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

A022430286

FACILITY: LAFARGE NA		**SRN / ID:** A0224
LOCATION: 1601 Saline St, ESSEXVILLE		**DISTRICT:** Saginaw Bay
CITY: ESSEXVILLE		**COUNTY:** BAY
CONTACT: Scott Anderson , Terminal Supervisor		**ACTIVITY DATE:** 05/21/2015
STAFF: Sharon LeBlanc	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: scheduled inspection - facility is major source preparing to become true minor source.		
RESOLVED COMPLAINTS:		

On Thursday, May 21, 2015, AQD District Staff arrived onsite to conduct a scheduled site inspection for LaFarge USA – Essexville Plant (Formerly Essroc Italcementi Group and Essroc Cement Corporation) (A0224). The facility is a permitted Portland cement grinding, storage and material handling facility. The facility is subject to conditions outlined in Renewable Operating Permit (ROP) No. MI-ROP-A0224-2012 issued to Essroc Italcementi Group for the facility on November 9, 2012. LaFarge North America purchased the facility on December 20, 2012.

Site inspection was conducted with the intent of confirming operational status as well as compliance with the referenced permit. The facility was open, and truck loading was ongoing at the time of the inspection. District Staff met with Robert Budnik and Scott Anderson regarding facility operations. The last inspection was conducted in July 30, 2013.

FACILITY DESCRIPTION

Formerly known as Essroc Cement Corporation (AKA Essroc), the LaFarge USA facility has historically been operated/permitted as a Portland cement grinding facility located in Essexville, Michigan. The primary contaminant associated with the facility is particulate matter from various activities onsite, including:

- **Material handling and bulk loadout,**
- **Fugitive emissions,**
- **Clinker grinding/processing, and (last raw materials were received & processed in 2010)**
- **Finish Mill operations (operations ended in July 2010).**

The facility also has historically received finished cement delivered by ship and railcar which is unloaded into storage silos for later bulk loadout for transport via truck and rail.

It is important to note that at the present time the facility is only operated as a bulk loadout/storage facility. Under the present operations, finished product comes in by ship, and is transported out via truck. Raw material storage is no longer conducted onsite. Presently the facility does not have a railcar unloader onsite. The railcar unloader was retained by the previous owner. However, the MAERS reporting system identifies one railcar unloader EU onsite. LaFarge representatives indicated that they may bring a railcar unloader onsite sometime in the future.

Activities and Onsite staff at the site are presently located at the southern entrance on Main Street, rather than the northern entrance at Saline St where the offices were previously located. Both the Main Street and Saline Street address on file are for the facility.

The business is located in an older industrial area located on the south side of the Saginaw River and is bounded by small commercial/industrial facilities located on the north side of Woodside Ave and Saline Street, as well as with small commercial and residential properties located adjacent along Pine Street.

PERMIT HISTORY

A review of the Emission Unit table in the ROP (page 13 of 38) identified installation dates for EUs associated with the facility as far back as 1923. Based on installation and modification dates it appears that many of the EUs onsite were grandfathered, with respect to the AQD permitting program. Records indicate that nine PTIs from 1971 through 1985 were rolled into the ROP for the facility, and that two permit applications (1973 and 2010) were voided. One permit for a mobile bag-type dust collector associated with the transfer by/from ship of clinker materials (488-77) is reported to be active.

A review of files appears to indicate that permitting activities were predominantly the result of upgrades or changes in pollution controls for existing emission units. The following table summarizes PTI information. Permits associated with the active portion of the facility are in bold and *italics*.

Permit No.	Associated Equipment	Future Use	Comments
171-72	***Bag collectors***	***yes***	***Silos 21, 22, 23 &24. As well as another one for Silos 17, 18, 19 & 20***
87-73	***Silo vents silos 1-4 and 5-12***	***yes***	
242-71	Installed 3 dust collectors for clinker handling facilities.	No	No Copy of permit in files
138-72	Truck loadout dust collector for silos 11 & 12	No	Facility reports that silos 11 & 12 are not in use.
86-73	5 Dust collectors	No	Conditions reference clinker handling and storage
488-77	Mobile bag dust collector	No	Pulseaire filter located at the ship bucket elevator and boom conveyor. Company reported that loadout was for clinker and was scrapped sometime around 2003.
27-81	Clinker grinding dust collectors	No	Conditions reference cement grinding operations. Dust collector installed Feb. & March 1980
28-81	Clinker processing	No	Conditions reference cement grinding operations – Dust Collector installed in 1979
29-81	3 dust collectors	No	Clinker grinding dust collectors – installed in 1977 & 78.
178-85	Clinker hopper dust collector	No	

EQUIPMENT

The ROP for the facility identifies a total of 73 Emission Units (EUs) most of which are identified as being part of the following Flexible groups (see Emission Unit Summary Table Page 13 of 38 in the ROP). (Note emission units reported as operating in 2014 and their flexible groups are presented in bold).

