

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

N659049908

FACILITY: R H HUHTALA AGGREGATES INC #75-01		SRN / ID: N6590
LOCATION: T 49N R 34W SE 1/4 SE 1/4 Sec 12, LANSE		DISTRICT: Upper Peninsula
CITY: LANSE		COUNTY: BARAGA
CONTACT: ROLAND H HUHTALA , OWNER		ACTIVITY DATE: 08/02/2019
STAFF: Michael Conklin	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced inspection to determine compliance with PTI No. 75-01.		
RESOLVED COMPLAINTS:		

Facility: R.H. Huhtala Aggregates (SRN: N6590)
Location: 18154 US Hwy 41, L'Anse, MI 49946
Contact: Roland Huhtala, President, 906-514-7758

Regulatory Authority

Under the Authority of Section 5526 of Part 55 of NREPA, the Department of Environment, Great Lakes, and Energy may upon the presentation of their card, and stating the authority and purpose of the investigation, enter and inspect any property at reasonable times for the purpose of investigating either an actual or suspected source of air pollution or ascertaining compliance or noncompliance with NREPA, Rules promulgated thereunder, and the federal Clean Air Act.

Facility Description

R.H. Huhtala Aggregates (Huhtala Aggregates) is a sand and gravel company based out of L'Anse, MI. The company operates a portable nonmetallic crusher plant at various locations throughout the Upper Peninsula of Michigan. According to the 2018 MAERS report, the company operated in Iron, Houghton, Baraga, Keweenaw, and Marquette County. For 2019, to-date, the plant has operated in Marquette County and is currently operating in Keweenaw County.

Emissions

Stone quarrying and processing operations can cause point and fugitive emissions of PM, PM10, and PM2.5. Emissions from process operations should be considered fugitive unless the source of emissions is vented through an air pollution control device or contained and emitted through a force-air vent or stack. Fugitive sources of emissions are generated from machine movement and wind erosion. Emission sources can include hauling, crushing, screening, and transferring of material. The primary factors affecting PM emissions are wind and the moisture content of the material. Moisture on the surface of the material can cause fine particles to adhere resulting in a dust suppression effect.

Emissions Reporting

The facility is subject to the federal New Source Performance Standards (NSPS) Subpart 000 - Standards of Performance for Nonmetallic Mineral Processing Plants and reports its annual emissions to MAERS. In 2018, the facility reported crushing 285,000 tons of material and emitting 2850 pounds of PM10.

Compliance History

The facility has not received any violation notices in the past five years. The facility was last inspected in 2016 and was found to be in compliance with all applicable air quality rules and federal regulations at that time.

Regulatory Analysis

Huhtala Aggregates is currently subject to General Permit To Install (PTI) #75-01. The facility is considered a true minor source because the potential-to-emit (PTE) of all regulated air pollutants is less than the major source thresholds. The facility is also considered an area source because the PTE of individual HAPs is less than 9 tpy and the PTE of aggregate HAP emissions is less than 25 tpy. The facility is subject to NSPS Subpart 000 by having a portable crushing plant with a crushing capacity of greater than 150 tons/hr and equipment that has been constructed after August 31, 1983.

Inspection

On August 2, 2019, I conducted an unannounced inspection on Huhtala Aggregates at the Sickler Industries Allouez Pit in Allouez, MI. I arrived at the site and met with Brad Hutula and Roland Huhtala. I explained to them that the purpose of the inspection was to ensure compliance with PTI #75-01 and all

applicable air pollution control rules and federal regulations.

The inspection began by going through the process from the beginning, starting with the primary crusher. Process equipment was inspected for labels and water sprays on crushers and screens. At the time of the inspection, the plant was not operating as they were preparing for a change in material being crushed, that is road gravel to asphalt material. The following table summarizes process equipment observed at the plant. All crushing equipment at the plant, including crushers, screens, conveyors, and bins, were labeled with the permit number and equipment number.

Equipment Number	Description
9901	Primary jaw crusher with spray bar installed
7902	Conveyor with feeder bin and magnet. The magnet removes metals in the crushed material to prevent damage to other equipment further down the process line.
9101	Conveyor, conveys rejected materials to storage pile
9204	Second conveyor with bin and magnet
8002	Conveyor
0004	Sand conveyor
8901	Scale conveyor
0301	Stacking conveyor
0302	First screen, no spray bars installed
8101	Conveyor
0101	Second and third screen, no spray bars installed
9801	Secondary cone crusher, spray bar installed
1201	Conveyor, spray bar installed
1202	Recirculating conveyor from third screen to tertiary crusher
1501	Tertiary cone crusher with spray bar installed
0503	Recirculating conveyor from tertiary crusher to second screen, spray bar installed
0003	Conveyor from third screen
1504	Conveyor with spray bar installed
1505	Conveyor
1506	Conveyor
0504	Scale conveyor
0401	Fourth screen, no spray bars installed
9601	Scale conveyor from fourth screen conveying 5/8" size material to stack conveyor
0201	Stack conveyor conveying 5/8" material into storage piles
9701	Scale conveyor
0001	Stack conveyor
RICE 1	Caterpillar engine rated at 285 HP, fuel oil fired
RICE 2	Caterpillar engine rated at 896 HP, fuel oil fired
RICE 3	Caterpillar engine rated at 896 HP, fuel oil fired

