

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

N792138009

FACILITY: NSF INTERNATIONAL		SRN / ID: N7921
LOCATION: 789 N DIXBORO RD, ANN ARBOR		DISTRICT: Jackson
CITY: ANN ARBOR		COUNTY: WASHTENAW
CONTACT: Matt Gorsline , Quality Assurance Specialist		ACTIVITY DATE: 11/30/2016
STAFF: Zachary Durham	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled, unannounced inspection of facility with equipment exempt from permitting.		
RESOLVED COMPLAINTS:		

Contact

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Quality Specialist
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Purpose

This was a scheduled, unannounced inspection of the facility located at 789 N. Dixboro Rd, Ann Arbor, MI owned by NSF International. Mike Kovalchick and I arrived on site at about 1:30pm on 11/30/16 to conduct the inspection of the equipment and materials used in their processes. We were met by Matt Gorsline, who led us on a tour.

Background

This facility houses laboratory equipment that is used to analyze water samples for the Environmental Protection Agency (EPA). There are different areas for each type of analysis being run and the equipment and chemical needs associated with those tests. The lab equipment is exempt from requiring a Permit to Install (PTI) by Rule 283(b).

It does not appear that the facility is subject to the regulation written under 40 CFR Part 63, Subpart VVVVVV - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chemical Manufacturing Area Sources. The applicable exemption to the subpart is made in 63.11494(c)(3).

The facility has 4 boilers on site, 2 of which are rated at 7 mmBTU/hr and 2 at 3.5 mmBTU/hr. These units are exempt from requiring a PTI by Rule 282(b)(i).

They also have 2 emergency backup diesel generators. One is a Caterpillar rated at 465 horsepower and was installed in 1998; the other is a Cummins rated at 500 horsepower and was installed in 2007. The applicability of the New Source Performance Standard (NSPS) for Compression Ignition (CI) Rotating Internal Combustion Engines (RICE) in Subpart IIII of 40 CFR Part 60 may apply to the Cummins engine installed in 2007 depending on manufacture date. The company is currently looking into specifications for this engine.

These engines may have requirements according to the Maximum Achievable Control Technology (MACT) in 40 CFR Part 63, Subpart ZZZZ for RICE. The AQD does not have delegation of the RICE MACT at the time of this inspection, and therefore, was not reviewed.

Compliance Evaluation and Summary

During the walk through tour of the facility I observed many of the laboratory stations and consider the equipment exempt from requiring a PTI by Rule 283(b). Labs analyses being performed included mass spectrometry, gas chromatography, ion chromatography, high performance liquid chromatography, and various wet chemistry tests to name a few. The area of concern for the AQD is the presence of three large stacks that exhaust emissions from lab fume hoods.

This inspection identified three chemicals that the company uses the most which are regulated by the AQD:

methylene chloride, methanol, and acetonitrile. The company disposes of chemical waste via the waste hauler U.S. Industrial Tech. The company provided me with an estimation of air emissions based on a mass balance that accounted for volumes purchased and the amount of waste sent out (see attached). They have estimated 3750 lbs of methylene chloride emissions over the past 12 months as being emitted through the stacks, or 312.5 lbs/month. Both methanol and acetonitrile were captured by the waste stream at about 99%, and thus had negligible emissions. These estimated actual emissions appear to be in line with PTI exemption Rule 290(a)(i) and (a)(ii)(A) for emission units with limited emissions. Since the inspection I have spoken with Tim Sonnenberg, whom inspects hazardous waste generating facilities for DEQ-OWMRP, and he confirmed that NSF is a small quantity generator. He provided me with some recent waste manifest documentation (see attached).

It appears that the only other equipment on site that has potential requirements is the diesel-fired emergency RICE that was installed in 2007. If it is determined that the engine was manufactured after April 1, 2006, the engine would be subject to the NSPS IIII for CI RICE.

Compliance Determination and Recommendations

Pending new information is discovered that subjects the facility to NSPS IIII, I have determined the facility is in compliance with state and federal air quality rules and regulations.

I recommend that the facility review their emergency engine specifications as well as the rule in 40 CFR Part 60, Subpart IIII to determine what standards they are required to meet.

I also recommend that the facility contact the AQD with their findings regarding emergency engines so that compliance assistance may be offered.

Lastly, I recommend that the facility maintain emission records in a manner that will ease future compliance inspections.

NAME Zack Dunham DATE 12/21/16 SUPERVISOR [Signature]