

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

N203524358

FACILITY: SCOTT SPECIALTY GASES		SRN / ID: N2035
LOCATION: 1290 COMBERMERE ST, TROY		DISTRICT: Southeast Michigan
CITY: TROY		COUNTY: OAKLAND
CONTACT: Scott King , Lab Supervisor		ACTIVITY DATE: 02/13/2014
STAFF: Usama Amer	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Inspection of a Minor Source		
RESOLVED COMPLAINTS:		

On February 13, 2014, I conducted a Scheduled Inspection at Scott Specialty Gases, Inc. (facility), located in Troy, Oakland County. The purpose of the inspection was to determine the company's compliance with the requirements of Article II, Air Pollution Control, Part 55 of Act 451 of 1994, administrative rules, and the conditions of Permits to Install (PTI) No's. 724-92 & 23-89.

Mr. Scott King, Lab Supervisor, represented the company during the inspection.

BACKGROUND

- The company mixes hydrogen sulfide gas (H₂S) with nitrogen (N₂), and hydrogen chloride gas (HCl) with N₂ in preheated industrial cylinders at 2000 psi. The gas mixtures are sold to be used as calibration gases for EPA and hospitals standard testing. After filling, excess gases which are left in the two mixing tubing systems are transferred into two separate scrubbers for treatment before being released to the atmosphere.
- The facility has been purchased by Air Liquide about 5 years ago.

COMPLIANCE STATUS

I. PTI No. 23-89 - Gas cylinder treatment process with caustic scrubber.

- S.C. #10 – stipulates that the HCl emission shall not exceed 287.4 ml/m³

* The above limit is maintained based on the pH value of the treatment solution (caustic) in the scrubber. A pH meter is installed and checked daily.

As of 8-31-10, the facility started to retrain appropriate personnel on existing procedures and requirements and monitor records to confirm they are consistent with prescribed operating procedure.

- S.C. #12 – stipulates not to operate the gas cylinder treatment process unless a caustic scrubber is installed and properly operated

* The pH digital meter is equipped with an indicator light, which flashes upon recognizing low pH readings.

II. PTI No. 724-92 - Lab standards development and calibration unit using H₂S

- S.C. #12 – stipulates not to operate the Lab standards development and calibration unit unless an activated carbon scrubber is installed and properly operated

* The original activated carbon scrubber was installed in 2003, and replaced in October, 2010.

- S.C. #14 – stipulates that records of H₂S usage shall be kept on file.

* H₂S usage records are available based on purchase records only.

As of 8-31-10, the facility started the following procedure:

"In order to make hydrogen sulfide usage levels more readily available, the Facility shall on a quarterly basis calculate the amount hydrogen sulfide used in orders record that data. The Facility will log the remaining balance of hydrogen sulfide on hand. The issue of tracking H₂S not sent as product ("waste generated") will be addressed in the planned action as noted above in item S.C/ #12." Attachments A & B

CONCLUSION

The facility appears to operate in compliance with the requirements of the above regulations and the conditions of Permits to Install (PTI) No's. 724-92 & 23-89.

NAME L. Sam Amer

DATE 2/20/14

SUPERVISOR CJE