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

U34220541165262

FACILITY: Penisula Prestress		**SRN / ID:** U342205411
LOCATION: 8580 Portland Road		**DISTRICT:** Grand Rapids
CITY: Clarksville		**COUNTY:** IONIA
CONTACT: Fernando Roldan , Plant Manager		**ACTIVITY DATE:** 11/01/2022
STAFF: Eric Grinstern	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:**
SUBJECT: On-site compliance inspection		
RESOLVED COMPLAINTS: C-23-00245		

Unannounced on-site inspection of Peninsula Prestress Company. The facility manufactures prestressed concrete bridge beams and concrete pilings.

At the facility, staff consisting of Eric Grinstern (EG) met with Fernando Roldan, Plant Manager, and David Marsh, Owner.

The facility consists primarily of a concrete batch plant, concrete forms, and a steam boiler.

The concrete batch plant consists of aggregate storage (sand and stone), two (2) cement silos, aggregate bins, and mixer. Concrete from the batch plant is transported and poured into the forms. Steam from the boiler is used to cure the concrete. Beams and pilings are stored on-site. The batch plant has an enclosure over the top and partially down the sides of the three (3) aggregate bins. The mixer is totally enclosed in a building, from which wet concrete is dispensed from the bottom.

The steam boiler is a 2.0 MMBtu/hour propane-fired unit. The facility stated that they plan to install a second identical unit. The boiler is exempt from permitting under Rule 201 via Rule 282 (2)(a). The boiler is not subject to NSPS Subpart Dc since it is less than 10 MMBtu/hr. Propane for the boiler is supplied by a 6,000-gallon tank. The propane tank is exempt from permitting under Rule 201 via Rule 284(2)(e) since it has a capacity less than 40,000 gallons.

The facility stated that the capacity of the concrete batch plant is 13,000 cubic yards per year. Concrete batch plants are exempt from permitting under Rule 201 via Rule 289(2)(d)(i) through (vii) if they meet the following requirements:

(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.

(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.

(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 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 following fugitive dust plan:

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

(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.

(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%.

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

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

(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.

(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.

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(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.

(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.

(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.

One of the facility's cement silos (tall white silo) is equipped with a bin vent filter system. The shorter cement silo currently does not have any control. The facility stated that the silo had issues with cement emissions during filling. To reduce emissions, they wait until the silo is nearly empty before refilling. The facility has also ordered a bin vent filter for the silo. The facility provided a sales order documenting that a bin vent filter was purchased on October 14, 2022, with scheduled shipping on November 4, 2022. Mr. Roldan stated that the bin vent filter will be installed in one day upon arrival. With the installation of the bin vent filter the facility will be incompliance with Rule 289(2)(d)(iii), through having fabric filter dust control on the cement silo. Additionally, on October 13, 2022, a complaint was forwarded to AQD that included details regarding a large plume coming out of the top of the cement silo every time material is being filled. The silo that currently does not have a bin vent filter appears to be the source of the plume described in the complaint. The installation of a bin vent filter should resolve the silo emission issues contained in the complaint. No opacity or fugitive dust was observed during the inspection; however, the silos were not being filled during the inspection.

The facility has not provided a notification to AQD with the location of the batch plant or intent to utilize the exemption. The facility will be provided a copy of Rule 289. The facility will be requested to comply with the requirements if they intend to utilize the exemption for the concrete batch plant. The facility appears to meet the requirements of Rule 289, with the exception of providing a notification and the fugitive dust provisions.

NAME Eric Grinstern DATE 11/3/2022 SUPERVISOR