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

B293422373

FACILITY: Palisades Nuclear Plant		SRN / ID: B2934
LOCATION: 27780 Blue Star Memorial Hwy., COVERT		DISTRICT: Kalamazoo
CITY: COVERT		COUNTY: VAN BUREN
CONTACT: Steve Andrews , Environmental Coordinator		ACTIVITY DATE: 08/13/2013
STAFF: Dorothy Bohn	COMPLIANCE STATUS:	SOURCE CLASS: MAJOR
SUBJECT: scheduled inspection		
RESOLVED COMPLAINTS:		

This was an announced inspection (although he thought I was coming the following day). I arrived at 9:05 and got through security to Steve Andrew's office by about 9:55. I met Mike Mlynarek, Steve's boss. I left at 12:55. The ROP renewal is waiting to go to EPA 45 day, therefore I used that to complete the inspection because it contains the requirements for the NSPS for the generators that I needed to review. First we toured the facility to look at the equipment. Then we went back to Steve's office and reviewed the records.

EUOfficeBlr & FGEmerg-ExRice: These are being added to the ROP for the 1st time because of the boiler and RICE MACTs. Since Palisades is an area source of HAP the AQD does not have authority for these regulations therefore I did not observe or evaluate their compliance status.

EUGen3: The plate on this unit says it is a CAT model 3516, 2145kW, 2876 hp and 69.0 displacement. It is housed in what looks like a trailer and has its own fuel oil tank (T-1001) with a 1250 gallon capacity that is outside but steve said their is also a tank behind the wall in the trailer. In an 8/27 email (attached) Steve said that there is a float gauge on the outside oil tank but that monitoring use by that would be very inaccurate so they have historically determined use by using load and run time. To be completely in-compliance with this requirement, they should add a fuel use monitor inside the trailer. Steve said that they do not use any of the generators to make energy for the grid.

Records show that they track the hours of use each month and then calculate the amount of fuel used with a conversion factor of 123.1 gal/hour (but the note says this for 1825 kW). Run time is recorded to the minute. Steve has not received the operation records from maintenance this year yet except in March where 220 gallons was recorded but Steve said they have the data (the person was out). The 2012 records show 2.316 hours of operation for one month using 284 gallons. Steve said this was when they ran a quarterly test which takes 2-3 hours. Other times it is only run for about 10 minutes. The total use in 2012 was 1512 gallons and 2011 it was 1403 gallons. On 8/16 Steve emailed me the 2013 records (attached). He has updated them to provide better info on why they operated. They are not keeping 12 month rolling totals (MRT) on the fuel use but they are way below their limit of 136,000 gallons. They should start keeping these records though.

EU-SecurityGen: This is a small generator subject to NSPS IIII. It is a CAT model C18 built in 2010, 600 kW and 750 kVA. According to information sent for the ROP renewal it was built on 8/7/10 and the displacement is 18.13 liters. The digital hour meter read 90.4 hour. The conversion factor used in fuel use calculations is 42.7 gallons/hour for a 600kw unit. They also record the hours of operation in minutes. This unit has its own oil tank. Records showed that for 2011 they operated 8 hours and burned 342 gallons of oil. In 2012 it was 7 hours and 299 gallons. They were only recording the hours operated but not a reason for the operation. From the short time frame you can tell it was for maintenance. Steve said they will make the changes for the requirements in the new ROP. On 8/16 Steve emailed me the 2013 records (attached). He has updated them to provide better info on why they operated.

FGBoilers: Both are Kewanee 23.211 MMBtu/hr units and 691 hp. M8 is the label on the heating boiler and M61 is on the evaporation boiler. A conversion factor of 200.9 gallon/hr is used for each. The fuel oil spec sheets are scanned and kept on the computer and show <15ppm sulfur. The fuel oil is sampled and tested by Palisades twice a year. The last time was on 2/7/13 and the results were 0.0018 %S and 19,468 Btu/#.

These boilers use the same oil storage tanks as FGENG1&2 and the fire pumps and air compressors (T-10A & T926). They typically don't run because they use leftover heat/steam from the nuclear units. In 4/12 M8 ran for 2.8 hours and used 569 gallons. In Jan. & Apr. 2012 M61 operated for a total of 807.9 hours and used 162.3 kgal of oil. Each time the unit runs the also record their VE check and write clear

or light gray. Steve said he tells them to only notify him if it is black which doesn't totally match up with the procedures in appendix 3. On 8/16 Steve emailed me that he cannot find any data that they have operated either boiler so far in 2013 (attached).

FGGENS1&2: These are both 3125 kVA and 2827 kw. The conversion factor used is 1410 pounds of oil /hour (and they have 1 kw = X #/hr to gal = 0.498762). Records show that as of 7/1/13 Gen1 had use 6510 gallons in 2013 over 48.2 hours. (26.1 of the hours occurred once as part of a 24 hour test done once every other year. The rest of the runs are 3.5-4.5 hours in length.) In 2012 it operated for a total of 44.95 hours using 6080 gallons. In 2012 Gen2 used 9400 gallons of oil over 69.5 hours. As of 7/15 they year it has operated for 31.4 hours and has used 4247 gallons (it had its 24 hour test this year where it ran for 25.8 hours). Every record of use has a VE observed recorded – unless it's at night – just like the boilers do. They were all light grey or clear.

FGColdCleaners: There is one cleaner in maintenance. It was not in use, the lid was closed and the unit was posted. It uses EPA2000 WCI-140CM. The MSDS did not give a VOC% but said it was non-hazardous. It listed several ingredients and 2 were 64742-47-8 (hydrotreated light distillate) and 68551-16-6 (an isoparaffin). The MSDS did not give a % of content for any of the materials.

Facility: Per an 8/16 email from Steve (attached) maintenance is controlled by a computerized PM process that schedules the work orders and then they scan the records into the computer for the equipment. I did not observe any of the maintenance records.

I am going to say that they are in compliance but the facility should make some improvements to better meet the requirements.

NAME Dorothy Bohn

DATE 10/2/13

SUPERVISOR MA 10/02/2013