

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

N6966
FY 2016 Insp-

N696632200

FACILITY: Mack Industries of Michigan Inc.	SRN / ID: N6966
LOCATION: 8265 White Lake Road, WHITE LAKE	DISTRICT: Southeast Michigan
CITY: WHITE LAKE	COUNTY: OAKLAND
CONTACT: Howard Mack , General Manager	ACTIVITY DATE: 11/06/2015
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance
SUBJECT: FY 2016 initiated inspection of Mack Industries of Michigan, Inc.	SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:	

N6966 - SAR - 2015 11 06

Mack Industries of Michigan, Inc. (N6966)
8265 White Lake Road
White Lake, Michigan 48386-1157

VN: AQD issued October 01, 2015 Violation Notice (VN) – baghouses plugged due to failures of shaker mechanisms.

On November 06, 2015, I conducted a level 2 self-initiated inspection of Mack Industries of Michigan, Inc. ("Mack"), a precast concrete products company, located at 8265 White Lake Road, White Lake, Michigan 48386-1157. The inspection was conducted to determine compliance with the requirements of federal Clean Air Act; Article II, Air Pollution Control, Part 55 of Act 451 of 1994; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules.

The inspection is a result of observation of excessive dust from the silos (2) by AQD inspectors Ms. Kerry Kelly and Mr. Erick Gurshaw on September 24, 2015, as documented by several pictures with visible emissions (VE) of high opacity.

During the inspection, Mr. Howard Mack (Phone: 248-620-7400 or 866-620-MACK; Cell: 248-249-3458; Fax: 248-620-7408; E-mail: hMack@MackConcrete.com), General Manager and Owner, assisted me.

Mack does not sell any ready-mix concrete. Mack makes concrete batches (both dry and wet) for its own use for making precast products such as road barriers, manholes, manhole shafts, security walls, box culverts (a device that allows water to flow from one side to the other of a barrier such as road, railroad, any natural or man-made barrier), etc.

Mack produces about 30,000 cubic yards per year of concrete, for precast products manufacturing, using the following batch (concrete mix) equipment:

1. Dry-cast (2 cubic feet capacity): only enough moisture for curing concrete.
2. Wet-cast (2 cubic feet capacity): a concrete mixture like ready-mix.

Concrete is poured into desired molds to make precast products. Open bins are present for raw materials (aggregates, sand, limestone, etc.) storage.

About 1994, Mack bought an existing plant from Price Brothers. The plant's installation date is not known. On September 29, 2015, I observed that paved yard was covered with an inch of dust that rendered it practically unpaved. Unpaved yard was full of dust and was not watered at all, to control dust due to traffic, as a matter of practice. Before the October 1, 2015, Violation Notice, the concrete paved was hardly swept; however, now (November 2015) the same concrete paved yard is swept twice per week.

On September 29, 2015, I found that the baghouses (cement silo and fly-ash silo) were overloaded and inoperable because of failure of shaker mechanisms (2). On September 24, 2015, pictures of visible emissions from silos were taken by Ms. Kerry Kelly. AQD issued the violation notice based upon the pictures, which clearly showed high opacity visible emissions, and the September 29 inspection.

During FY 2016 inspection on November 06, 2015, I observed practically clean paved yard. After October 1, 2015, Violation Notice (VN), Mack is maintaining paved yard clean by sweeping twice a week via Curbcoco, a sweeping company: Tuesdays and Thursdays.

On November 6, 2015, I gave fugitive dust presentation: dust suppressant application (moisture for traffic and calcium chloride for non-traffic areas), rumble strips to control dirt track-out to paved yard and public roads, truck wheel wash systems, water trucks, paved yard sweeping, traffic control (speed limits, installation of barriers to limit traffic area), etc.

Mack (about 30,000 cubic yards per year for only precast products at the site) is exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1289 subject to the following conditions:

- (i) The plant shall produce not more than 200,000 cubic yards per year.
- (ii) The plant shall use either a fabric filter dust collector, a slurry mixer system, a drop chute, a mixer flap gate, or an enclosure for truck loading operations.
- (iii) All cement handling operations, such as silo loading and cement weighing hoppers, shall either be enclosed by a building or equipped with a fabric filter dust control.
- (iv) The owner or operator shall keep monthly records of the cubic yards of concrete produced.
- (v) Before commencing operations, the owner or operator shall notify the appropriate air quality division district supervisor of the location where the concrete batch plant will be operating under this exemption.
- (vi) The concrete batch plant shall be located not less than 250 feet from any residential or commercial establishment or place of public assembly unless all of the cement handling operations, excluding the cement silo storage and loading operations, are enclosed within at least a 3-sided structure.
- (vii) The owner or operator shall implement the fugitive dust plan described in the Rule 336.1289

Cement and fly-ash are stored in the two separate elevated silos:

1. One 90,000-pound cement silo (36 bags, each bag 4 inches diameter & 79 inch height , shaker mechanism for cleaning bags)
2. One 60,000-pound fly-ash silo (36 bags, each bag 4 inches diameter & 79 inch height , shaker mechanism for cleaning bags)

Each of two silos (cement and fly-ash) is equipped with its own baghouse. There are 36 bags per silo. The bags are cleaned using shaker mechanism.

October 01, 2015 Violation Notice

AQD issued October 01, 2015, Violation Notice (VN) for failure to operate cement and fly-ash silos (2) properly. Shaker mechanisms for both baghouses (2) were inoperable or malfunctioning. As a result baghouses were overloaded with attendant visible emissions. AQD received the October 20, 2015, VN response letter. The letter stated that (including my conversations on November 6, 2015):

1. All bags of both baghouses (2) were replaced (fly-ash silo baghouse on October 6 and cement silo baghouse on October 19, 2015)
2. Shaker mechanisms for both baghouses were repaired with new parts before bags were replaced.
3. Baghouses would be inspected monthly.
4. Alarms would be installed on baghouses by November 15, 2015, to warn of baghouse systems failure (s).
5. Curbcoco, a sweeping company, would sweep twice per week all paved areas.
6. Water truck would be used to wet unpaved areas with high traffic such that soil is wet at all times.
7. Dust suppressant, such as calcium chloride, would be applied to unpaved areas.
8. Traffic control measures would be implemented (speed limit signs, barriers to control traffic pattern).

Conclusion

Follow-up inspection is necessary due to fugitive dust problem.

FYI: VN

October 1, 2015

Mr. Howard Mack
Mack Industries, Inc.
8265 White Lake Road
White Lake, MI 48386-1157

SRN: N6966 , Oakland County

Dear Howard :

VIOLATION NOTICE

On September 29, 2015, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of Mack Industries, Inc (Mack). located at 8265 White Lake Road, White Lake, Michigan. The purpose of this inspection was to determine Mack's compliance with the requirements of the federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules.

During the September 3, 2015 inspection, staff observed the following:

1. 90,000-pound
cement silo
2. 60,000-pound fly-
ash silo

NAME J. Pennington

DATE 11/17/2015

SUPERVISOR CJE