

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

P010350236

FACILITY: Stoneco of Michigan (formerly CYDI)		SRN / ID: P0103
LOCATION: 3275 N. Martin Luther King Jr. Blvd., LANSING		DISTRICT: Lansing
CITY: LANSING		COUNTY: INGHAM
CONTACT: Dave Ward , Operations		ACTIVITY DATE: 08/21/2019
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled, unannounced inspection to determine compliance with PTI 87-10, particularly with fugitive dust control requirements and the coal emergency response plan.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow (author) and Lauren Magirl (AQD Permit Section)

Personnel Present: Dave Ward, Operations Supervisor (dward@mipmc.com)

Purpose: Conduct an unannounced, scheduled compliance inspection by determining compliance with Stoneco’s Permit to Intall (PTI) No. 87-10 for aggregate and coal handling. This facility was last inspected (via self-initiated inspection) August 2012, but was revisited in 2016 as the result of track-out dust complaints onto MLK. The inspection was also conducted to ensure Stoneco is complying with their coal emergency response plan and to ensure that fugitive dust on paved roads especially is being controlled.

Facility Background/Regulatory Overview: Stoneco is an aggregate storage yard where limestone aggregate is received and shipped via rail and truck. Historically, Stoneco also used to receive (via railcar), store, and ship out coal for Michigan State University (MSU), but this part of their business ceased when, according to Dave Ward, Operations Supervisor, MSU started shipping their own coal using their own railyard. Stoneco is a subdivision of Michigan Paving & Materials.

The coal was a contentious point for local authorities and residents in 2012 because the piles were managed in a way that allowed the coal piles to get hot enough to spontaneously combust. Through 901 violations, AQD required that Stoneco develop an Emergency Response Plan (ERP). Their current plan addresses railcar unloading, coal pile maintenance procedures, and contains their Fugitive Dust Plan for coal, (an addendum to the Fugitive Dust Control Plan contained within PTI 87-10).

The limestone aggregate coming in via rail is from Ohio, and all other loads are virgin limestone aggregate from quarries.

D. Ward said they operate 7 a.m. – 3 p.m. (no weekends) all year long. In the winter months aggregate is brought in via trucks only (no railcar unloading), and shipping aggregate out is minimal. Trucks will unload directly to the stock piles located throughout the plant yard.

Table 1 contains a list of all the equipment present onsite.

Table 1. Equipment listing and descriptions for current processes

Unit	Description	PTI/ Exemption
EURAILUNLOAD	Rail yard for limestone aggregate – received and shipped by rail & truck, stored onsite Conveyors are used for storage piles	87-10
EUTRUCKTRAFFIC	Truck traffic for delivery of material, truck and loader traffic, storage pile handling, loading of trucks. All commercial and unpaved road areas	87-10
EUSTORAGE	Open stock piles	87-10

Inspection: On August 21, 2019 at approximately 8:00 a.m., Lauren Magirl and I arrived at Stoneco. We met with Dave Ward, Operations Supervisor. We discussed the currently activities being conducted onsite, including coal, and I provided him with a copy of the June 2019 Permit to Install Exemptions Handbook.

As stated in the Facility Background description, Stoneco no longer handles coal, thus the Emergency Response Plan and any permit requirements associated only with coal handling are no longer applicable. While touring the site I noted very sparse areas of residual coal ground into the unpaved areas near some of the limestone aggregate piles. Attached are photos of the plant yard where residual coal is present and where I believe part of the unpaved yard roadways are tainted with residual coal. We walked around the plant yard and saw no coal piles. Additionally, Google aerial maps show that there are no coal piles (compared to Brian Culhams internet aerial photos of the coal piles in 2012).

D. Ward showed us that they have various-sized limestone aggregate: sand (used mostly at asphalt plants); 6A (paving jobs/concrete); 21A (road shoulder material); 4 x 8 rock (ditch/holding purposes); 16 – 24" (riprap); 28" rock. D. Ward explained that all limestone sand ("gray sand") has been "washed" to remove dustier/finer particulate from the sand.

None of the equipment was being operated during the inspection, but we were able to observe truck traffic entering and exiting the facility.

EURAILUNLOAD

EURAILUNLOAD consists of the rail yard, rail and truck receiving, and aggregate loading/shipping, as well as the onsite conveyors used to convey aggregate brought in via railcar to the storage piles. D. Ward said that they may install a stacking conveyor. Installing a stacking conveyor would be exempt under Rule 285(2)(t) (sand, gravel unloading), but I reminded D. Ward that with that install, Stoneco would still be responsible to keep transfer and dropoint opacities to at or less than 10%. If not, the dust will need to be controlled. D. Ward indicated that he understood this requirement.