FG-MaterialHandling – (Inactive)

This flexible group is the largest consisting of a total of 24 EUs and 16 associated baghouses (DV-101 - 104, 201-208, 213, 215 and 217). Equipment consists of clinker, gypsum and storage domes, unloading hoppers, weigh feeders, material transfer belts, crusher circuit, mill hoppers #1-8 and separator circuits #4-6. Clinker historically was unloaded from ships into the north and south clinker storage domes, and occasionally to a covered clinker storage pile. Gypsum and limestone were delivered to covered storage piles. (Note that the clinker storage domes were determined to be exempt from permitting in 1997 under Rule 336.1284(k) for non-carcinogenic solid storage containers that only emit particulates). The linker loadout from the boats and the associated mobile dust collector for the ship bucket elevator was reported to have been scrapped.

The referenced raw materials would be loaded into their respective hoppers then to weigh feeders, and carried by raw material transfer belts to the long inclined transfer belt and transferred to the crusher circuit. From the crusher circuit the materials were transferred to the mill hoppers for further production activities.

The July 30, 2013, site inspection report indicated that the last raw material was received and processed at the facility in 2010.

- **o Unloading Hoppers**
  - **§ EU-104, 105 & 106 for Clinker, Gypsum and Stone, respectively**
- **o Weigh Feeders**
  - **§ EU-107, 108 & 109 for Clinker, Gypsum and Stone, respectively**
- **o Transfer Belts**
  - **§ EU- 110, 111, 112, 113 & 114**
- **o Clinker Storage Domes**
  - **§ EU-115 & 116**
- **o Mill Hoppers**
  - **§ EU-201 – 208 for Mill hoppers #1-8 which feed finish mills #1- 8**
- **o Separator Circuts**
  - **§ EU – 220 -222 for separator circuts #6-8**

FG-FinishMills – (Inactive)

This flexible group is reported to consist of 11 EUs and six associated baghouses (DV-209 – 212, DV-214 and DV-216). Mill hoppers feed clinker, gypsum and stone that has been mixed and crushed to the finish mill circuits for further reduction in size by grinding with steel balls in the rotating mills. Finish mill circuits include feed belts and feed screws and empty into separator circuits which classify the mill discharge and return any rejected product back to the finish mills for further processing. The finished cementitious product is sent to the various cement storage silos.

- **o Finish Mills**
  - **§ EU-209 –213, 214, 215, 216 for finish mills #1 - 8**
- **o Separator Circuts**
  - **§ EU-217 – 219 for Separator Circuts #1-3**

FG-Packing&Storing –

This flexible group consists of 24 EUs and seven associated baghouses. Equipment within this flexible group consists of cement storage silos for the various types of cementitious product produced. Product is transferred from the silos to packing machines and/or bulk loadout. The July 30, 2013, site inspection report indicated that packing operations at the facility have ceased. This was confirmed with staff

during the site inspection.

- o Cement Silo Storage
  - § EU-301, 302, 303 – 304, 305-306 and 307 -314 for silos #1-25 (only silos # 13-25 are active per MAERs).
- o Portable Dump Box
  - § EU-331
- o Pit Reclaim System
  - § EU-332
- o Packing Machine Systems
  - § EU-333-335
- o Screen Screw Discharge
  - § EU-336

lote that page 24 of 38 of the ROP also lists the following EUs as part of this flexible group: EU 315-317 ınd EU-338.

FG-LoadOut –

This flexible group consists of 12 EUs and 12 associated baghouses which empty cementitious product to bulk truck and/or rail car loadouts. Loadout by ship is conducted using the boats dust collector.

- o Cement Truck Loadouts
  - § EU 319 -322 for bulk loadouts #13-16
  - § EU-326, 327 & 328 -330 for bulk loadouts #22 – 24.
- o Cement Truck/Rail Loadouts
  - § EU-323 – 327 for loadouts #17-21 & 25.

