From: Hedgpeth, Zach
To: Scott Downey; Katie McClintock; John Keenan; Sandra Brozusky; Franklin, Richard; Koprowski, Paul; MONRO.David@deq.state.or.us; bivins.louis@deq.state.or.us
Cc: John Pavitt; Roylene Cunningham; Peter Magolske
Subject: field update re Portland used oil facility inspections today
Date: Thursday, September 24, 2015 1:46:00 PM

Hi All,

Here's a short summary describing notable observations from inspections conducted early this morning at American Petroleum Environmental Services (11535 N. Force Ave) and Fuel Processors (4150 N. Suttle Road). The following agency staff participated in the inspections: Sandra Brozusky and Zach Hedgpeth (EPA Region 10) and Louis Bivins (ODEQ).

Around 03:00, immediately prior to the inspections, we conducted an odor survey along Marine Drive and walked along the dike recreational path which runs roughly SE/NW and is located to the NW of the APES facility. No odors were observed, and no pollutant concentrations were observed using the PID which would have indicated a pollutant plume. Both PID concentration data and GPS location data were collected. The weather service indicated no wind at the time of the odor survey.

(Note: On a previous survey conducted around 3 AM Tuesday morning, a distinctive petroleum-like odor was observed along this same walking route and PID concentration readings were consistent with a pollutant plume originating from APES. On Tuesday morning, winds were ~4 mph to the W/NW. During the inspection this morning, the same distinctive odor was experienced when we were impacted by the plume from the "back plant" burner.)

<u>American Petroleum Environmental Services</u>

We arrived onsite at the APES facility at approximately 03:15 and presented our credentials to the operators "Jamen" and "Andy". Jamen led us on a site tour, during which we recorded FLIR video of the following emission points:

1. An emission stack attached to "cook tank 4"
2. A "dry leg" valve on "cook tank 3"
3. Lids on the "R700 unit" collection totes
4. The "back plant" burner stack exhaust (unburned hydrocarbons)
5. Burner exhaust from the "front burner" (unburned hydrocarbons)

In addition to these emission points, the facility utilizes a 55-gallon drum of carbon as an intermittent control device through which vapors are routed when they cannot be sent to the "back plant" burner. There was no backup carbon unit, and Jamen was not aware of how the facility determined when to replace the carbon unit. It seems likely that routing vapors to a saturated carbon unit is a potential intermittent source of odors.

Fuel Processors, Inc (fka ORRCo)

We arrived onsite at the FPI facility at approximately 07:30 and presented our credentials to the foreman, Ryan Porter. Ryan led us on a site tour, and we were later joined by the Environmental Manager Logan Choisnet. During the tour, we recorded FLIR video of the following emission points:

1. "burner #9" (unburned hydrocarbons)
2. "thumper tank" exhaust
3. Tank 18 vent
4. Tank 8 vent
5. Underground rejects tank vent/sump

Also of note: The "thumper tank" emissions are likely highly variable, since the tank receives volatiles and gasses from the heating of the raw material oil in all three "burners" at the facility. During the inspection, only one of the three burners was operating, so emissions would likely be higher with all three burners operating.

Also, the "scrubber" through which the exhaust from "burner 11" is routed is another potential source of emissions/odor. The "scrubber" actually appears to be a tank filled with process water which is heated by burner 11 and functions more as an evaporator to dispose of process water.

I think this hits the high points. Sandra and Louis can fill in any key items I may have left out. Please call/email with any questions.

Zach Hedgpeth, PE
Office of Environmental Assessment
EPA Region 10 -- Seattle
hedgpeth.zach@epa.gov
206-553-1217