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

A393428400		
FACILITY: Great Lakes Castings LLC		SRN / ID: A3934
LOCATION: 800 N. Washington Ave., LUDINGTON		DISTRICT: Cadillac
CITY: LUDINGTON		COUNTY: MASON
CONTACT: Bob Ellis		ACTIVITY DATE: 01/27/2015
STAFF: Kurt Childs	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: 2015 FCE.		
RESOLVED COMPLAINTS:		

<u>2015 FCE</u>

Site Inspection and Records Review

On 1/27/2015 I conducted a scheduled inspection of this source in accordance with the FY 2015 inspection plan through which I was assigned this source based on workload re-balancing. The AQD contact for this source is Mr. Rob Dickman. The most recent inspection occurred on 9/04/2013. The most recent stack testing took place on 9/1/11 for EUCUPOLA and 4/1/2010 for EUHUNTERSAND and FGDUSTAR. Three Permits to Install (438-80F, 151-93B, 210-91B) have been issued since the current ROP (MI-ROP-A3934-2009) was issued. A renewal ROP application has been submitted and is under development. The Renewal ROP will incorporate the PTI conditions which include elimination of the NOx limits for EUCUPOLA and changes to the Manganese and Lead limits as well as eliminating some requirements that are no longer applicable (PTI 438-80F). PTI 151-93B adds PM10 concentration emission limits in FGDUSTAR for EUHUNTER and EUSHOTBLAST and limits the hours of operation of the DISA line to 6,000 hours per year. PTI 210-91B updates the EUCOLDBOXCORE requirements to reflect a change in the catalyst gas from TEA to DMIPA, require VOC and DMIPA emissions calculations, and inspections of the scrubber, mist eliminator and ductwork. Stack/Vent requirements were also added.

Great Lakes Castings LLC (GLC) is a gray iron foundry that produces cast iron products. The major production operations are raw material handling and preparation, mold and core production, metal melting, pouring and cooling, and casting finishing/heat treating. Molten iron is produced in a cupola controlled with an afterburner, wet cap, quencher, venture scrubber and demister. The molten metal is stored in a holding furnace. Green sand molds are produced on two separate mold lines, a Hunter and a DISA line which are controlled by baghouses and scrubbers. The molten metal is poured in the Hunter and DISA lines from portable ladles. The molds utilize shell and cold box cores which are also produced on-site. On-site finishing operations primarily consist of three Rotoblast (shot blasting) units.

The facility is subject to Title V because the potential to emit for criteria pollutants exceeds the major source threshold. GLC is subject to the Iron and Steel Foundry Area Source NESHAP, Subpart ZZZZ because of a permit limitation on HAP emissions to prevent the PTE from exceeding the major source threshold for HAPs. NESHAP requirements for compliance with the fugitive emissions limits, opacity testing, operation and maintenance requirements and scrap restriction apply to all foundry operations and metallic/mercury scrap and are addressed in the SOURCE-WIDE section. The cupola (EUCUPOLA) is also NESHAP subject in regards to emission limits, operation and maintenance requirements in the ROP: EUHUNTERSAND, EUHUNTER, EUDISA, EUCLEANING, and EUCUPOLA.

There are no recent or outstanding complaints about air emissions from GLC or its operations.

Prior to entering the facility I observed that the cupola appeared to be in operation (substantial water vapor plume). I did not observe visible emissions from any emission point. Winds at the time of the inspection were light and out of the east. Skies were clear with a temperature of 20 degrees F. At the time of the inspection I met with Mr. Bob Ellis, Environmental, Health, and Safety Manager for GLC who provided records, accompanied me on the inspection, and answered my questions. At the time of the inspection I provided Mr. Ellis with a copy of the Environmental Inspections Brochure.

Source Wide Conditions

http://intranet-legacy.deq.state.mi.us/maces/WebPages/ViewActivityReport.aspx?ActivityI... 2/2/2015

I. EMISSION LIMITS – HAPS emissions are limited to 10 tons per individual HAP and 25 tons aggregate HAPS. Compliance with these limits is demonstrated through calculation of emissions based on emission factors associated with iron and sand binder usage rates. Records of HAPS emission over the last 12 months are attached. The most prominent individual HAP emitted by the facility is Benzene. Emissions of Benzene over the last 12 months total 3.3 tons. Total HAPS for the facility total 13.7 tons.

