

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

N581454264

FACILITY: ASAMA COLDWATER MANUFACTURING, INC.		SRN / ID: N5814
LOCATION: 180 ASAMA Parkway, COLDWATER		DISTRICT: Kalamazoo
CITY: COLDWATER		COUNTY: BRANCH
CONTACT: Darrin Mynhier, Quality Manager - GCI		ACTIVITY DATE: 07/15/2020
STAFF: Amanda Chapel	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

On Wednesday July 15, 2020, Air Quality Division's (AQD) Amanda Chapel (staff), conducted an announced walk-through inspection of the Gokoh Coldwater, Inc (GCI) facility was part of the compliance inspection of ACM and GCI as one single source as defined under MI-ROP-5814-2015. Due to the COVID-19 pandemic, inspections are announced, and the records review portion is completed separately through e-mailed records. Records were requested and they are due on July 22, 2020. For a history of the relationship between GCI and ACM, see the ACM walkthrough inspection write-up. A determination was made in January, 2020 that GCI and ACM are now separate sources and GCI will be removed from the ACM ROP permit during the ROP renewal cycle.

Due to the pandemic, the required PPE was steel-toed boots, eye protection, hard hat, and face mask. Staff signed in and submitted to a temperature check before making contact with Mr. Richard Marske, Production Manager and Mr. John Siler, Maintenance Manager. Mr. Darrin Mynhier, Quality Manager was out of the building during the time of the inspection. It was agreed ahead of time that Mr. Marske would facilitate the tour. The facility works 2 shifts per day, and they work 4 days a week, 10 hours per day. There are approximately 43 people that are currently employed at the facility.

The facility does not have any parts washers, boilers, or emergency generators on site. The facility has a number of natural gas fired space heaters along the south wall of the building which is exempt from permitting under Rule 282(2)(b)(i). The facility also has a nitrogen gas generator system located to the west of the cold box machines and adjacent to the shell core machines. The nitrogen gas is used in the cold box making process as a blowing agent. The equipment is exempt from permitting under Rule 285 (2)(II).

During the facility walkthrough, all emission units contained in the ROP were observed by staff. No records were reviewed at the time of the walkthrough and have been requested and will be submitted via email to show compliance with the emissions limits. The following will describe observations made during the walkthrough and compliance status.

#### EU-SHELLCORE-S2

This emission unit consists of seven shell core machines that exhaust horizontally to the ambient air. There was a core wash tank with limited use that was associated with this emission unit but it was removed earlier in 2020. The dust collector is disconnected and being stored in the facility and the tank was recently sold and shipped to Texas. A shipping manifest copy was obtained during the inspection.

One shell core machine was running during the inspection and Mr. Siler stated that because of social distancing requirements, they only run two machines at the same time. There were no visible emissions observed from the horizontal vent.

#### EU-SILOS-S2

This emission unit consists of two 72-ton sand storage silos, two sand mixers to mix sand with resin, all associated sand handling equipment, and a fabric filter dust collection system. The silos are backfilled through an internally fed hose about 3 times per week. There is an internal dust "knock-out" system where excess dust falls out of the venting from the loading. There is a note on a clipboard by the silos indicating the filters were changed on June 1, 2020 and changed once per year. Pressure drop gauge read 6.5" at the time of the inspection. Acceptable range for the pressure drop is between 5" and 9".

The dust collector is located outside the building and was observed during the inspection. No dust was

observed coming from the collector and no excess sand was observed around the area. The bin is checked every day at least once per shift and is changed, as needed, about once every 1-2 weeks. Visible emissions readings are taken once per week on site.

All records associated with this emission unit will be emailed and full compliance with the permit will be evaluated upon receipt of the records.

#### **EU-LAEMPE#1AND#2-S2**

This emission unit consists of two Laempe cold box core machines which use a phenolic urethane core making process. Mixed sand and resin is used to make the cores which are sent through two natural gas fired core ovens. Emissions are controlled through Dakota acid scrubbers. The core machines were both in operation during the inspection.

Sulfuric acid is used in the scrubbers and the pH and liquid flow rate are monitored continuously. The scrubbers are filled with 55 gallons of sulfuric acid and 250 gallons of water. During the inspection, the pH on the scrubbers read 3.31 and 3.08 pH. They change the liquid when the pH reaches about 4.5 which is about every 4-6 weeks. The liquid flow rate during the inspection was 42.8 gpm and 43 gpm. The magnehelic gauge read 0.91 and 3.06.

Each scrubber is equipped with a data logger that continuously monitors process suction pressure (magnehelic), scrubber differential pressure, flow rate, and blowdown pH. Readings are recorded to an SD card every minute and averaged every 15 minutes. The SD data is downloaded every month and data reviewed to make sure the 15-minute readings don't exceed the 3-hour averages established during the most recent performance test.

Resin is mixed in a 3-part system 65/30/5 with Isomax 271, 161, and triethylamine (TEA) gas as the active chemical. While walking up the platform on one of the Laempe machines, there was a chemical-odor. When Mr. Marske opened the sand and resin mixing area, the odor was very strong as the seal had been broken. The gauges on the scrubbers indicated that things were operating normally. The dosing tubes which are calibrated once per month, send the mixed chemicals and sand through to the sand gate which feed the molds.

Once the sand and resin mixture is injected into the molds, a robot unloads them, dips them in a hardening liquid, and the cores are placed on a conveyor and cured for about 17 minutes. The natural gas oven is heated to 390 degrees. The facility makes approximately 400 cores per hour on each Laempe line. Opacity is read twice a year from the oven stacks.

All records associated with this emission unit will be emailed and full compliance with the permit will be evaluated upon receipt of the records.

#### **EU-MISCELLANEOUS-S2**

This emission unit consists of materials ancillary to the core making process including glue/paste, coating, core box release agent, and metal cleaners. During the inspection, the storage area where the binders, sulfuric acid, metal cleaner, part spray, and hydraulic oil is stored. All lids were closed and the chemicals were stored in a separate, enclosed area.

All records associated with this emission unit will be emailed and full compliance with the permit will be evaluated upon receipt of the records.

At the time of the walkthrough inspection, it appeared the facility was in compliance with the requirements for operation in MI-ROP-N5814-2015. Records demonstrating compliance will be reviewed separately when they are received to determine full compliance with the requirements found in the ROP.

NAME Amber Clapp

DATE 7/20/20

SUPERVISOR RIL 7/31/20