

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

P129763828

<b>FACILITY:</b> TITAN CONCRETE		<b>SRN / ID:</b> P1297
<b>LOCATION:</b> 6497 EAST 10 MILE ROAD, CENTER LINE		<b>DISTRICT:</b> Warren
<b>CITY:</b> CENTER LINE		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b> James Plohg , VP of Operations		<b>ACTIVITY DATE:</b> 07/21/2022
<b>STAFF:</b> Shamim Ahammod	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> Minor
<b>SUBJECT:</b> Conducted an onsite scheduled inspection of Titan Concrete, an umbrella organization of Hercules Concrete LLC.		
<b>RESOLVED COMPLAINTS:</b>		

On July 21, 2022, the Michigan Department of Environment, Great Lakes and Energy (EGLE) -Air Quality Division (AQD) staff, I (Shamim Ahammod) conducted an onsite scheduled inspection of Titan Concrete, an umbrella organization of Hercules Concrete LLC (SRN: P1297) located at 6497 East 10-mile road, Center Line, MI 48095.

The mailing address of Hercules Concrete LLC is 2791 West Jefferson, Detroit, MI 48216. Contact person: James Plohg, VP of Operations  
Email ID: [jplohg@herculesconcrete.com](mailto:jplohg@herculesconcrete.com)  
Cell phone number: 313-690-1175

The purpose of the inspection was to determine the company'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 Air Pollution Control Rules of R 336.1901 and R 336.1289(2)(d).

### Process of Operation

The facility produces concrete, and they deliver it to job sites around the county and return to do it all over again. Concrete from this facility is composed of cement, cement supplement (fly ash and ash), fine aggregate (sand), and coarse aggregates (gravel and stone). These materials are delivered to the plant by truck.

The cement and cement supplement is directly transferred to silos via pneumatic transfer (Picture 1 and 2). The aggregate materials are transferred to elevated storage bins via a conveyor belt system (Picture 3). The aggregate materials are stored in the storage area by a three-sided structure to reduce dust generation (Picture 4). The material is transferred from the stockpiles by a front-end loader (Picture 3).

Once the material is transferred to elevated bins (Central Mixer, Picture 5), the constituents are fed gravity to weigh hoppers, which combine the proper amounts of each material based on client specifications (Picture 5). The central mixer door is kept closed during the mixing process (Picture 5). The constituents are then conveyor in a cement truck drum (Picture 6 and 7) and transported to various job sites.

### Background

On September 1, 2021, the Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) staff, I (Shamim Ahammod) conducted an investigation on fugitive dust complaint received on 8/23/2021 against Titan Concrete, an umbrella organization of Hercules Concrete LLC. Based on an onsite inspection, I issued a violation letter to the facility for violating Rule 901 of Act 451. On October 5, 2021, the facility responded to the violation letter and agreed to take the following steps to prevent fugitive dust at the site:

1. Increasing the frequency of applying dust suppressant to this site, particularly on dry or windy days
2. Street/site sweeping will be added to their paved areas
3. Additional concrete will be poured to alleviate the open dirt areas at the site

### Onsite Inspection

On July 21, 2022, at 11 AM, I went to the vicinity of Titan Concrete, an umbrella organization of Hercules Concrete, LLC. At the time of inspection, I observed the fugitive dust that originated from the facility parking lots and roadways due to truck traffic and wind and entered the atmosphere and onto residential property.

### Permit Exemptions

Per R 336.1289 (2) (d), The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the following:

(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.

- I reviewed the monthly records of the cubic yards of concrete produced for this facility. From June 2021 to July 2022, for the last 12 months, they produced a total of 161618.415 cubic yards of concrete.

(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.

- The plant uses a cartridge filter dust collector and Erie mixer system with an enclosure for truck loading operations. This is a wet mix concrete plant.

(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.

- According to James Plohg, the plant uses a cartridge filter dust collector.

(iv) The owner or operator shall keep monthly records of the cubic yards of concrete produced.

- The owner or operator shall keep monthly records of the cubic yards of concrete produced. James Plohg provided the monthly records of the cubic yards of concrete produced from June 2021 to July 2022.

