

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

N211037927

FACILITY: GALLATIN AND SOCHA METALS		SRN / ID: N2110
LOCATION: 208 HAEUSSLER, ANN ARBOR		DISTRICT: Jackson
CITY: ANN ARBOR		COUNTY: WASHTENAW
CONTACT:		ACTIVITY DATE: 12/08/2016
STAFF: Zachary Durham	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Scheduled, announced inspection of PTI 237-89 for precious metal recovery processes.		
RESOLVED COMPLAINTS:		

Contact

Dan Budd
gs@gsgold.com

Purpose

This was a scheduled, announced inspection of the facility and equipment operated by Gallatin and Socha Metals (G & S). The purpose of the inspection was to determine compliance with state and federal rules and regulations as contained within their Permit to Install (PTI) No. 237-89. I arrived on-site at about 9:15am and met with Dan Budd to inspect their metal recovery and processing operations.

Background

G & S Metals has been operating in the same manner since the issuance of the PTI in 1989. The processes outlined in the permit include an incinerator furnace, a wet scrubber, and chemicals used for precious metal recovery. The incinerator is charged with material received from jewelry shops, such as carpeting, buffing tools, etc., that may contain trace amounts of precious metals. These materials are loaded into the incinerator and combusted to remove volatile solids. The remaining debris is collected from the furnace and homogenous samples are tested for target metals, which are then processed for recovery. The wet scrubber is installed to control potential acid fumes from chemical use in the metal recovery processes.

This minor source does not appear to be subject to any NSPS or NESHAP regulations at this time.

Compliance Evaluation and Summary

Upon arrival I met with Dan Budd. Dan showed me to the area of the facility where the processes of interest to the AQD were located. The incinerator was not currently operating, though was still warm from a previous run. I inquired about the thermocouple control as well as the amount of material being charged to the unit. The control is mounted to the wall directly besides the incinerator and the connection of the thermocouple to the unit is clearly visible. I observed the record keeping of material charged to the incinerator while on site, and have included several months of their log to this report (see attached). According to Dan, they attempt to limit the weight of material being loaded in a single run in order to ensure complete combustion with no visible emissions. The unit is connected to a stack that is exhausted vertically, unobstructed to the ambient air. No VE's were observed at any time during this inspection or previous attempts to conduct the routine inspection.

Next, I observed the operational setup of the wet scrubber. It was currently operating at a pH of 8.73 according to the controller. It is maintained at a basic pH by use of sodium hydroxide (NaOH) addition to control for acid fumes. Dan said that the container of NaOH is refilled about every six weeks. Additionally, I requested records of chemical use. Dan provided me with the last two purchase orders, which include orders for hydrochloric acid, nitric acid, and sodium hydroxide. He also orders sulfur dioxide by the 150lb cylinder, of which 3-5 cylinders are typically used per year in the metal recovery process. I did not observe the sulfur dioxide usage record at the time of this inspection.

The metal recovery and processing area appeared to be in good condition. Dan did indicate that one of the fume hoods was being repaired at the time, so they were not utilizing that work space. All equipment identified in the permit appeared to be functioning properly and installed in a manner consistent with good air pollution control

techniques. I would recommend that this facility remain on its routine inspection schedule or on an as needed basis.

Compliance Determination

After on-site inspection, I have determined that this facility is in compliance with state and federal air quality rules and regulations.

NAME Jack Durlan

DATE 12/14/16

SUPERVISOR [Signature]