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

A133768059				
FACILITY: Central Concrete		SRN / ID: A1337		
LOCATION: 1277 N. Bridge Street, ALMA		DISTRICT: Lansing		
CITY: ALMA		COUNTY: GRATIOT		
CONTACT: Steve Findsen , Alma Plant Manager		ACTIVITY DATE: 07/10/2023		
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR		
SUBJECT: Onsite compliance inspection to determine compliance with PTI 695-83				
RESOLVED COMPLAINTS:				

Inspected by: Michelle Luplow

Personnel Present: Steve Findsen (sfindsen@thefisher.co), Alma Plant Manager

Purpose

Perform an unannounced onsite compliance inspection of Central Concrete to determine compliance with PTI 695-83 for a fabric filter collector at the existing concrete batch plant. This facility was last inspected in December 2013.

Facility Background/Regulatory Overview

Central Concrete, Alma Plant, was previously named Alma Concrete Products, and is a division of the Fisher Companies. S. Findsen said Central Concrete is a "ready mix," batch concrete facility that also takes in commercial, industrial, and residential concrete to be crushed and recycled for gravel roads, driveways, parking lots, etc. S. Findsen explained to me that Fisher Sand & Gravel's portable crushers come to this location every 1 to 2 years to Central Concrete to crush the commercial/industrial/residential waste concrete. He said the last time the crusher had operated at Central Concrete was ~1.5 years ago.

This facility was permitted prior to exemptions for concrete production equipment. Central Concrete has a "Permit to Operate", 695-83, for a fabric filter collector on the concrete batch plant covering the cement silos. Central Concrete was informed of the option to void permit 695-83 and to use the exemptions in place of the permit for their equipment, and has decided to keep their permit in lieu of the permit exemptions. Concrete production equipment is now exempt per Rule 336.1289 (Rule 289).

Central Concrete operates year-round; however, 98% of operations are conducted in the spring, summer and fall.

Inspection

On July 10, 2023, I met with Steve Findsen, Alma Plant Manager to conduct an inspection of the facility.

S. Findsen described each part of the plant to me: there is one silo used for Portland/Lafarge Cement, and 3 batch silos: 1 for Portland Cement and 2 for slag; a heated building/enclosure for the concrete components (2NS [sand], 6A, and 22A & 6AA limestone); and a conveyor system that carries the aggregate component up to the enclosed, heated building.

Table 1 contains a list of equipment located on-site.

Table 1. Equipment list.

https://intranet.egle.state.mi.us/maces/webpages/ViewActivityReport.aspx?ActivityID=24... 9/29/2023

EU Description	Control device	РТІ
Fabric filter collector on the concrete batch plant to control dust from loadout from the slag and cement.	Baghouse used when trucks are being loaded with slag and cement. C&W Manufacturing & Sales, Model RA-140, Serial # 48968.	695-83/ Rule 285(2)(d) for replacement baghouse
1 Portland/Lafarge Cement storage silo	Baghouse – this silo is ducted to the batch silos, the batch silos of which are controlled by the permitted baghouse.	
Heated building/enclosure for the concrete compounds:	Enclosed	
2NS (sand)		
6A		
limestone		
1 batch storage silo for Portland Cement	Baghouse	
2 batch silos for slag	Baghouse	
Conveyor system to move aggregate components up to the enclosed heated building	NA	

S. Findsen said that they replaced the permitted baghouse (Griffin Environmental Co Model 36 k.S) with a newer C&W Mfg & Sales baghouse (Model RA-140, Serial # 48968). See attached for complete list of manufacturer's specs for the unit. Also attached is the old baghouse's specs. Replacement of air pollution control equipment with equivalent or more efficient equipment is exempt per Rule 285(2)(d).

I compared the old baghouse specs to those from the new baghouse. The new baghouse has equivalent or better control efficiency, as well as more bags, and thus a greater square footage of cloth to control dust. Based on this information, it appears that the replacement of the baghouse would meet exemption Rule 285(2)(d).

PTI 695-83

PTI 695-83 requires that visible emissions from the cement handling and storage equipment not exceed 20% opacity, based on Method 9. Trucks were being loaded during the inspection. S. Findsen said there is a baghouse to control dust from the loadout area of the plant: there are air intakes on either side of the loadout tubes that are connected to the baghouse. I saw no signs of opacity emitting from the baghouse stack during any of the loadouts; however, I did note opacity appeared to be emitting from the lower area of one of the batch silos, and I discussed this with S. Findsen. Rule 301 opacity limits (20%) apply to this situation and the opacity appeared to be less than 15%. That said, I requested that S. Findsen look into this issue and find the cause or the location of the emission point to prevent emissions from this area. I was unable to determine a source for these emissions during the inspection.

The fabric filter collector is required to be installed and operated properly. Central Concrete has established a pressure drop operating range of 3 – 6 psi on the baghouse. During the inspection, while a truck was being loaded out, I noted that the gauge was reading at 3.2 psi and therefore it appears the baghouse was operating properly.

Central Concrete is required to comply with the fugitive emissions control program for plant roadways, material storage piles, and material handling operations in Appendix A of the PTI. The following is an evaluation of compliance with these requirements:

Yard Maintenance

Roadways at Central Concrete must be maintained to prevent fugitive dust. When I arrived on-site, I noticed excessive fugitive dust being generated from the truck traffic entering and leaving the facility. The entire plant yard is unpaved, with only a small paved portion located at the entrance of the facility. Track out was seen from the plant yard and onto the paved public roadway.

S. Findsen said that the fugitive dust from unpaved areas is controlled by brine and that the last application was June 5, 2023. The paved portion of the entry road he said is washed with water using one of the concrete mixers and is sometimes hand-swept. He said that the paved dust control activities were conducted 2 weeks ago.

I informed S. Findsen of the requirement to maintain roadways to prevent fugitive dust and that both paved and unpaved roads should be maintained at all times to ensure dust is kept to a minimum.

I asked that he provide me with action items Central Concrete plans to take to ensure that fugitive dust is mitigated.

On July 12, 2023, I was informed that Central Concrete ordered a calcium chloride truck, which applied chloride to all unpaved areas of the facility on July 11, 2023, (one day after being put on notice that fugitive dust was an issue). See attached photos. Calcium chloride application will control dust from the unpaved yard and therefore there should be little to no track-out onto the public road after application of this product.

Compliance Statement

Central Concrete appears to be in compliance with PTI 695-83 at this time.





Image 1(CaCl2 (1)) : Photos of calcium chloride being applied to unpaved road/plant yard on 7/11/23. Photo Credit: Central Concrete.





Image 2(CaCl2 (2)) : Photos of calcium chloride being applied to unpaved road/plant yard on 7/11/23. Photo Credit: Central Concrete.





Image 3(CaCl2 (4)): Photos of calcium chloride being applied to unpaved road/plant yard on 7/11/23. Photo Credit: Central Concrete.





Image 4(CaCl2 (5)) : Photos of calcium chloride being applied to unpaved road/plant yard on 7/11/23. Photo Credit: Central Concrete.



Image 5(CaCl2 (6)) : Photos of calcium chloride being applied to unpaved road/plant yard on 7/11/23. Photo Credit: Central Concrete.

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Image 6(CaCl2 (7)) : Photos of calcium chloride being applied to unpaved road/plant yard on 7/11/23. Photo Credit: Central Concrete.

NAME Michelle Luplow

DATE 9/29/23

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