Opacity is also limited to 20% from any building. Testing for this is required once every six months. Testing for this was performed in July 2014 and demonstrated compliance.

- II. MATERIAL LIMITS There are no material limits associated with this emission unit.
- **III. PROCESS/OPERATIONAL RESTRICTIONS** The facility has a written scrap procurement plan that follows the mercury scrap management option of not accepting scrap that contains motor vehicle scrap. Compliance with this plan is required to be certified and reported semi-annually. This reporting has been submitted most recently1/28/14 for the period 1/01/2014 to 6/30/2014. The report and certification were submitted in a timely manner.
- **IV. DESIGN/EQUIPMENT PARAMETERS** There are no design limits associated with this emission unit.
- V. **TESTING/SAMPLING** Testing for fugitive emissions (opacity) from all buildings is required once every six months. Testing for this is required once every six months. Testing for this was performed in July 2014 and demonstrated compliance. Notification of this testing is required prior to testing and these notifications have been submitted in a timely and correct manner.
- VI. MONITORING/RECORDKEEPING Records regarding HAPS emissions calculations and scrap procurement and segregation are being kept by the facility and demonstrate compliance with applicable standards. A report regarding this has been submitted every six months per the MACT.
- VII. REPORTING Semi-annual deviation reports, annual certifications of compliance and CAM reports were reviewed and documented as they were received. The required reporting was submitted in a timely and correct manner.
- VIII. STACK/VENT RESTRICTIONS There are no specific stack parameters for this section.
- **IX. OTHER REQUIREMENTS** Malfunction Abatement Plans (MAP) are required for EUCUPOLA, EUCOLDBOXCORE, EUHUNTERSAND, EUDISASORM, FGDUSTAR, and AND FGCLEAN&FINISH. Plans for each have been developed and copies are on file with the AQD Cadillac District Office. There have not been any changes or updates to MAP in the last 12 months.

EUCUPOLA

I. EMISSION LIMITS - The emission unit currently has the following emission limits:

Pollutant	Limit
PM	50.8 tons/year
PM	1.4 pounds/ Ton of metal charged
РМ	28 pounds per hour
PM	0.25 pounds per 1,000 pounds of exhaust gases, calculated on a dry gas basis.
PM ₁₀	39.2 tons/year
РМ ₁₀	1.08 pounds/ Ton of metal charged
PM ₁₀	21.6 pounds per hour
SO ₂	54.4 tons/year

SO ₂	1.5 pounds/ Ton of metal charged
SO ₂	30.0 pounds per hour
CO	408.0 tons/year
СО	11.25 pounds/ Ton of
	metal charged
CO	225 pounds per hour
VOC	13.6 tons/year
VOC	0.42 pounds/ Ton of metal charged
VOC	8.4 pounds per hour
Pb	0.76 tons/year
Pb	0.02 pounds/ Ton of metal charged
Pb	0.4 pounds per hour
Arsenic	0.0036 pounds per hour
Manganese	0.87 pounds per hour
PM or Total Metal HAP	0.8 or 0.06 pounds per ton of metal charged

Compliance with the emission limits is demonstrated through stack testing and calculations based on emission factors developed during stack testing. Records of annual emissions (attached) indicate compliance with each of the limits.

- II. MATERIAL LIMITS The sulfur content of the coke is limited to 2.5%, by weight. Analytical results provided by GLC indicate that the sulfur content is 0.699% by weight, which demonstrates compliance with the limit. A copy of the most recent analysis, dated 10/09/14, is attached. I also collected a sample of coke from the fuel bunker and submitted it to Fibertec Environmental Services for analysis. Analytical results anticipated to be available two weeks from submittal.
- III. PROCESS/OPERATIONAL RESTRICTIONS The facility is restricted to melting no more than 20 tons of metal per hour. Records maintained by GLC indicate that the average melt rate in 2014 was 11.18 tons per hour.

Emission control device operating parameters are specified in the ROP. At the time of the inspection I made the following observations of these parameters. Following are instant readings taken on site:

Parameter	Permit Limit	Actual
Venturi Delta P	>33 inches water	56 inches water
Venturi Flow	>200 gpm	296.5 gpm
Demister Delta P	<1.0 inches water	0.1 inches water
Demister Flow	>40 gpm	56.5 gpm
Quencher Flow	>200 gpm	231.5 gpm
Cupola Upper Stack Temperature	>1150 degrees F	500 degrees F*

*At the time of the reading the cupola was on "relief", not melting.

