

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

B626930595

FACILITY: Paragon Concrete Company		SRN / ID: B6269
LOCATION: 4389 LESSING DR, WATERFORD		DISTRICT: Southeast Michigan
CITY: WATERFORD		COUNTY: OAKLAND
CONTACT: <i>[Signature]</i>		ACTIVITY DATE: 07/21/2015
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Non Compliance	
SUBJECT: FY 2015 inspection of Paragon Concrete Company ("Paragon")		
RESOLVED COMPLAINTS:		

B6269 - SAR - 2015 07 21

Paragon Concrete Company (B6269)
4389 Lessing Dr.
Waterford, Michigan 48329-1425

PTI No. 715-80 dated October 09, 1980, for existing dry portable batch plant with fabric filter.

VN: AQD issued July 24, 2015 Violation Notice

Name change: Waterford Block & Ready Mix Inc. (B6269, PTI No. 715-80) → Paragon Concrete Company (B6269)

FY 2015 Complaint

1. C-15-01051 (Received: 07/09/2015; Incident: 07/08/2015; Complainant: Ms. Cynthia Roy (Phone: 248-210-0975), 4384 Lessing Dr., Waterford Michigan 48329; 901 issue: Grey cement dust allegedly from Paragon Concrete Company. About July 22, 2015, AQD issued Paragon a violation notice.

On July 09, 2015, Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD) received a complaint from Ms. Cynthia Roy, who lives across the street from Paragon Concrete Company, regarding grey dust allegedly attributable to Paragon, a transit mix concrete batch plant.

On July 21, 2015, I conducted a complaint investigation. Also, on July 21, 2015, I conducted a level 2 self-initiated inspection of Paragon Concrete Company ("Paragon"), located at 4389 Lessing Drive, Waterford, Michigan 48329-1425. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules; and PTI No. 715-80.

During the inspection / investigation, Mr. Mark Danhausen (Phone: 248-623-0100; Cell: 248-930-3084; Fax: 248-623-3404; E-mail: mDanhausen@ParagonConcrete.Net), Mr. Brian Britt (Phone: 248-623-0100; Cell: 248-930-8374; Fax: 248-623-3404; E-mail: bBritt@ParagonConcrete.Net), Dispatcher, and Mr. Ryan Washburn (Cell: 248-877-3273), Head Mechanic, assisted me.

During FY2015, I observed acceptable amount of materials on paved concrete surfaces. According to Mr. Washburn, the yard is swept once a week.

Paragon (about 70,000 cubic yards per year) may be (if and only if it meets setback distance of 250 feet and all conditions) 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

The materials, such as aggregates, gravel, limestone, sand, etc., are stored in the open storage bins. The materials are poured into hopper using a front-end loader. From the hopper, materials are transported using a conveyor belts to four bins. From bins (4) the materials are transferred to weigh scales (underneath the bins), from which they are conveyed to a transit mix concrete truck.

Cement, flyash and steel mill slag are stored in the three separate elevated silos, each equipped with a fabric filter:

1. One 110-ton cement silo (56 bags [6 ft. tall and 3 inches diameter], Cylindrical Box, shaker mechanism with automatic timer after each load)
2. One 50-ton flyash silo (40 bags, shaker mechanism)
3. One 80-ton steel mill slag silo (40 bags, shaker).

On July 21, 2015, I observed cement loading on to the 110-ton cement silo using a pneumatic method from a truck:

Five Little Trucks, Inc.

License: BA14676 MI, Trailer Nos. A411968 MI & A411967 MI

During the pneumatic loading I observed less than 5 percent visible emissions (VE) at the top of the cement silo. About June 4, 2015, pneumatic cement loading blew cement into the neighborhood due to misconnection of pipes / hoses.

A transit mix truck loading area

The materials are transported using an enclosed conveyor to a truck. The truck opening area, where materials are poured, is NOT equipped with an enclosure. The emissions from the enclosure are NOT captured and ducted to a dry filter system (PTI No. 715-80, SC 14). About July 24, 2015, AQD issued Violation Notice for PTI No. 715-80, SC 14 and Rule 910.

I observed a transit mix truck being loaded with cement, flyash, slag and water. I observed during the loading visible emissions up to 70 percent. The visible emissions are due to not installing a fabric filter system (PTI No. 715-80, SC 14).

