

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

B655328916

FACILITY: UPPCO PORTAGE STATION		SRN / ID: B6553
LOCATION: 16626 Academy / Cemetery Road, SOUTH RANGE		DISTRICT: Upper Peninsula
CITY: SOUTH RANGE		COUNTY: HOUGHTON
CONTACT: JAMES MELCHIORI, SUPERVISOR		ACTIVITY DATE: 03/24/2015
STAFF: Ed Lancaster	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Conducted an announced, scheduled inspection.		
RESOLVED COMPLAINTS:		

The Upper Peninsula Power Company - Portage Station is a Title V subject facility. The company submitted a timely renewal application on November 5, 2014. The technical review of the applications is complete and the draft ROP is in 30-day public participation review, which ends on April 8, 2015.

The facility operates a General Electric MS-5000 gas turbine peaking unit rated at 22.6 MW. The turbine has the capability of burning natural gas or No. 2 fuel oil. A 465 hp diesel (compression ignition (CI)) "black start" engine is used to start the turbine. The black-start engine is subject to the RICE MACT (40 CFR Part 63 Subpart ZZZZ). In addition, the facility has a Rule 284(d) exempt 250,000 gallon, fuel oil storage tank with an electric heater.

During the week of March 16th, Mr. Melchiori called to inform me that the fuel oil turbine would be operating over the next several days and if I wanted to observe the start-up of the unit I should plan on arriving early at the site. We scheduled my arrival for 0730 hours, Tuesday, March 24th. Mr. Melchiori explained that the Midcontinent Independent System Operator (MISO) delegates when the turbine will start-up and he was hopeful it would be after I arrived. At 0646 hours, while en-route to the facility, Mr. Melchiori called to inform me the turbine was up and running.

Upon arrival at the facility I could hear the turbine operating and observed there were no visible emissions coming from the stack. I then entered the shop and met with Mr. Melchiori, who had copies of the facility's operations for 2014, 2015 (through the 23rd of March) and the fuel oil analysis.

The company receives the fuel oil supplier's analysis report with each shipment, in addition, they send a sample of the oil to their own lab for analysis. The distributors' fuel oil samples for March 18 and 20 gave results of 0.00105% and 0.00076%, respectively, in compliance with the Material Limit and Monitoring/Recordkeeping requirements of 0.5% by weight identified in ROP No. MI-ROP-B6553-2010. Mr. Melchiori informed me the oil shipments they are receiving are the first since 2010. For two years the plant was down for maintenance and repairs and in 2014 the plant was only called on to produce electricity for four (4) days.

During those four days the turbine operated for a total of 15.53 hours and consumed 27,423 gallons of fuel oil. Through the 23rd of March, 2015, the plant has operated 9 days for 114.55 hours and consumed 142,356 gallons of fuel oil.

As mentioned above, the diesel starting engine is subject to the RICE MACT. Because the starting engine only operates for approximately three (3) minutes to start the turbine, UPPCO has chosen to use the oil analysis program to show compliance with the applicable requirements in the MACT standard.

At the time of my inspection the company appeared to be in compliance with their ROP and the Air Pollution Control Rules.

NAME Ed Lucastra DATE 4/1/15 SUPERVISOR _____