IV. DESIGN/EQUIPMENT PARAMETERS – Devices to measure flow rate, pressure drop, and temperature across the various pieces of equipment were all installed and appeared to be operating properly.

- V. **TESTING/SAMPLING** The ROP requires testing for each of the pollutant limits every 5 years. The most recent test was performed on 9/1/11 and demonstrated compliance with the emission limits.
- VI. MONITORING/RECORDKEEPING Required monitoring within the ROP includes the charge weight and time and the ratio of iron to coke charged. Monitoring of these items is maintained electronically. The computer monitors the time and weight of each material charged to the cupola. The computer system is also set up so that the facility cannot exceed the 20 ton per hour melt rate limit. Records of monitored data were available at the time of the inspection and examples are attached. Inspection of the records demonstrates that the facility is maintaining the required records. Records associated with CAM are also being kept and were available on request.
- VII.REPORTING The facility is required to report calendar year emissions to the AQD via the Michigan Air Emission Reporting System. The report was previously reviewed and documented. Semi-annual deviation reports and annual certifications of compliance were previously reviewed and documented. Reporting associated with CAM is being performed properly and was previously reviewed and documented.
- VIII. STACK/VENT RESTRICTIONS Stack parameters at the facility have not been modified and appear correct
- **IX. OTHER REQUIREMENTS** There has been no need to modify the existing CAM plan and no QIP has been required.

EUCOLDBOXCORE

- I. EMISSION LIMITS The facility is limited to 10 tons of VOC per year from this emission unit. Emissions are calculated using the resin manufacturer emission factor. Records (attached) indicate the 12 month rolling VOC emission rate was less than one ton. The TEA emission limit has been replaced by an emission limit for DMIPA in PTI 210-91B of 0.50 tpy. The attached records indicate 12 month rolling DMIPA emissions were 31.3 pounds. The ROP indicates that there must be no visible emissions from the emission unit. Records of visible emissions readings are maintained and indicate that no visible emissions were observed. There were no visible emissions observed by AQD staff during the inspection.
- **II. MATERIAL LIMITS** The emission unit is limited to using only 23,000 pounds of resin per calendar month. Records maintained that the amount of resin used in 2014 is 2,921 lbs.
- **III. PROCESS/OPERATIONAL RESTRICTIONS** One of the six core machines was operating at the time of the inspection. The scrubber was in operation at this time and the pH of the scrubber water was 0.17. The permitted limit is <4.5. The scrubber differential pressure was 2.8".
- **IV. DESIGN/EQUIPMENT PARAMETERS** The pH meter on the scrubber was installed and appeared to be operating properly.
- V. TESTING/SAMPLING Non-certified visible emissions observations are required on a weekly basis, whenever the equipment is operating. Records of visible emissions readings are maintained and indicate that no visible emissions were observed. Observations made during the inspection also confirmed no visible emissions were present.
- VI. MONITORING/RECORDKEEPING Records indicate that GLC is monitoring and recording the pH of the scrubbing liquor, the VOC and DMIPA emissions from the emission unit, and the presence of any visible emissions as required by the permit.
- VII. REPORTING Semi-annual deviation reports and annual certifications of compliance were previously reviewed and documented.
- VIII. STACK/VENT RESTRICTIONS There are no stack parameters for this EU.
- IX. OTHER REQUIREMENTS There are no other requirements for this EU.