There are currently no Design/Equipment Parameters, Testing/Sampling, Reporting, or Stack/Vent restrictions for EURAILUNLOAD.

Emission Limits

All drop and transfer points (whether from conveyors, railcar unloading or truck loading) have a limit of 10% opacity. During the inspection the conveyors were turned off and we did not observe any loading or unloading of any sort to determine whether the visible emission limits were met. Future inspections will need to be conducted to determine compliance with this limit.

Material Limits & Monitoring/Recordkeeping

Stoneco is not permitted to process any asbestos-containing materials per the NESHAP Subpart M. Based on what D. Ward told us about taking in only limestone from Ohio and virgin limestone aggregate from quarries, it does not appear that Stoneco would be processing any materials that contain asbestos.

Material processed through EURAILUNLOAD is limited to 500,000 tons per 12-month rolling time period. Stoneco is required to keep monthly records of the amount of material processed through EURAILUNLOAD and create 12-month rolling records from that data. D. Ward said that all material that is brought onto the site is eventually shipped out. Sue Hanf provided me with the 12-month rolling records I had requested for August 2018 – July 2019. Total 12-month tonnage shipped out for this period was 169,349 tons.

Design/Equipment Parameters

Continuous fugitive emissions control is required to be implemented for all plant roadways, the plant yard, all material storage piles, and all material handling operations, as specified in Appendix A of the PTI, in addition to Stoneco's fugitive dust control measures spelled out in the Fugitive Dust Plan portion of their ERP. See "Fugitive Dust Control Plan" discussion.

EUTRUCKTRAFFIC

This emission unit includes truck traffic for delivery of material products, truck and loader traffic associated with processing equipment, storage pile handling and loading delivery trucks; as well as all commercial truck areas and unpaved road portions. During the inspection I noted that only the first few hundred feet of the entrance to Stoneco are paved. The remaining portions of the road and plant yard consist of crushed limestone aggregated (unpaved).

There are currently no Material Limits, Design/Equipment Parameters, Testing/Sampling, Monitoring/Recordkeeping, Reporting, or Stack/Vent Restrictions for EUTRUCKTRAFFIC.

Emissions Limits

Visible emissions from all truck traffic and wheel loaders is limited to 5% opacity. During the inspection we observed more than handful of semi-truck and dump truck traffic entering and exiting the facility, as well as loader truck activity. All opacity associated with this traffic met this limit. I saw very minimal dust being kicked up from these processes, and 0% opacity at times. This is indicative that the plant yard and plant roadways (paved and unpaved) are being maintained properly.

Process/Operational Restrictions

Continuous fugitive emissions control is required to be implemented for all plant roadways, the plant yard, all material storage piles, and all material handling operations, as specified in Appendix A of the PTI, in addition to Stoneco's fugitive dust control measures spelled out in the Fugitive Dust Plan portion of their ERP. See "Fugitive Dust Control Plan" discussion.

EUSTORAGE

EUSTORAGE includes all open area stock piles. Water spray is required to be used to control dust from materials when necessary. D. Ward said that at this time the piles are self-maintained, as moisture from the air is enough to control limestone dust. Limestone is hygroscopic. I reminded D. Ward that if water spray is necessary, there should be water spray available to wet the piles and he indicated that he understood this.

There are currently no Material Limits, Design/Equipment Parameters, Testing/Sampling, Monitoring/Recordkeeping, Reporting, or Stack/Vent Restrictions for EUSTORAGE.

Emission Limits

Visible emissions from the storage piles is limited to 5% opacity. Based on weather/underground data, during the inspection winds were calm at 0 mph. We did not observe any opacity from any of the storage piles; however, future inspections when the wind is blowing may be helpful in determining if fugitive dust from the storage piles is being controlled during windy conditions.

Process/Operational Restrictions

Continuous fugitive emissions control is required to be implemented for all plant roadways, the plant yard, all material storage piles, and all material handling operations, as specified in Appendix A of the PTI, in addition to Stoneco's fugitive dust control measures spelled out in the Fugitive Dust Plan portion of their ERP. See "Fugitive Dust Control Plan" discussion.