Month/year	Cubic yards of concrete produced
June 2021	7094.25
July 2021	14205.85
August 2021	20684.85
Sept. 2021	13361.00
Oct. 2021	17513.75
Nov. 2021	19088.75
Dec. 2021	13171.5
Jan. 2022	6392.00
Feb. 2022	4503.5
March 2022	9590.75
April 2022	13769.00
May 2022	21961.75
June 2022	20415.50
Total for last 12 month	161618.415

(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.

- The notification was received on March 3, 2021.

(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.

- According to the Google map, the concrete batch plant is located less than 250 feet from any residential or commercial establishment or place of public assembly. However, at the time of inspection, I observed cement handling operations are completely enclosed systems. The cement and cement supplement is directly transferred to silos via pneumatic transfer (Picture 1 and 2). Therefore, the facility satisfies this condition.

(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.

- At the time of inspection, I observed the drop distance at each transfer point is minimal.

(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.

- The trucks are loaded on-site by an enclosed system from the Central Mixer (Picture 5). The products are wet. Therefore, trucks are not 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%.

- On July 21, 2022, at the time of inspection, I did not observe any application of dust suppressants on the site roadways and the plant yards. I observed dust on the facility parking lots and roadways that entered the atmosphere due to truck traffic and wind.
- On August 9, 2022, I revisited the facility. I observed the facility has installed sprinkler systems and sprayed water on roadways and the plant yards (Picture 8).

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

- At the time of inspection, I observed there were debris and small rocks on the paved roadways and plant yards. It seems the facility did not sweep the paved roadways and plant yards.

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

- I did not observe any material spillage on roads.

(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.

- Per my request, James Plohg has provided only the plant yards sweeping records from 3/15/2022 to 7/21/2022. Dust suppressants records were not provided.

**(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.

**(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.

- On July 21, 2022, at the time of inspection, I observed stockpiles were not watered. Fugitive dust was generated from the stockpiles.
- On August 9, 2022, I revisited the facility. I observed there was no dust generated from the stockpiles.

**(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.

- The facility was unable to provide a record of all watering on the roads and plant yards for the last year.

**(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.

## **Conclusion**

During the onsite inspection on July 21, 2022, it appears that Titan Concrete, LLC did not apply a dust suppressant to the site. The parking lots and roadways were dry. It seems the facility did not sweep the parking lots and roadways. I took pictures and videos of fugitive dust that clearly indicated fugitive dust generated from the facility. The fugitive dust that was observed was of sufficient intensity, frequency, and duration so as to constitute a violation of Rule 901 of Act 451 and R 336.1289 (2) (d).

After observing fugitive dust, I met James Plohg, VP of Operations of Titan Concrete at the parking lot. I told him about the fugitive dust that was generated from the facility. He said they have recently installed a sprinkler system in the entire facility, and this will be active in the next few weeks. I requested him to apply dust suppression on the parking lots and roadways. It appears that the plant does not follow a fugitive dust plan. They do not comply with the fugitive dust plan condition of R 336.1289 (2) (d) (vii)(C) and R 336.1289 (2) (d) (vii)(D). The facility is requested to submit a fugitive dust plan to the AQD District Supervisor and follow the plan.

Based on the on-site inspection on July 21, 2022, it appears Titan Concrete, LLC does not comply with the requirements of Rule 901 of Act 451 and R 336.1289 (2) (d) (vii)(C) and R 336.1289 (2) (d) (vii)(D). Therefore, AQD will issue a violation notice to the facility.



**Image 1(Picture 1) :** Cement Loading Station (enclosed system)



**Image 2(Picture 2)** : Cement Silo



**Image 3(Picture 3)** : Aggregate transferred to elevated bins through transfer belt and conveyor



**Image 4(Picture 4)** : Three sided stock piles



**Image 5(Picture 5) :** Central mixer for sand, stone and cement



**Image 6(Picture 6) :** Unloading Concrete from the central mixer and loading to truck drum



**Image 7(Picture 7) :** Concrete loading truck





**Image 8(Picture 8) :** Wet Plant yard

NAME Shamim Ahammod

DATE 8/26/2022

SUPERVISOR *K. Kelly*