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

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tation SRN / ID: N5573
DISTRICT: Kalamazoo
COUNTY: SAINT JOSEPH
ACTIVITY DATE: 07/29/2016
US: Compliance SOURCE CLASS: MAJOR

This was not an announced inspection. Tim Wolf is the contact person.

The first part of the inspection was looking at records for EUAUXGEN1, EUAUXGEN2, and EUEMERGGEN.

EUAUXGEN1 and EUAUXGEN2

These two natural gas-fired emergency engines are started on Thursdays for 12 minutes and are located in Auxiliary Buildings 1 & 2. They are subject to 40 CFR Part 63 Subpart ZZZZ. Maintenance checks and readiness testing is limited to 100 hours per year. There does not appear to be a limit for hours of operation for emergency use only. Based on hours of operation records for 2015, they were well below the 100 hours as well as for 2016. These two engines are on an engine oil analysis program in place of the alternative oil and filter change every 500 hours or annually, whichever comes first. They have records for when the oil was sampled. They have a yearly inspection and maintenance schedule. There is a requirement to check spark plugs every 1,000 hours of operation or annually, and to check belts and hoses every 500 hours of operation or annually. It could not be found in the records whether the annual maintenance check includes this, and it was suggested to specify these checks in the maintenance schedule.

EUEMERGGEN

This is an 1,818 hp natural gas-fired emergency generator located at Plant 3. It is subject to 40 CFR Part 60 Subpart JJJJ. Because this is a non-certified engine, stack testing is required every three years for CO, NOx, and VOC. The last test date was 4/20/14. Thus, it will need to be tested by next spring. This engine is also on an engine oil analysis program. The dates of oil sampling are recorded. The hours of operation are recorded. This engine is also started on Thursdays for 12-minutes. It has a 500 hour annual limit based on a 12-month rolling time period. Maintenance checks and readiness checks are limited to100 hours per year. Based on records for 2015 and 2016 the engine hours are well below that.

Walkthrough

The facility has a variety of storage tanks for lube oil, ethylene glycol, diesel, brine, condensate, and gasoline. It appears that they are exempt by Rule 284. A map of the tanks was obtained.

Cold cleaners are located in Auxiliary Buildings 1 & 2 and Plant 3. The lids were closed and rules were posted. The 2 auxiliary buildings also have a small boiler each. The name plate said 2.51 MMBtu/hr. The Aux1 one was installed on 5/2/62. These are either grandfathered or exempt by Rule 282(b)(I). Plant 3 has a natural gas-fired water heater, EUHEATER, in the ROP and has a gas usage limit. According to the June record the 12-month rolling gas usage was 5459 thousand cubic feet, which is below the permit limit of 12.88 MMscf.

Engine Building 1 has 4 grandfathered compressor engines. Engine Building 2 has 4 grandfathered compressor engines.

Compressor Building 3 (Plant 3) has 4 engines (FGENGINES) that are in the ROP. These are natural gasfired 4-stroke, lean burn RICE. They have a catalyst to control CO emissions. They are subject to 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 60 Subpart JJJJ. They are tested yearly for CO destruction efficiency, NOx, and VOC. Engines 2, 3, and 4 were tested on March 8-10, 2016. These engines were in compliance. Engine 1 was tested on 7/7/16. The test report has not been received for this engine as of yet.

Printout records of operation hours for the engines are kept. Parameters that are logged include the 4 hour rolling average catalyst inlet temperature and monthly pressure drop across the catalyst. These two parameters have alarms if they go out of range.

The engines have a Preventative Maintenance/Malfunction Abatement Plan. The ROP also specifies in FGENGINES III.1. that a startup, shutdown, and malfunction plan be developed. However, operation of the engines are programmed into the control panel. Startup and shutdown of the engines is dependent on programmed conditions. If startup conditions are not achieved then the engine will be shut down. The facility submits semi-annual CPMS reports for ZZZZ.

Monthly fuel usage records are kept for each engine. This includes all the engines on the site.

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