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

FACILITY: Superior Materials LLC		SRN / ID: B3113
LOCATION: 39001 HURON RIVER DRIVE, ROMULUS		DISTRICT: Detroit
CITY: ROMULUS		COUNTY: WAYNE
CONTACT: Gary Lowell , Vice President Operations		ACTIVITY DATE: 02/09/2016
STAFF: Terseer Hemben	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Concrete Manufactur	ing	
RESOLVED COMPLAINTS:		

INSPECTED BY: PERSONNEL PRESENT:

FACILITY PHONE NUMBER: FACILITY FAX: DATES OF INSPECTION: SRN: SOURCE: SOURCE: SOURCE ADDRESS: Terseer Hemben, MDEQ Gary Lowell (VP) Matt Woloszyk (Manager) (810)-217-4214

February 9, 2016 B3113 Superior Materials, LLC 39001 Huron Drive, Romulus, MI 48174

FACILITY BACKGROUND:

The Superior Materials LLC (SML) operates an aggregates recycling for concrete manufacturing at several locations. The Company acquired Clawson Concrete Company since November, 2006. SML operates a concrete manufacturing plant at 39001 Huron Drive, Romulus, MI 48174. The plant is equipped with silos and scales. All silos are equipped with bag houses that are properly maintained. Transfer points/drop points (loading chutes) are kept to a minimum concrete transfer distance and enclosed for fugitive dust control. Truck load is 3 sided and equipped with a duct collector. Stock piles at the site are watered. The plant has water capabilities for all piles. The water capabilities include watering equipment, drain system, and yard sweepers. Dust suppressants are applied to unpaved surfaces to control dust emissions. Opacity meter is connected to computer a system that acquires and maintains digital records on site. Records are maintained in both electronic and hard copy formats.

INSPECTION NARRATIVE

I arrived at SML on February 9, 2016 at 1220 hours. The purpose of my visit was to conduct a scheduled annual compliance inspection. Temperature at the hour was 30 F with wind speed 9.2 mph coming from the W. Humidity was 79%. I was received by the manager, Matt Woloszyk in the company of Gary Lowell (Vice President). We exchanged introductory pleasantries and settled down for a pre-inspection conference session. I learned during the pre-inspection conference that SML acquired Clawson Concrete in 2006 and name change was completed in November of the same year. All environmental regulatory documents for manufacturing operations were transferred from Clawson to SML. Matt showed me the hard copy files and associated MSDS documents on site. Data acquisition was digitally in progress as trucks docked and loaded concrete at the loading bay. We took a tour of the plant to inspect the stock piles and silos. I observed all points had baghouses in place. Watering equipment and yard sweepers were available on site. We returned to the office for the post-inspection

conference. I discussed my observations and solicited for feedback. Gary informed they were ready for an inspector to come through any time. There had not been any visit from AQD since SML assumed the business. I left the facility at 1340 hours.

COMPLAINT/COMPLIANCE HISTORY:

There has not been any violations or complaints involving SML facility operations in the last 8 years.

OUTSTANDING CONSENT ORDERS: None

OUTSTANDING LOV'S: None

OPERATING SCHEDULE/PRODUCTION RATE:

The SML plant is set to operate 24 hours per day, and 6 days a week or alternative schedule 10 hours per day, and 5 days per week in a year. The machineries are designed to operate batch-wise and continuous as desired, except when shut down for maintenance. Dust sweepers are used as deemed necessary. Historically, SML took over operations from Clawson Concrete in 2006. The Huron River Drive plant (B3113) was closed (non-operational) in 2008, 2009, 2010, and 2011. The facility was opened (operational) on limited production rate basis in 2012 and 2013.

EQUIPMENT AND PROCESS CONTROL:

The SML operates silos and scales equipped with baghouses. The transfer points for bulk materials or drop points are located at minimum distance to each other. All drop points or transfer points are enclosed for fugitive dust runaway and against material losses. The truck load point has a 3 sided provision and each side is equipped with a dust collector. The facility has watering systems that comprise water truck equipped with a hose, and extended jet hoses for stock pile watering. The facility operates a dust sweeper that cleanses the pave ways up to the road entrance into Huron River Drive. There is a tank containing chloride used for dust suppressant. The facility is well equipped for fugitive dust control.

