

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

N590466486

<b>FACILITY:</b> GCI GOKOH COLDWATER INC		<b>SRN / ID:</b> N5904
<b>LOCATION:</b> 100 CONCEPT DR, COLDWATER		<b>DISTRICT:</b> Kalamazoo
<b>CITY:</b> COLDWATER		<b>COUNTY:</b> BRANCH
<b>CONTACT:</b>		<b>ACTIVITY DATE:</b> 02/09/2023
<b>STAFF:</b> Chance Collins	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Scheduled Inspection for FCE		
<b>RESOLVED COMPLAINTS:</b>		

On February 9, 2023, AQD staff traveled to Branch County to perform an inspection of GCI GOKOH Coldwater Inc. The purpose of the inspection was to determine the facility's compliance with Permit to Install No. 162-11B and applicable state and federal air pollution control regulations.

AQD staff arrived on site at 1:50 p.m. to overcast conditions with a temperature of 53° F with a SSW wind of 18 mph. There were no noticeable odors upon arrival.

AQD staff met with Cynthia Carr (QA Assistant Lead) who walked staff around the facility and answered all questions.

The facility operates two shifts per day, four days per week, 10 hours per shift. 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. There are several natural gas-fired space heaters along the south wall of the building which appear to be exempt from permitting under Rule 282(2)(b)(i). The facility also has a nitrogen gas generator system which is 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 appears to be exempt from permitting under Rule 285(2)(II).

Permit to Install No. 162-11B covers EUSHELLCORE, EUSILOS, EULAEMPE1AND2, EUMISC, and FGFACILITY limits.

The following discusses the findings of the inspection and review of records:

**EUSHELLCORE:** Seven shell core machines with horizontal exhaust to ambient air.

Pollutant	Limit	Actual	Compliance
VOC	1.0 tpy	.001 tpy	Appears to be compliant.

All records were reviewed on-site and were kept in a satisfactory manner.

While touring the facility, four Kiri hot shell machines were found to have been installed and operating without a permit. A violation notice will be sent.

**EUSILOS: Sand Storage Silos, two at 75 tons capacity each, sand handling, and two sand mixers (sand is mixed with resin) with a fabric filter dust collection system, Dust Collector #1, 8500 cfm. Includes transfer of sand from trucks to the silo and pneumatic sand feed through enclosed piping from the silo.**

**Pollution Control Equipment: Fabric filter dust collection system, Dust Collector #1, 8500 cfm.**

Pollutant	Limit	Actual	Compliance
PM	2.5 tons per year (tpy)	0.67 tpy	Appears to be compliant.

**Material Limits:**

Material	Limit	Actual	Compliance
Sand	25,000 tons/yr throughput	6224 tons/yr throughput	Appears to be compliant.

**A Malfunction Abatement Plan (MAP) was provided and reviewed.**

**A gauge, which continuously measures the pressure drop across the fabric filter dust collection system was installed, maintained, and operated in a satisfactory manner. The gauge had a reading of 6.5" at time of inspection.**

**All records were reviewed on-site and were kept in a satisfactory manner.**

**EULAEMPE1AND2: Two Laempe cold box core machines.**

**Phenolic Urethane Cold Box core making process. Mixed sand/resin is set to make cores. TEA catalyst. Emission control is two Dakota acid scrubbers, 3,850 cfm each.**

**Equipment includes two Laempe core making machines and two natural gas-fired core ovens, 1.5 MMBtu/hr each, 1.33 tons/hr cores nominal throughput capacity.**

**Pollution Control Equipment: The TEA catalyst emissions controlled by two Dakota packed tower acid scrubbers, 3,850 cfm each.**

Pollutant	Limit	Actual	Compliance
VOC	1.54 tpy	0.44 tpy	Appears to be compliant.

<b>TEA</b>	<b>0.70 tpy</b>	<b>0.36 tpy</b>	<b>Appears to be compliant.</b>
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**Material Limits:**

<b>Material</b>	<b>Limit</b>	<b>Actual</b>	<b>Compliance</b>
<b>Total Resins Combined (Parts A, B &amp; C)</b>	<b>245 tons/yr</b>	<b>103.5 tpy</b>	<b>Appears to be compliant.</b>
<b>TEA Catalyst</b>	<b>35 tons/yr throughput</b>	<b>18.0 tpy</b>	<b>Appears to be compliant.</b>

A device to monitor the scrubber solution flow rate and the pressure drop across the scrubber on a continuous basis when EULAEMPE1AND2 is in operation and record the data once each operating work shift. At the time of inspection, scrubber pH1 and scrubber pH2 had readings of 0.42 and 0.88 respectively.

All records were reviewed on-site and were kept in a satisfactory manner.

**EUMISC:** Use of materials ancillary to the core making process including daub/mud, glue/paste, coating core box release agent, and metal cleaners.

<b>Pollutant</b>	<b>Limit</b>	<b>Actual</b>	<b>Compliance</b>
<b>VOC</b>	<b>12.0 tpy</b>	<b>6.5 tpy</b>	<b>Appears to be compliant.</b>

All records were reviewed on-site and were kept in a satisfactory manner.

**FGFACILITY:**

<b>Pollutant</b>	<b>Limit</b>	<b>Actual</b>	<b>Compliance</b>
<b>Individual HAPs</b>	<b>8.9 tpy</b>	<b>0.36</b>	<b>Appears to be compliant.</b>
<b>Aggregate HAPs</b>	<b>22.4 tpy</b>	<b>0.36</b>	

			<b>Appears to be compliant.</b>
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**All records were reviewed on-site and were kept in a satisfactory manner.**

NAME 

DATE 3/2/2023

SUPERVISOR  3/2/23