Fugitive Dust Control Plan – Appendix A

The Fugitive Dust Control Plan addendum for coal, contained within the ERP, is no longer applicable since coal is no longer handled at this facility. I will have discussions with the appropriate company contacts to discuss sending the AQD an official notice concerning the fate of the ERP and making the appropriate contacts with other local emergency personnel (e.g. Fire Department) to inform them that the ERP is no longer necessary because there is no longer any coal handling.

Site Roadways/Plant Yard

Dust on the site roadways and plant yard are required to be controlled by water, calcium chloride, or another acceptable, approved fugitive dust control compound, and applications of these are required to be done as often as necessary to meet the applicable emission limits. All paved roadways are required to be swept as needed and any material spillage on roads is required to be cleaned up immediately.

D. Ward said that the paved portions of the road are watered down with a loader bucket to wash the paved entry roadway, and wash all dust to the sides of the property on a daily basis. In addition to this, Stoneco installed a sprinkler system at the paved entryway last year, and began operating it this year. D. Ward said he turns the sprinkler system on when the road is getting dry in order to keep the dust down. He explained that he used to sweep it but found that water is more effective and so now only uses water. He turned on the sprinkler system to show us that it covers the entire paved roadway (with sprinklers on both sides of the road). Although they do not sweep, it appears based on this inspection, that the processes D. Ward is using to control dust on the paved roadway is preventing trackout onto MLK Blvd, in addition to controlled the dust onsite. Historically, AQD has received complaints of dust track out onto MLK, but during this inspection the paved road was well maintained (free from dust) and there was no trackout onto MLK (see attached photos).

The crushed limestone/unpaved roadways and plant yard were also well maintained. Even with truck traffic, I saw no signs of opacity, or if there was opacity, it did not exceed any of the opacity limits within the PTI. D. Ward said that the entire plant yard is controlled with calcium chloride. He said that they have applied calcium chloride to the yard twice already this year, with the last application being done approximately 3 weeks ago. He said they apply the chloride as needed and may chloride the yard once more before the end of the load-out season.

I did not observe any material spillage on any part of Stoneco's property.

Plant & Stock Piles

The drop distance at each transfer point is required to be reduced to the minimum the equipment can achieve. D. Ward stated that the conveyors are arranged as such. We observed a bucket loader dumping aggregate into a truck and the drop distance was sufficient for minimizing fugitive dust, I observed some opacity ranging from 0-5%, under the limit of 10% for transfer/drop points.

Stock piles are required to be watered as needed to meet the 5% opacity limit. We saw no signs of opacity from any of the stock piles.

Truck Traffic

Onsite vehicles are required to be loaded in a way to prevent their contents from dropping, leaking, blowing or escaping the truck. While onsite, I noticed that all trucks being loaded and leaving the facility had loads below the top of the truck and saw no signs of any material leaving the trucks during the inspection.

Compliance Statement: Stoneco appears to be in compliance with PTI 87-10 at this time. In my professional judgment the procedures Stoneco has in place for managing dust from the unpaved and paved portions of their facility are meeting and exceeding the requirements set forth in the PTI. All portions of their site were well maintained. Fugitive dust overall was nonexistent, which appears to be a great improvement based on previous inspections and complaint investigations.