APPLICABLE RULES:

Wayne County Department of Environmental Quality or/and DEQ-AQD Permit Conditions. Based on Rules: R 336.1901; R 336.1201; R 336.1301; R 336.1219, WC permits: C-9360, the inspection determined that SML operated: 1. In compliance- SML stated there had not been any change or modification of process at the facility since the ownership changed in 2006 consistent with Rule 201(1).

2. In compliance – SML stated the fugitive particulate emission from the sand, limestone, and pea pebble bin loading operations did not exceed 5.00 lbs. per hour or 7.8 tons per year. SML stated for purposeful limitation of emissions from the process, the operators performed daily inspection of aggregate for moisture production and visual observations of emissions from piles, loader operations around piles and dumping of fresh aggregates and watered the aggregate piles at the site. The facility installed and maintained baghouses at all emission points for emissions control. AQD inspector confirmed the watering of aggregate daily supported with water drain provision for moisture control was an approvable method for achieving the required moisture content of aggregates [SC. 16] [Pg. 1, Response# 2].

3. In compliance-SML demonstrated the total process particulate emissions from the concrete batch plant including cement bins and fly ash storage silo did not exceed 0.004 grain per dry standard cubic feet, 0.33 lbs. per hour nor 0.52 ton per year [SC. 17]. Response from SML indicated that daily visual inspection of plant bag houses and dust collector equipment was regularly performed to ensure the bag houses designed to limit emissions from concrete batch plant performed according to design. Item #4 stated the baghouses were inspected daily from the exterior for signs of wear and tear for proper dust control. The baghouses were also opened, cleaned on semi-annual basis, and with filters, replaced as required to insure proper operation [Pg. 1, Response# 4].

4. In compliance- SML demonstrated the applicant did not operate the concrete batch plant unless the baghouse dust collector was installed and operating properly [SC. 18]. Inspection of the process indicated baghouses were installed at point emissions [Pg. 1, Responses# 3 & #4].

5. In compliance – SML stated the visible emissions from the baghouse dust collector, cement silos and fly ash silo did not exceed 5% opacity [SC. 19]. Inspection of the loading process observed the loading was enclosed for assurance of minimum fugitive dust escape into the ambient air. The dust emitted when the loading arms were disengaged from the truck lasted only for an average 3-5 seconds at the opacity less than 5% [Pg. 1, response# 5]. Staff advised SML to start keeping records of opacity as the facility performed daily observations going forward.

6. In compliance- SML demonstrated the production of concrete did not exceed 200 cubic yards per hour nor 624,000 cubic yards per year [SC. 20]. Records covering 12 months in 2014 indicated the facility produced at the average rate of 28 cubic yards per hour based on calculated number of hours averaging 166 hours per month; and total volume of 53873 cubic yards per year. Production volumes are listed [Pg. 6, Attachment # 2].

7. In compliance – SML demonstrated the permittee did not operate the concrete batch plant for more than 3,120 hours per year [SC. 21]. Records submitted by SML indicated calculations that in the year 2014, the facility recorded 199 days of production at the rate of 10 hours per day. Hence the number of hours of production was 1990. In 2015, the facility operated for 264 days at the rate of 10 hours per day. The total hours operated was 2640 hours per year. The facility operated within the permitted hours.

8. In compliance –SML demonstrated a written log of the hours of operation and cubic yards of the concrete produced were kept on file on a monthly basis for a period of two years and made available to Division personnel upon request [SC. 22]. Records covering 12 months of 2014 operations indicated the hours of operation were logged [Pg. 6, Attachment# 2].

