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

| N255643300 | | F | | | |
|---|-------------------------------|---------------------------|--|--|--|
| FACILITY: OMNI METALS LABORATORY | | SRN / ID: N2556 | | | |
| LOCATION: 4683 FREEDOM DRIVE, ANN ARBOR | | DISTRICT: Jackson | | | |
| CITY: ANN ARBOR | | COUNTY: WASHTENAW | | | |
| CONTACT: | | ACTIVITY DATE: 01/16/2018 | | | |
| STAFF: Zachary Durham | COMPLIANCE STATUS: Compliance | SOURCE CLASS: | | | |
| SUBJECT: Scheduled inspection of PTI 658-90 for an activated charcoal system controlling H2S from a metals testing laboratory. This equipment is now exempt from requiring a PTI by Rule 291. | | | | | |
| RESOLVED COMPLAINTS: | | | | | |

Contact

Dr. David Sponseller 734-677-2100 <u>DSponseller@OMNImetalslab.com</u>

Tom Sponseller tesponseller@OMNImetalslab.com

Purpose

This was a scheduled, unannounced inspection of Permit to Install (PTI) 658-90 and equipment located at 4675 Freedom Drive, Ann Arbor, MI 48108. I arrived on site at on 1/16/18 and met with David and Tom.

Background

OMNI Metals Laboratory received PTI 658-90 for an activated charcoal filtration system to control emissions of hydrogen sulfide (H2S). The company tests metal piping used in the oil and gas industry, which when exposed to H2S degrades the metal. Their laboratory setting allows the equipment to be tested before being implemented in the field, thereby generating data on how the product will wear over time with exposure to H2S.

The company was last inspected by Glen Erickson in 2011 and found to be in compliance at the time.

Compliance Evaluation and Summary

Upon arriving at the facility I noticed the stack coming from the roof of the building, and no visible emissions were observed. I was met by David Sponseller when I entered the building and he showed me to the back of the building where the testing laboratory is set up in an enclosure, all of which is vented through the activated charcoal system before exiting through the stack.

At that time Tom exited the lab and joined us. I briefly went over the permit conditions, which appeared to be met since it was clear that the laboratory exhaust was being routed through the filtration system. It was at that point I directed David and Tom's attention to Rule 291, which describes emission units that are exempt from requiring a PTI and considered "de minimus."

Tom produced a spreadsheet calculating potential H2S emissions, with the highest actual year being 2013, which comes to 420 pounds of H2S. Other years average between 180 to 240 pounds of H2S per year, before control. These emission rates are well within the applicability of Rule 291 and Table 23, which identifies potential emissions of H2S as not to exceed 2 tons per year.

Compliance Determination

This facility is in substantial compliance with air quality rules and regulations and special conditions of PTI 658-90.

Recommendations

http://intranet.deq.state.mi.us/maces/WebPages/ViewActivityReport.aspx?ActivityID=246... 2/13/2018

This permit has been void as it now meets criteria of Rule 291. DATE 2/13/18

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| SUPERVISOR | - N |
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2/1/2018

Hydrogen Sulfide Usage @ Omni Metals Laboratory, Inc.

| Year of Maximum Usage: | | 2013 | Pounds |
|-------------------------------|-----|-----------|--------|
| # of Size "44" tanks used: | 60 | | |
| Pounds of H2S per tank: | | | |
| Total H2S used in maximum usa | 420 | Pounds | |
| | | | |
| Average Usage | | 2004-2017 | |
| # of Size "44" tanks used: | | 3-4 | • |
| Pounds of H2S per tank: | | 60 | Pounds |

Total H2S used in average usage year:

Prepared by: Tom Sponseller Technical Director Omni Metals Laboratory, Inc.

180-240 Pounds