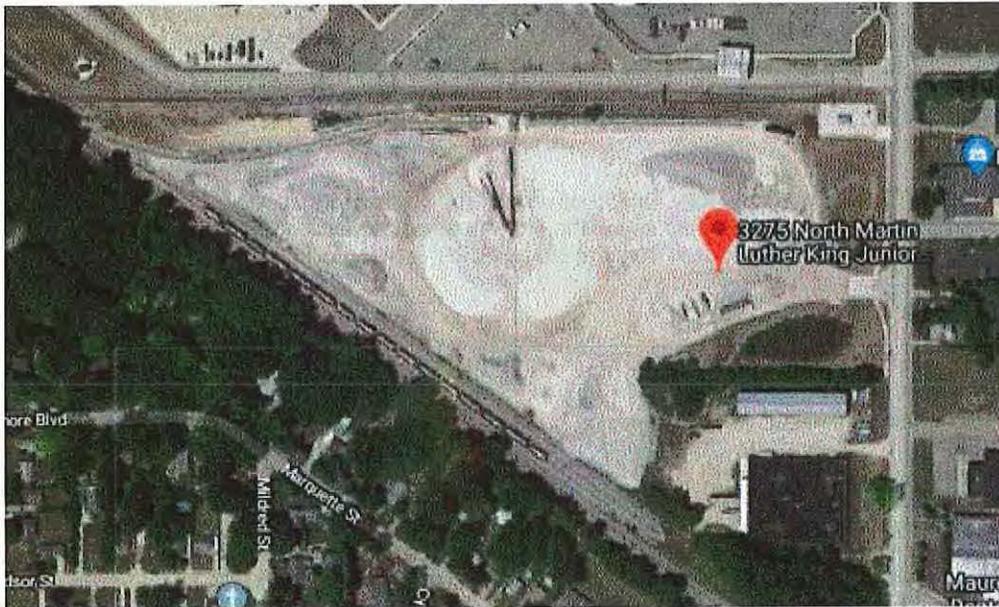


Image 1(Aerial View) : Google Satellite imagery shows there are no longer any coal piles at this facility.



Image 2(Paved Entry) : Paved entryway wetted/controlled for dust - sprinkler systems used

