was not variable speed, and the speed could not be increased today. Roger and I looked at the control panel to be sure and did not see how it could be done easily. It was also identified that the tank with the constituent of concern was at the back of the enclosure, so it was requested that we move the smoke bomb to a location farther within the enclosure. This request was approved.

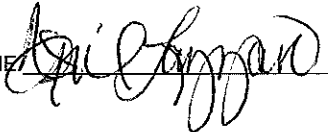
The second smoke bomb was deployed, and again, the smoke did not get captured by the enclosure, and showed that the seals on the access doors were not sealing. The smoke also escaped out of each other NDO.

A few more changes to the enclosure were made and a third smoke bomb was deployed in the same location as the second. This third smoke bomb also did not get captured by the enclosure as required.

Mr. Miller indicated that he learned from the company who services/maintain's the oxidizer that the fan does have additional capacity that can be accessed by reconfiguring the system. Almond indicated that this is a high priority fix for them and will contact AQD when the system is ready for re-testing.

I informed Mr. Stebbins that this issue is a violation of the permit, and a Violation Notice will likely be issued. I indicated that since the Consent Order had recently been terminated, the company is basically starting over with regard to compliance tracking.

The facility is in non-compliance with PTI No. 361-06E, SC IV.3, for failure to maintain and operate an enclosure that eliminates fugitive emissions. A Violation Notice will be issued.

NAME 

DATE 2-16-16

SUPERVISOR 