FG-Rule290 –

This flexible group consists of EUs that are exempt from the requirements of Rule 201 pursuant to Rules 278 and 290. Both of the referenced units were reported in the July 30, 2013 site inspection report to have been retained by Essroc and removed from site. The most recent MAERS submittal for the facility lists the rail car EU-339 as onsite, but unused for 2014.

- o Mobile Rail Car loadouts
  - § EU-339 & 340

FG_ESSROC_CAM_UNITS –

This flexible group is not identified in Emission Unit Summary Table Page 13 of 38 in the ROP, however, it is identified in the Flexible Group Summary Table on Page 17 of 38 in the ROP. EUs in this flexible group have been identified as being subject to Compliance Assurance Monitoring (CAM) requirements. These eight EUs (EU-209 -216) and six associated baghouses are also part of the FG-FinishMills, and in the 2013 site inspection report were reported as not having been operated since July 2010. Lafarge NA staff report that the doors to the finish mills with the exception of one that has to be accessed for other purposes, have been welded shut. The CAM Plan for the units was approved on September 11, 2012.

EUs not included in one of the above referenced ROP Flexible Groups include:

- **EU-101 (Clinker Storage Pile)**
- **EU-102 (Gypsum Storage Pile)**
- **EU-103 (Stone Storage Pile)**
- **EU-401 (Haul Roads)**

These EUs would be subject to source wide conditions in the ROP.

In addition to the above EUs MAERs identifies the following emission units for the site which are not included in the ROP:

- **o EU-223 (Dry End Pit Reclaim)**
- **o EU-318 (Mortar Bulk Truck Loadout)**

For the purposes of reporting annual emissions, the facility reports emissions from individual EUs as well as "Reporting Groups" rather than ROP Flexible Groups. The facility does not operate a kiln.

No distressed vegetation, emissions or odors were noted during the site visit. No obvious staining to soils was noted.

REGULATORY SUMMARY

The facility is at present listed as a major source based on the potential to admit of particulate matter which exceeds 100 tons/year. However, based on changes in use of the facility over the past few years and discussions with the present LaFarge Staff and previous AQD inspector it is the District's understanding that the facility intends to disconnect the existing unused EUs for the inactive FGs and become a true minor source.

At the time of the ROP Renewal (2012) the facility was determined to have the potential to emit less than 100 tons per year of CO2E, and is considered a minor for Greenhouse Gases.

EUs at the source are not subject to PSD because the process equipment was constructed/installed prior to the June 19, 1978 promulgation date for PSD Regulations. In addition, 72 emission units were reported to be installed prior to August 15, 1967, and are considered grandfathered and not subject to New Source Review (NSR) permitting requirements.

The site is not subject to 40 CFR Part 63, Subpart LLL (Portland Cement MACT) as it is not a major source of HAPs and the source is not a kiln, in-line kiln,/raw mill or material dryer. However, based on commencement of construction or modification after August 17, 1971, the following EUs appear to be subject to requirements of 40 CFR Part 60 Subpart F (Standards of Performance for Portland Cement Plants):

- **o EU-115 & 116 (enclosed clinker storage) (constructed 4/1/1997)**

- o EU-223 (dry end reclaim pit) (constructed 1/1/1980)
- o EU-339 (Railcar unloading system) (6/18/2010)

COMPLIANCE HISTORY

No complaints are of record nor have any violation notices been issued for the facility since the last inspection on July 30, 2013.

ROP required submittals include semi-annual and annual certifications of compliance as well as annual emissions reporting (AKA MAERS). Per LaFarge representatives, the previous owner was responsible for all 2013 reporting, and that they had taken over for the calendar year 2014. Required submittal records for 2013 and 2014 are summarized below:

Document	Recv'd	Due	Late	Submitted by
2013 Semi Annual Cert 1	9/23/2013	9/15/2013	Y	Essroc Italcementi Group
2013 Semi Annual Cert 2	4/16/2014	3/15/2014	Y	Essroc Italcementi Group
2013 annual Cert	4/16/2014	3/15/2014	Y	Essroc Italcementi Group
2014 MAERs (for 2013 emissions)	3/18/2014	3/15/2014	Y	Essroc Italcementi Group
2014 Semi Annual Cert 1	3/19/2015	9/15/2014	Y	LaFarge
2014 Semi Annual Cert 2	3/19/2015	3/15/2015	Y	LaFarge
2014 annual Cert	3/19/2015	3/15/2015	Y	LaFarge
2015 MAERs (for 2014 emissions)	3/12/2015	3/15/2015	N	LaFarge

COMPLIANCE EVALUATION

For the purposes of the compliance determination, District staff evaluated the EUs associated with FG-PACKAGING&STORAGE, FG-LOADOUT and Source Wide Requirements. FGMATERIALHANDLING, FG-ESSROC_CAM_UNITS and FG-FINISHMILLS will not be evaluated due to their non-operating status.