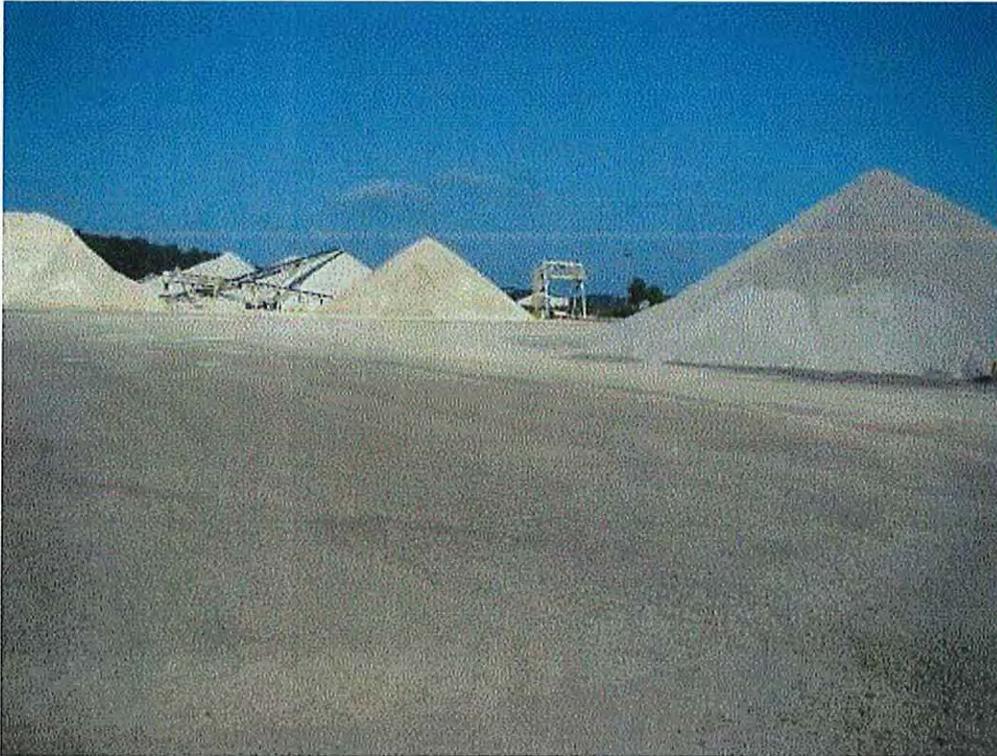


Image 3(Storage Piles) : aggregate storage with crushed limestone unpaved yard

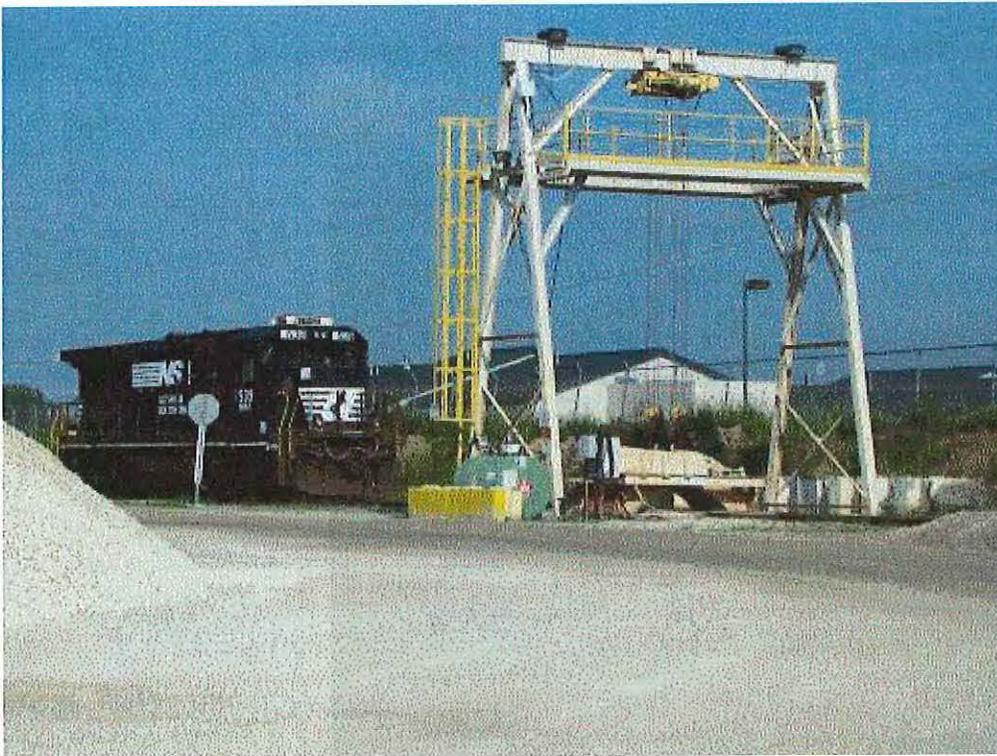


Image 4(Railcar Unloading) : Railcar unloading is hooked up beneath the surface to conveyors that pull material up to stacking conveyors.

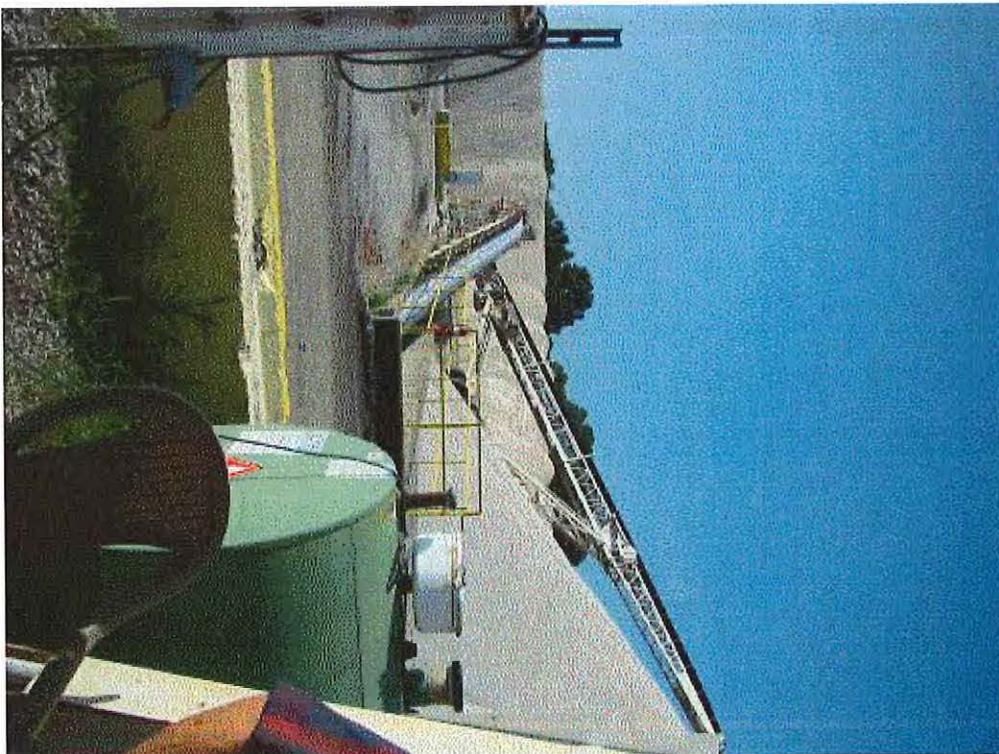


Image 5(Conveyors) : Conveyors coming up from ground to stack material on piles



Image 6(Residual coal) : Darker portions of yard are from residual coal



Image 7(Residual Coal #2) : Darker area by conveyor is residual coal from past coal handling activities

NAME M. M. Lott

DATE 9/27/19

SUPERVISOR B. M.