# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Self Initiated Inspection** 

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FACILITY: DCP Antrim Gas L	LC	SRN / ID: N2940			
LOCATION: 6250 OLD STATE	RD, JOHANNESBURG	DISTRICT: Gaylord			
CITY: JOHANNESBURG	1 II January Company	COUNTY: OTSEGO			
CONTACT: Jay Laughlin, PE	A SAME AND	ACTIVITY DATE: 10/11/2016			
STAFF: Gloria Torello	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR			
SUBJECT: Use of FLIR Infrared camera at the facility.					
RESOLVED COMPLAINTS:					

AQD: Gloria Torello, Kathy Brewer, Jorge Acevedo

N2940/DCP: Jay Laughlin, Dave Bennett, Jen Pellitteri, Christopher Matts

The purpose of this site visit was to use AQD's FLIR Infrared camera (camera) at the facility in an effort to detect incomplete combustion exiting the stacks and as a check for leaks from other areas (valves, connectors, meters). The camera was used on various stacks and other areas as described below. "Movies" of the stacks and other areas were made and a copy of the movies was given to Jay. The main application of the camera is for detecting VOCs. The camera is designed to see emissions in the infrared spectrum of 3-5 um. As a general statement, the camera did not detect VOC emissions from DCP's stacks, and the camera detected leaks from a couple of other areas-which were already identified and tagged by DCP's consultant, see below. During the site visit FGTURB1and2 did not operate, but the balance of the other emissions units identified in the facility's ROP did operate.

Jen Pellitteri from DCP works in Colorado and uses a FLIR camera to detect leaks at DCP facilities for compliance with State of Colorado Air rules.

AQD staff watched DCP's safety and orientation video. Kathy Brewer gave an over presentation of the camera.

Jay gave Torello a copy of their consultant's October 5, 2016 "2016 Subpart W Equipment Leak Monitoring" report for the facility. This work was completed to "conduct equipment leak detection and compressor monitoring consistent with the requirements of the Onshore Natural Gas Processing segment regulated under 40 CFR 98, Subpart W." The report identifies leaking equipment, which Jay said is on schedule for follow-up action. At this time the Michigan AQD does not administer Subpart W.

Jay also gave Torello the October 7, 2016 response to the September 19, 2016 Violation Notice. The VN response will be reviewed under a separate report.

## **EUPLANT6AMINE**

Movie 614.

From the amine stack the camera picked up an attached plume that had an abrupt end point. This plume was attributed to heat in the steam plume off the amine stack.

In the building one leak was detected at Connector 851. This connector is in the Subpart W report.

## **FGENGINES**

Movie 614.

The camera showed the engines mufflers as very red, representing heat.

#### Movie 616.

The camera was used inside of the building where the engines are located. Nothing was detected.

Christopher showed Torello the new pressure gauges on the engines. Engine 1's dP was 2.8 inches across the catalysts, Engine 2's dP was 2.5 inches across the catalyst. Engine 1's catalyst inlet temperature was 974 degrees F and the outlet temp was 1011 degrees F. Engine 2's catalyst inlet temperature was 941 degrees F and the outlet temp was 982. Torello requested DCP write on Engine 1's temperature gauge panel "I In and 2 Out" as observed on Engine 2's gauge panel. The number 1 represents the inlet catalyst temperature and the number 2 represents the catalyst outlet temperature.

## **FGTURB1AND2**

# Movie 619.

From the turbine stacks the camera picked up a white plume. This plume was attributed to the heat exiting the stack. With the naked eye, Torello could see a heat shimmer on both of the turbine stacks.

## **FGGEN6789**

Movie 614.

The camera showed a short white plume off the stack that quickly dissipated.

## **FGPLANTRA**

**EUPLANT5AMINE** 

Movie 618.

The camera picked up a heat shimmer. With the naked eye, Torello could see an attached white plume that dissipated abruptly.

## **FGPLANTPH**

**EUPLANT6HEATER** 

Movie 614.

The camera picked up a short white plume that quickly dissipated.

### FGGD01

**EUP1DEHY** 

Movies 620, and 621.

With the naked eye, Torello observed white exhaust from the dehy stack. Torello smelled odor attributed to the dehydrator.

NAME Storia

DATE 10 -18-16

SUPERVISOR