It should be noted that 5 years of back records were not available for review. LaFarge Staff reported that staff under the prior owner destroyed much of the records before they could be stopped.

Source Wide Conditions - For the facility source wide conditions are limited to requirements to meet applicable provisions of 1994 PA 451, Section 324.5524 (Fugitive Dust Sources or Emissions) (Special Condition IX.1). The referenced section of the ACT requires a 0.03 gr/dscf limit for particulate collection equipment and 5% opacity limit for fugitive dust from roadways, lots or storage piles, including any material handling activities at storage piles.

The facility is presently operating under their fugitive dust plan, approved by the District on September 11, 2012. At the time of the inspection no storage piles were present, roadways were properly swept (log book kept in sweeper), and speed limits were being followed. No fugitive dust was noted from either the roadways or from the silo loading area at the time of the inspection.

In addition, the facility is required to report deviations as required in general conditions 21 and 22 of Part A of the ROP (SC VII.1) as well as semiannual and annual reporting of monitoring and deviations pursuant to General Condition 23 of Part A of the ROP (SC VII.2 & 3).

FG-PACKING&STORAGE – As previously indicated, equipment within this flexible group consists of cement storage silos for the various types of cementitious product produced. Product is transferred from the silos to packing machines and/or bulk loadout. Applicable conditions with reference to this FG include the above referenced emission limits for particulate collection equipment (SC I.1) as well as the

reporting requirements (SC VII.1, 2 & 3) referenced in the source wide conditions.

PM10 emission limits of 0.005 grains/dscf exist for bag houses DV-301 through DV-305, DV-318 and DV-319. Testing of the referenced equipment at the owners/operators expense may be required by the department (SC VI.2). A review of district files indicate that testing was conducted on December 16 & 17, 2010, for silo loading operations for DV-304 (Silos #14 and #15, AKA EU304 and EU305) and packing system emissions from EU333. The January 25, 2011, Test Report for the activities reported emission factors below permit emission limits confirming compliance. District files indicate that supplemental testing had been deferred in 2011 for EUs in FG-PACKAGING&STORAGE until packaging operations have been resumed.

FG-LOADOUT- This flexible group consists of 12 EUs and 12 associated baghouses which empty cementitious product to bulk truck and/or rail car loadouts. Restrictions associated with this flexible group include PM and PM10 emissions of 0.03 grains/dscf for all baghouses and 0.01 grains/dscf for baghouses associated with EU-319 thru 330, respectively. Testing to determine compliance may be requested (SC VI.2), however a review of files did not identify any requests for testing.

Conditions for the flexible group also include limits on the operation of any cement load out related operation to 12 hours per emission unit per 24-hour time period (III.1). A review of available records for the facility appear to indicate that the facility is operating in compliance with the condition.

SUMMARY

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It is important to note that at the present time the facility is only operated as a bulk loadout/storage facility. Under the present operations, finished product comes in by ship, and is transported out via truck. Raw material storage is no longer conducted onsite.

The facility is at present listed as a major source based on the potential to admit of particulate matter which exceeds 100 tons/year. However, based on changes in use of the facility over the past few years

and discussions with the present LaFarge Staff and previous AQD inspector it is the District's understanding that the facility intends to disconnect the existing unused EUs for the inactive FGs and become a true minor source. District Staff will be working with the facility to complete this process during 2015.

No complaints are of record nor have any violation notices been issued for the facility since the last inspection on July 30, 2013.

ROP required submittals include semi-annual and annual certifications of compliance as well as annual emissions reporting (AKA MAERS). Late certification forms have been received over the past two years, but not violation notices have been issued as changes in ownership had occurred.

For the purposes of the compliance determination, District staff evaluated the EUs associated with FG-PACKAGING&STORAGE, FG-LOADOUT and Source Wide Requirements. FGMATERIALHANDLING, FG-ESSROC_CAM_UNITS and FG-FINISHMILLS were not evaluated due to their non-operating status. No compliance issues were noted for the referenced FGs, and the facility was determined to be in compliance with permit conditions. sgl

NAME Marian J LeBlanc DATE 7/21/2015 SUPERVISOR C. Hare