

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

N274159408

FACILITY: Modern Shiawassee		SRN / ID: N2741
LOCATION: 599 S GOULD ST, OWOSSO		DISTRICT: Lansing
CITY: OWOSSO		COUNTY: SHIAWASSEE
CONTACT: Ron Lammy II , Owner		ACTIVITY DATE: 08/18/2021
STAFF: Julie Brunner	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Compliance inspection of new concrete batch plant		
RESOLVED COMPLAINTS:		

On 8/11/2021, I attempted an on-site inspection of Fisher Redi Mix located at 599 S. Gould Street. The last inspection of this facility was on 8/2/2011. This facility closed in October 2020. I requested that the facility Permit to Install (PTI) No. 1235-90 for the concrete batch plant and baghouse, and PTI No. 755-89 for a cement silo with weigh hopper be voided on 8/11/2021.

A new batch concrete plant was being constructed. The batch concrete plant will operate under the business name of Modern Shiawassee. This new facility was scheduled to be inspected on 8/18/2021.

Arrived: 11:54 am

Weather: 79°F, NE 5 mph, UV Index 6

Departed: 12:22 pm

Contacts:

Mr. Ron Lammy, Owner, Modern Concrete, ron@modernconcrete.us, p: 810-767-8525

Mr. Kris Hammond, Plant Manager, krishammond@modernconcrete.us, p: 989-723-1622

Facility Description:

This facility is a concrete batch plant, which weighs out amounts of cement, water, and aggregate. The water, and the cement and aggregate are added, simultaneously, and dispensed into trucks. The concrete batch gets mixed within the truck's mixing drum. The batch plant consists of a batcher, truck loading with baghouse, a Type 1 cement (round) silo with baghouse, a slag cement material (square) silo with a baghouse, and three aggregate bins with open conveyors. The concrete batch plant and yard is surrounded by a tall, large concrete block wall with 3, 3-sided bunkers for holding aggregate materials.

Emission units, and operating status, at the time of the inspection:

Emission unit	Control equipment	Exemption From Permit Rule	Operating status
Concrete batch plant		Rule 289(2)(d)	Under construction

**3 Baghouses and
water spray**

1000 gallon diesel fuel tank for on-site usage **Containment for spill prevention** **Rule 284(2)(d)** **In use**

The facility still needs Consumers Energy to connect the power. During construction, portable diesel fuel-fired generators are being used to provide power.

Inspection:

Plant Design and Production Projections: 100 cubic yards/hr (max), 200 - 300 cubic yards/day, 25,000 - 50,000 cubic yards/yr

Roads: Mainly unpaved (gravel) with concrete pads in spots.

Start-up Date: Monday, August 23, 2021

Rule 289(2)(d) A concrete batch plant that meets all of the following requirements:

(i) The plant shall produce not more than 200,000 cubic yards per year. *Maximum capacity of the plant is 876,000 cubic yards if operated 8760 hr/yr. Production targets are between 25,000 to 50,000 cubic yards/yr well below the exemption requirements.*

(ii) The plant shall use a fabric filter dust collector, a slurry mixer system, a drop chute, a mixer flap gate, or an enclosure for truck loading operations. *Truck loading operations will be controlled by a fabric filter dust collector (baghouse) with a plastic shroud enclosing the drop point to minimize dust from loading and increase capture for the baghouse.*

(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. *Cement silos have fabric filter dust collectors, the truck loadout has a dust collector, and all operations are enclosed for batching/conveying to the truck loading.*

(iv) The owner or operator shall keep monthly records of the cubic yards of concrete produced. *Owner/operator will set up a recordkeeping system on a monthly basis.*

(v) Before commencing operations, the owner or operator shall notify the appropriate district supervisor of the location where the concrete batch plant will be operating under this exemption. *Notification of intent to commence operations on Monday, August 23, 2021 was provided at the inspection.*

(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. *The concrete batch plant and operations are mainly surrounded by a tall, large concrete block wall with entrance points for trucks and vehicular traffic. The closest residential house is approximately 390 feet, southeast of the concrete batch plant.*

(vii) The owner or operator shall implement the following fugitive dust plan:

(A) The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve. *Compliance expected.*

(B) On-site vehicles shall be loaded to prevent their contents from dropping, leaking, blowing, or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within 6 inches of the top of any sideboard, side panel, or tailgate. Otherwise, the truck shall be tarped. *Compliance expected.*

(C) All of the following provisions apply for site roadways and the plant yard:

(1) The dust on the site roadways and the plant yard shall be controlled by applications of water, calcium chloride, or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet an opacity limit of 5%. *An on-site water truck for application of water, and usage of calcium chloride to control fugitive dust will be deployed.*

(2) All paved roadways and plant yards shall be swept as needed between applications. *Compliance expected.*

(3) Any material spillage on roads shall be cleaned up immediately. *Compliance expected.*

(4) A record of all applications of dust suppressants and roadway and plant yard sweepings shall be kept for the most recent 5-year period and be made available to the department upon request.

Owner/operator will set up a recordkeeping system for all applications of dust suppressants, and roadway and plant yard sweepings.

(D) All of the following provisions apply for storage piles:

(1) Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems. *Compliance expected.*

(2) Stockpiles shall be watered on an as-needed basis in order to meet an opacity limit of 5%. Equipment to apply water or dust suppressant shall be available at the site or on call for use at the site within a given operating day. *A sprinkler system will be set up on an as needed basis. Mined aggregate materials have natural moisture but during periods of dry, hot weather they can dry out in the sun. The sprinkler system will be used at that point to control fugitive dust.*

(3) A record of all watering shall be kept on file for the most recent 5-year period and be made available to the department upon request.

Owner/operator will set up a recordkeeping system for all applications of dust suppressants.

(E) The provisions and procedures of this fugitive dust plan are subject to adjustment by written notification from the department if, following an inspection, the department determines the fugitive dust requirements or permitted opacity limits are not being met.

Summary

The concrete batch plant is expected to be in compliance with exemption Rule 289(2)(d) upon start-up.



Image 1(IMG 0267) : From truck loading baghouse, type 1 cement silo, slag cement silo



Image 2(IMG 0266) : Truck load out



Image 3(IMG 0268) : Aggregate storage bins

NAME Julia L. Brunner

DATE 8/19/2021

SUPERVISOR B.M.