9. In compliance – SML demonstrated visible emissions from any roadway, parking lot,

or storage pile; including any material handling activity at storage pile did not exceed 5% opacity [SC. 23]. Staff observed the roadway, parking lot and paved ways during the inspection and determined the presence of watering equipment and chloride based dust suppressant was an adequate indication of compliance. There was no opacity at the time of inspection. SML stated that visual inspection performed onsite for excessive dust was curbed by weekly sweeping of paved surfaces. The process was backed up with chloride and water application [Pg. 1, Response# 9; Attachment # 2]

10. In compliance – SML demonstrated prior to issuance of the permit to operate, the concrete batch plant had a fugitive dust control program approved by the Department [SC. 24]. SML confirmed that a fugitive dust plan was mailed to the DEQ-AQD via certified U.S Postal Service in 2011 [Attachment# 1].

11. In compliance- SML stated the permittee did not operate the concrete batch plant unless the malfunction abatement plan/preventive maintenance program specified by the permittee had been implemented and maintained [SC. 25]. Response from SML indicated the equipment for maintaining fugitive dust control installed onsite supported the implementation of fugitive dust management plan. The AQD determined the assessment is adequately stated for achieving compliance.

12. In compliance – SML demonstrated all sand storage piles, crushed limestone piles, and pea pebble piles were maintained with a minimum moisture content of 6%, 5%, and 3%, respectively [SC. 26]. Response from the facility management was the same as in Response#2.

13. In compliance – SML demonstrated the Applicant did not use any asbestos tailings or asbestos containing waste materials, as defined by National Emission Standards for Hazardous Air Pollutants [40 CFR 61.143] regulations, in any central mix concrete batch plant [SC. 27]. SML stated the company did not process Asbestos or asbestos containing materials in the production of concrete [Pg.1, Response# 13].

14. In compliance - SML did not need demonstrate within 120 days after written notification from the Division, verification of particulate emission rate from the concrete batch plant by testing, at owner's expense; in accordance with Division requirements were approved. Stack testing procedures and the location of stack testing ports had a prior approval by the District Supervisor, and results were submitted within 45 days of completion of tests [SC. 28]. No request had been made for testing.

Discussion of Applicable Rules

R 336.1901: There has not been any odor complaint involving SML. There were no open containers containing organic liquids at the site, Therefore, Rule 901 did not apply.

R 336.1201: The equipment installed at the facility were covered by the WC permits; C-9360. The facility was cited for not applying, installing and operating Silos with approval under Rule 1201 in 2005. Clawson decided to take the exemption 279 and void the C-9360 issued by Wayne County. However, Rule 279 was rescinded in 2003. SML stated in the email (Pg. 1] that the facility contacted AQD for verification if Rule 279 was active for regulatory compliance, but AQD did not respond to the inquiry. Hence, SML operations at the site are responsible for operating under C-9360 condition that was not voided. Staff verified this status in the voided files- the Permit C-9360 is still active. SML does not have AQD issued permits. The inspection points were based on WC permit C-9360 conditions.

R 336.1301: The baghouses were installed and operated properly. There had been a fugitive dust complaint and registered dust violation against the facility under the ownership of Clawson Concrete in 2005. Baghouses were inspected and replaced regularly. Replaced baghouses were disposed using contractor arrangements. The facility violated record keeping conditions and opted to meet the permit requirements under Rule 279. However, the Rule was rescinded in 2003. The new facility owner, SML, has upgraded the recordkeeping practice to required standards.

R 336.1219: Pursuant to rule 219, SML filed for ownership and name change with the MDEQ in 2006. The letter sent to MDEQ is attached [Pg. 1, Attachment# 1.

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS

This facility has a fugitive dust management plan submitted to the Wayne County Department of Environment and Health at the time of permitting. The SML displayed adequate consciousness and practice of fugitive dust management plan management requirements at the site.

MAERS REPORT REVIEW:

The SML is not required to submit MAERS report.

FINAL COMPLIANCE DETERMINATION

This inspection determines the SML facility operated in compliance with record keeping, visible emissions, particulate matter emission limits, and name change requirements. The silos were operated and maintained satisfactorily. The record keeping was standard. Pertinent records were kept and maintained onsite. The Company management showed continuous efforts for improvement of recordkeeping, fugitive dust management, opacity monitoring and waste minimization plans above levels previously held by Clawson Concrete Company. The grounds were swept and wetted. All piles were treated with dust suppressant.

NAME____

DATE 7/27/16 SUPERVISOR___K