Before departure trucks are washed. A system of settling ponds is present. The system consists of six ponds. Water flows in two directions (from right as well as from left) with two wash areas. One pond is for holding cleanest water after settling particulate matter. Arrangement of settling ponds is more complex than most transit mix concrete batch plants with two directional water flows. Flow pattern can be controlled such that all (not too fine) suspended particulate matter settles and clean water flows into one cleanest water pond. From the cleanest pond, water is reused. During water flow through weirs from one pond to the other, largest particles having highest settling velocity settle first and fine particles with lowest settling velocity settle last. Fine particulate, with very little weight and hence practically negligible gravitational forces to overcome drag forces, do not settle at all.

A cold-cleaner

There is one maintenance Safety-Kleen 3'x4' cold-cleaner. Each cold-cleaner is subject rule 336.611 or 336.1707 depending on if it is new or existing. A cold-cleaner is exempt from Rule 336.1201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

The cold-cleaner is of tank-on-drum type. The solvent is stored in 55-gallon drum (solvent reservoir) and pumped to the tank for cleaning. Spray brush is present. Mechanically assisted lid is present.

The procedures were not posted. On July 07, 2015, I gave DEQ cold-cleaner decals for posting. I found the mechanically assisted lid closed during the FY 2015 inspection. Safety-Kleen services the cold-cleaner. It is equipped with mechanically assisted lid.

Safety-Kleen (800-669-5740) Premium Solvent (virgin plus recycled). Petroleum Distillates CAS 64742-47-8

100% VOC solvent. Flash Point (FP) = 148 °F TCC. Auto Ignition = 480 °F. Boiling Point (BP) = 350 (IBP) °F @ 760 mm Hg. Vapor Pressure (VP) = 0.2 / 0.6 mm Hg at 68 °F / 100 °F. Specific Gravity (SG, Water = 1.0) = 0.77-0.82. Density (ρ) @ 68 °F = 6.4-6.7 lbs. / gallon (0.770-820 kg /L). Flammability range = 0.7 %v (LEL) – 5%v (UEL). Viscosity = NA centistokes at 77 °F.

Violation Notice

AQD issued July 24, 2015 Violation Notice for failure to install dust collector at transit mix loading area. As a matter fact, the loading area dust collector was removed by perhaps the previous owner. On August 12, 2015, AQD received a VN response letter that stated that a dust collector would be installed at a cost of \$44,650.00 (Stephens Model SOS-4000)

Conclusion

Complaint is resolved. July 24, 2015 Violation Notice is to be resolved with installation a baghouse or equivalent to control transit mix truck loading operation.

FY: July 24, 2015 VN.

July 24, 2015

Mr. Mark Danhausen, President
 Paragon Concrete Company
 4389 Lessing Drive
 Waterford, Michigan 48329-1425

SRN: B6269, Oakland County

Dear Danhausen:

VIOLATION NOTICE

On July 21, 2015, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of Paragon Concrete Company (Paragon) located at 4389 Lessing Drive, Waterford, Michigan. The purpose of this inspection was to determine 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; and the conditions of Permit to Install (PTI) number 715-80.

During the July 21, 2015, inspection, staff observed the following:

Process Description	Rule/Permit Condition Violated	Comments
Transit mix concrete plant	PTI No. 715-80, SC 14 Dust collectors shall be installed and operating properly.	Paragon Concrete Company (Paragon) or previous owner (Waterford Block & Ready Mix, Nagy Paving, etc.) removed dust collectors that controlled fugitive dust due to transit mix truck loading (cement, sand, aggregates, slag, fly ash, etc.) operation.
Transit mix concrete plant	Rule 336.1910 (Air cleaning devices)	Paragon or previous owner removed dust collectors that controlled fugitive dust due to transit mix truck loading (cement, sand, aggregates, slag, fly ash, etc.) operation.

On July 21, 2015, the AQD staff observed operation of a transit mix concrete plant while the dust collector (or a baghouse) was completely removed resulting in visible emissions of opacity up to 50 percent and thus causing neighborhood dust nuisance.

This constitutes a violation of Act 451, Rule 910, which requires that an air-cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the administrative rules and existing law. Tampering with or removing an air pollution control device may be a criminal offence under Clean Air Act.

Please initiate actions necessary to correct the cited and submit a written response to this Violation Notice by August 14, 2015 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the occurred; an explanation of the causes and duration of the ; whether the ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

If Paragon Concrete Company believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the cited above and for the cooperation that was extended to me during my inspection of Paragon . If you have any questions regarding the or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

Iranna Konanahalli

Air Quality Division
586-753-3741 or konanahalli@michigan.gov

IK/DC

cc/via e-mail: Ms. Lynn Fiedler, DEQ
Ms. Teresa Seidel, DEQ
Mr. Thomas Hess, DEQ
Mr. Chris Ethridge, DEQ

NAME

Iranna Konanahalli

DATE

08/13/2015

SUPERVISOR

CJE