EUHUNTERPOURING

I. EMISSION LIMITS - Particulate matter emissions are limited to 0.10 pounds per 1000 # of exhaust

- gases. Stack testing on April 1, 2012 demonstrated that the emissions from the emission unit are 0.012 pounds per thousand pounds exhaust gas. Furthermore, the absence of visible emissions during the testing and the absence of visible emissions based upon observations by facility personnel indicate continuous compliance with the emission limit. There were no visible emissions at the time of the inspection.
- **II.** MATERIAL LIMITS There are no material limits associated with this emission unit.
- **III. PROCESS/OPERATIONAL RESTRICTIONS** The Hunter line has a pouring rate limit of 20 tons per hour this is equivalent to the cupola melt rate limit. Cupola melt rate has averaged around 11 tons per hour.
- IV. DESIGN/EQUIPMENT PARAMETERS There are no equipment restrictions for this EU.
- V. **TESTING/SAMPLING** The facility is required to perform non-certified visible emissions observations on a weekly basis when the emission unit is operating. Records of visible emissions readings are maintained and indicate that no visible emissions were observed. There were no visible emissions present at the time of the inspection.
- VI. MONITORING/RECORDKEEPING Records of the amount of metal poured in this EU are being maintained.
- **VII.REPORTING** Semi-annual deviation reports and annual certifications of compliance were previously reviewed and documented.
- VIII. STACK/VENT RESTRICTIONS Stack parameters at the facility have not been modified and appear correct.
- **IX. OTHER REQUIREMENTS -** There are no other requirements for this emission unit, therefore, this section does not apply.

EUHUNTERSAND

- I. EMISSION LIMITS Particulate matter emissions from this emission unit are limited to 0.10 pounds per 1,000 pounds of exhaust gases, calculated on a dry gas basis. The facility demonstrates compliance with this limit by maintaining the differential pressure across the CSI baghouse within the 0.2 to 7 inches of water range specified in the MAP and 1 6 inches of water range specified in the CAM plan. Based upon a review of the records, the differential pressure has ranged from 1 to 4 inches of water and was observed at 3.0 inches of water at the time of the inspection.
- **II.** MATERIAL LIMITS There are no material limits associated with this emission unit.
- **III. PROCESS/OPERATIONAL RESTRICTIONS -** The facility is not allowed to operate the emission unit unless the CSI baghouse differential pressure is within the range specified in the PM/MAP. As mentioned previously, the CSI baghouse was operating within the acceptable range.
- IV. DESIGN/EQUIPMENT PARAMETERS A device to measure differential pressure across the baghouse was installed and appeared to be operating properly.
- V. TESTING/SAMPLING PM testing is required every 5 years. Great Lakes Castings has fulfilled the testing requirements of the ROP by performing stack testing in April 1, 2010. This testing demonstrated compliance with the PM emissions limit.
- VI. MONITORING/RECORDKEEPING The facility is required to continuously monitor the differential pressure across the baghouse and record the parameter once per day. At the time of the inspection, the monitor was operating and the differential pressure was 3.0 inches.
- VII.REPORTING Semi-annual deviation reports and annual certifications of compliance were previously reviewed and documented. Reporting associated with CAM is being performed properly and was previously reviewed and documented
- VIII.STACK/VENT RESTRICTIONS Stack parameters at the facility have not been modified and appear correct.

IX. OTHER REQUIREMENTS - There has been no need to modify the existing CAM plan and no QIP has been required.

EUHUNTERMOLDCOOL

- I. EMISSION LIMITS This emission unit is limited to 0.10 pounds of particulate per 1,000 pounds of exhaust gases. Compliance with this limit is based on non-certified visible emission readings. Records of these readings are attached to this report and demonstrate zero visible emissions. No visible emissions were noted during the inspection.
- **II.** MATERIAL LIMITS There are no material limits associated with this emission unit.
- III. PROCESS/OPERATIONAL RESTRICTIONS There are no process restrictions for this EU.
- IV. DESIGN/EQUIPMENT PARAMETERS There are no equipment restrictions for this EU.
- V. TESTING/SAMPLING The facility is required to perform non-certified visible emissions observations on a weekly basis when the emission unit is operating and conduct Method 9 readings if any visible emissions are observed. Records of visible emissions readings are maintained and indicate that no visible emissions were observed. There were no visible emissions present at the time of the inspection.
- I. MONITORING/RECORDKEEPING There are no monitoring requirements for this EU.
- VII. REPORTING Semi-annual deviation reports and annual certifications of compliance were previously reviewed and documented.
- VIII. STACK/VENT RESTRICTIONS Stack parameters at the facility have not been modified and appear correct.
- IX. OTHER REQUIREMENTS There are no other requirements for this EU.

