

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

N741827916

FACILITY: Richard-Allan Scientific, part of Thermo Fisher		SRN / ID: N7418
LOCATION: 4481 Campus Drive, KALAMAZOO		DISTRICT: Kalamazoo
CITY: KALAMAZOO		COUNTY: KALAMAZOO
CONTACT: Jeff Burch , ESH Supervisor		ACTIVITY DATE: 12/02/2014
STAFF: Dorothy Bohn	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM 208A
SUBJECT: Unannounced Inspection		
RESOLVED COMPLAINTS:		

I arrived at 9:05. Larry Kwapis, Engineering Manager and acting plant manager, first met with me. Jeff Burch, ESH Supervisor, was out of the office when I arrived but he returned and joined us during the opening meeting. The company is Richard-Allen Scientific (RAS), a subsidiary of Thermo Fisher Scientific. I gave Larry an inspection brochure and we held a pre-inspection conference.

RAS has 2 primary components to their business. The 1st is to develop, manufacture, and package consumable medical products for processing tissue. The 2nd is to repair instrumentation that is used by facilities to process that tissue. The instruments are made elsewhere and the repairs typically involve software, wiring, etc. so this does not affect air quality. The company operates 3 shifts with manufacturing occurring on the 1st & 2nd shifts and distribution on the 1st and 3rd. They employ about 160 people.

Rule 208a: The facility is currently operating as a 208a source. On September 26, 2014 the AQD sent them notice that Rule 208a was going to be rescinded in 2015. We have not heard anything from RAS so I asked them about their status. They said they have been working with their consultant, ERM, and have a meeting scheduled with them this Friday to discuss the findings, but they think they will be submitting an opt-out PTI application. We discussed what that would look like and how long it might take to be issued.

The company is currently operating under exemptions and has no PTIs. I told them that there would be no NSR associated with the opt-out PTI so the equipment would continue to operate under the exemptions and they would still need to maintain that required recordkeeping in addition to any required by the opt-out PTI.

Tanks: The 6 tanks are inside and the loading bay is outside. The system is enclosed. Vapors displaced during loading are returned to the tanker so there are no emissions unless there is a spill or leak. The xylene, methanol and formaldehyde tanks are about 7K gallons each and the RGA (alcohol) tank is 8.5K gallons. These are all stainless steel tanks. There are two 10% NBF (neutral buffered formalin) each 5-6K gallons. One is a poly tank and one is stainless. The Formaldehyde is 36.9% formaldehyde, with about 11% methanol and the rest water. The 10% formalin is made by RAS and contains formaldehyde and methanol. There are numerous other smaller tanks and totes of various materials scattered around the facility.

Process rooms: There are 2, one for non-flammable and one for flammable. Each room has exhaust hoods at the various filling points of the lines and they combine into one exhaust point for each room. There are a total of 19 work centers and about 15 lines. Each line fills containers, seals and then packages the product.

They fill containers from a very small size to 5 gallons. Labels are applied to boxes, some vials are printed with a lot expiration date, and boxes are sealed with packing tape. No adhesive is used. The ink use is very low and is included in the Rule 290 calculations. The labels are printed by another company. The only emissions are from filling and a minute amount from the inkjet.

They are keeping monthly Rule 208a and 290 records and they were complete through October. The Rule 290 included all the processing as one emission unit. The highest monthly emissions for the IRSL (20#) was 9.15#. The highest for the ITSL (1000#) was 540# but all the other months were 175-230# so maybe they had a spill or broke some containers during the high month. Emissions are determined using data on what's produced and the amount packaged. From this they know the individual components and they use an emissions factor of # emitted/container filled.

Other Equipment: The company has one parts washer in maintenance that is rarely used. I was told that they haven't bought new solvent in several years. The lid was closed but it was not posted. Before leaving I gave

them one of the stickers for posting it and explained the rule a little. I observed a welding station but this is exempt per Rule 285(i).

They have 2 emergency, diesel fired, generators; 80 kw and 200 kw. Both installed in 2002 when the facility was built and both are Cummins engines (one said Onan on it). Cummins was performing their annual maintenance at the time of the inspection. They also have a fire pump but it is electric and operates off of one of the emergency generators if needed. They were not aware of the MACT 4Z so when I returned to the office I emailed Jeff the link to EPA's navigational tool for it and the NSPS. The engines are not subject to the NSPS though.

RAS has 2 very small, gas-fired, boilers – around 1 MBtu/hr, that were installed in 2002. They are used to heat paraffin wax. Since the facility is a minor source of HAP and they are gas fired they are not subject to the boiler MACT. The building is heated by rooftop HVAC's that are gas-fired.

We had a closing meeting during which they called their corporate environmental contact, Anne. I left at 11:00. The facility appears to be in compliance.

NAME

Dorothy Bohn

DATE

12/3/14

SUPERVISOR

MA 12/3/2014.