EUEASTCOREOVEN

- I. EMISSION LIMITS The ROP states that there shall be no visible emissions from the core oven. At the time of the inspection, there were no visible emissions observed from the oven stack.
- **II.** MATERIAL LIMITS There are no material limits associated with this emission unit.
- **III. PROCESS/OPERATIONAL RESTRICTIONS** There are no operational parameters associated with this emission unit.
- IV. DESIGN/EQUIPMENT PARAMETERS There are no design limits associated with this emission unit.
- V. **TESTING/SAMPLING** The facility is required to perform non-certified visible emissions observations on a weekly basis when the emission unit is operating. Records of visible emissions readings are maintained and indicate that no visible emissions were observed. There were no visible emissions present at the time of the inspection.
- VI. MONITORING/RECORDKEEPING There are no monitoring requirements for this EU.
- VII.REPORTING Semi-annual deviation reports and annual certifications of compliance were previously reviewed and documented.
- VIII. STACK/VENT RESTRICTIONS Stack parameters at the facility have not been modified and appear correct.
- **IX. OTHER REQUIREMENTS -** There are no other requirements for this emission unit.

EUDISASORM

I. EMISSION LIMITS - The ROP emission limits for PM₁₀ are 0.10 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis and 64.8 tons per year. Demonstration of compliance is through stack testing and non-certified visible emissions readings. The facility performed stack testing in April 2010 which demonstrated that the PM₁₀ emissions from the emission unit were 0.0223 pounds per 1000 pounds of exhaust gases.

The East Wet Dust Collector controls emissions from DISA line cooling, most of the shakeout, and sand reclaim. Opacity from the East Wet Dust Collector is limited to 5% during normal operation and 20% during cleaning of the dust collector. This is demonstrated though non-certified VE's. Records of these are being kept and are attached.

- II. MATERIAL LIMITS There are no material limits associated with this emission unit.
- **III. PROCESS/OPERATIONAL RESTRICTIONS** The wet dust collector was in operation at the time of the inspection with a flow rate of 175 gallons per minute (gpm). The MAP specifies a normal operating range of 100 300 gpm and the CAM Plan requires 150 275 gpm. Operation of the emission unit is also limited to 6,000 hours per year. The attached records indicate a 12-month rolling average of 2561 hours.
- **IV. DESIGN/EQUIPMENT PARAMETERS** A device to measure flow through the collector was installed and was operating properly as demonstrated by compliant flow rate and no visible emissions present.
- V. TESTING/SAMPLING The facility performed stack testing in April 2010 which indicates that the PM₁₀ emissions from the emission unit were 0.0223 pounds per 1000 pounds exhaust gases. The facility is also required to perform non-certified visible emissions observations on a weekly basis when the emission unit is operating. Records of visible emissions readings are maintained and indicate that no visible emissions were observed. There were no visible emissions present at the time of the inspection.
- VI. MONITORING/RECORDKEEPING The facility is required to continuously monitor and record the liquid flow rate through the collector. Inspection of the emission unit concluded that the monitor was installed and operating and records indicate that the flow rate is recorded. Flow rate through this collector averages around 195 gpm.
- VII. REPORTING Semi-annual deviation reports and annual certifications of compliance were previously reviewed and documented. Reporting associated with CAM is being performed properly and was previously reviewed and documented.
- VIII. STACK/VENT RESTRICTIONS Stack parameters at the facility have not been modified and appear correct.
- **IX. OTHER REQUIREMENTS** There has been no need to modify the existing CAM plan and no QIP has been required.

FGDUSTAR - EUHUNTER, EUDISA, EUSHOTBLAST

- I. EMISSION LIMITS PM₁₀ emissions limits are 0.0205 pounds per 1,000 pounds of exhaust gases, 6.5 TPY-EUHUNTER, 7.5 TPY-EUDISA, and 3.6 TPY-EUSHOTBLAST. The compliance demonstration is to monitor the differential pressure of the baghouse and perform non-certified visible emissions observations with Method 9 observations required if visible emissions are detected. Opacity from the Dustar baghouse is limited to 5% during normal operation and 20% during cleaning of the baghouse. VOC emissions are limited to 14.0 lbs./hr and 42 tpy. Compliance is demonstrated through stack testing. Formaldehyde emissions are limited to 2.0 mg/cubic meter corrected. Compliance is demonstrated through stack testing.
- II. MATERIAL LIMITS There are no material limits associated with this emission unit.
- **III. PROCESS/OPERATIONAL RESTRICTIONS -** The facility is not allowed to operate the emission unit unless the Dustar baghouse is operating with a pressure drop between 0.2 and 7.0 inches. Records review of the pressures demonstrates that the baghouse operates between 2 and 3 inches. At the time of the inspection, the Dustar baghouse was 1.4 inches, which is within the acceptable range specified in the ROP. No visible emissions were observed from the baghouse stack at the time of the inspection

- **IV. DESIGN/EQUIPMENT PARAMETERS** A device to measure pressure drop across the baghouse was installed and operating.
- V. TESTING/SAMPLING Performance testing for PM₁₀, VOC, and formaldehyde is required every five years. The most recent stack testing was conducted in April 2010. This stack testing demonstrated compliance with all emissions limits. Non-certified visible emissions observations are required on a weekly basis. Records of visible emissions readings are maintained and indicate that no visible emissions were observed. There were no visible emissions present at the time of the inspection..
- VI. MONITORING/RECORDKEEPING The facility is required to continuously monitor and record the differential pressure across the Dustar baghouse once per day. Records maintained by GLC indicate that the requirement is met. The differential pressure gauge was installed and operating at the time of the inspection.

Records associated with VOC and formaldehyde emission calculations are maintained and demonstrate compliance with the emission limits.

- VII. REPORTING Semi-annual deviation reports and annual certifications of compliance were previously reviewed and documented. Reporting associated with CAM is being performed properly and was previously reviewed and documented.
- VIII.STACK/VENT RESTRICTIONS Stack parameters at the facility have not been modified and appear correct.
- **IX. OTHER REQUIREMENTS** There has been no need to modify the existing CAM plan and no QIP has been required.

FGCLEAN&FINISH - EUCLEAN, EUFINISH

- I. EMISSION LIMITS PM₁₀ emissions are limited to 0.10 pounds per 1,000 pounds of exhaust gases, calculated on a dry gas basis. Compliance with this emission limit is ensured by proper installation, operation and maintenance of the AAF baghouse.
- II. MATERIAL LIMITS There are no material limits associated with this emission unit.
- **III. PROCESS/OPERATIONAL RESTRICTIONS** The ROP requires that the baghouse be installed and operating properly and that the differential pressure across the baghouse is within the normal operating range. At the time of the inspection, the differential pressure of the AAF baghouse was 5.2 inches, which is within the approved range specified in the MAP of 0.2 to 7.0 inches of water and 1 to 6 inches in the CAM plan.
- **IV. DESIGN/EQUIPMENT PARAMETERS** A device to measure pressure drop was installed and appeared to be operating properly.
- V. **TESTING/SAMPLING** The facility is required to perform non-certified visible emissions observations on a weekly basis when the emission unit is operating and conduct Method 9 readings if visible emissions are detected. Records of visible emissions readings are maintained and indicate that no visible emissions were observed. There were no visible emissions present at the time of the inspection.
- VI. MONITORING/RECORDKEEPING The differential pressure gauge was installed and operating at the time of the inspection. Records maintained by GLC demonstrate that the differential pressure is recorded at least once per day as required by the ROP. The pressure drop averages 4 – 5.2 inches of water. At the time of the inspection the differential pressure was 5.2 inches of water.
- VII. REPORTING Semi-annual deviation reports and annual certifications of compliance were previously reviewed and documented. Reporting associated with CAM is being performed properly and was previously reviewed and documented.
- VIII.STACK/VENT RESTRICTIONS Stack parameters at the facility have not been modified and appear correct.

IX. OTHER REQUIREMENTS - There are no other requirements for this emission unit, therefore, this section does not apply. There has been no need to modify the existing CAM plan and no QIP has been required.

FGCOLDCLEANERS

There are two small cold cleaners at the facility. These are owned and serviced by an outside contractor. At the time of the inspection, these appeared in good repair and the covers on them were closed. Associated MSDS information for them was available.

FGRULE290 - EURIAPPLICATION, EUPATTERNMAKING, EUSHELLCORE, EURULE290, EUCOREWASH

GLC maintains material VOC content and use records (example attached) that demonstrate emissions are below the Rule 290 thresholds.

CONCLUSION

Based on observations made and information available at the time of the inspection GLC appears to be in compliance with the requirements of MI-ROP-A3934-2009.

DATE 2-2-15 SUPERVISOR NAME