PTI No. 75-01 states that each crusher and screen shall be equipped with a water spray. Each crusher observed had a spray bar installed, however, the screens did not have spray bars installed. Some of the conveyors that feed material into the screens have spray bars installed. Mr. Hutula stated that there are no visible emissions from the screening operations and that spray bars are not installed on the screens because the material can clump together causing difficulties in screening. Mr. Hutula also stated that the screens operate at below 10% opacity and if visible emissions are observed, spray bars would be installed on the screens. All equipment at the plant appeared to be relatively clean and did not indicate to be operating over opacity limits.

After inspecting each piece of equipment, we reviewed records of the amount of material processed at the

plant. Mr. Hutula also showed me a copy of the permit in the records book. Records were reviewed for months April – July 2019. Huhtala Aggregates operated at the Conery Contracting Pit in Champion, MI, April – June, and processed 151,434 tons. The plant began operating at the Sickler Industries Allouez Pit in July and has processed 20,000 tons to-date. These records indicate that Huhtala Aggregates is within 2,000,000 ton limit of material processed per year per site.

All equipment that was observed and noted during the inspection has been accounted for through permit modifications by the submission of EQP5756 forms. All new equipment that is subject to NSPS, Subpart OOO, has been tested to demonstrate compliance with the visible emission limits. Mr. Huhtala provided test records on conveyors 1504, 1505, 1506, 1601, 1602, 1603, 1604, and 1605. Test records on these pieces of equipment were previously not in the AQD facility file.

Huhtala Aggregates has been prompt in sending relocation notice forms (EQP5757), along with a site plan identifying the geographical site and the probable duration at the site. At the Sickler Industries Allouez Pit, the crusher plant was located more than 500 feet from any residential or commercial establishment.

With the plant not operating at the time of the inspection, no visible emissions from equipment, transfer points, storage piles, and roadways were observed. A 10,000 gallon water trailer was observed with lines connected from the pond to the trailer pump. Mr. Huhtala stated that the plant operates with no visible emissions and that the roadways and storage piles are watered as needed. Besides stating how much material was crushed on a daily basis, the records also indicate an estimation of the amount water (gallons) used to control fugitive dust.

On August 13, 2019, I revisited the Sickler Industries pit, unannounced, to observe the plant in operation and to check visible emissions from equipment. Upon arrival, visible emissions were observed from the three crushers, transfer points from crushers onto conveyors, and front-end loaders. The visible emissions observed appeared to be over 15%, 10%, and 5% respectively. After observing emissions, I inspected the equipment for spray bars. The spray bars were not on at the time and I spoke with Mr. Hutula stating that the equipment appears to be operating over the opacity limits. Mr. Hutula turned on the spray bars and installed an additional one on the secondary crusher to bring the opacity of the visible emissions to below the limits. Mr. Hutula stated that the spray bars should have been on and that a new operator at the plant may have turned them off by mistake. Also, the process was not operating at full capacity resulting in more dust than usual. A heavier load on the crushing equipment helps contain the fugitive dust through the process, Mr. Hutula stated. With Mr. Hutula acknowledging the issues at the time and immediately correcting the problem, a violation notice will not be issued. No visible emissions were observed from screens, storage piles, or any other process equipment that is part of the nonmetallic crushing facility other than what was mentioned above.

The following table lists equipment that is considered to be exempt at the source.

Emission Unit	Description	PTI Exemption
EURICE1	Caterpillar engine rated at 285 HP, fuel oil fired	R 336.1285(2)(g)
EURICE2	Caterpillar engine rated at 896 HP, fuel oil fired	R 336.1285(2)(g)
EURICE3	Caterpillar engine rated at 896 HP, fuel oil fired	R 336.1285(2)(g)

Compliance

Based on this inspection, it appears that R.H. Huhtala Aggregates is in compliance with PTI No. 75-01 and all Michigan Air Pollution Control Rules and federal regulations.



Image 1(Crushing Plant) : Screens and tertiary crusher.





Image 3(Tertiary Crusher) : Spray bars installed and operating.

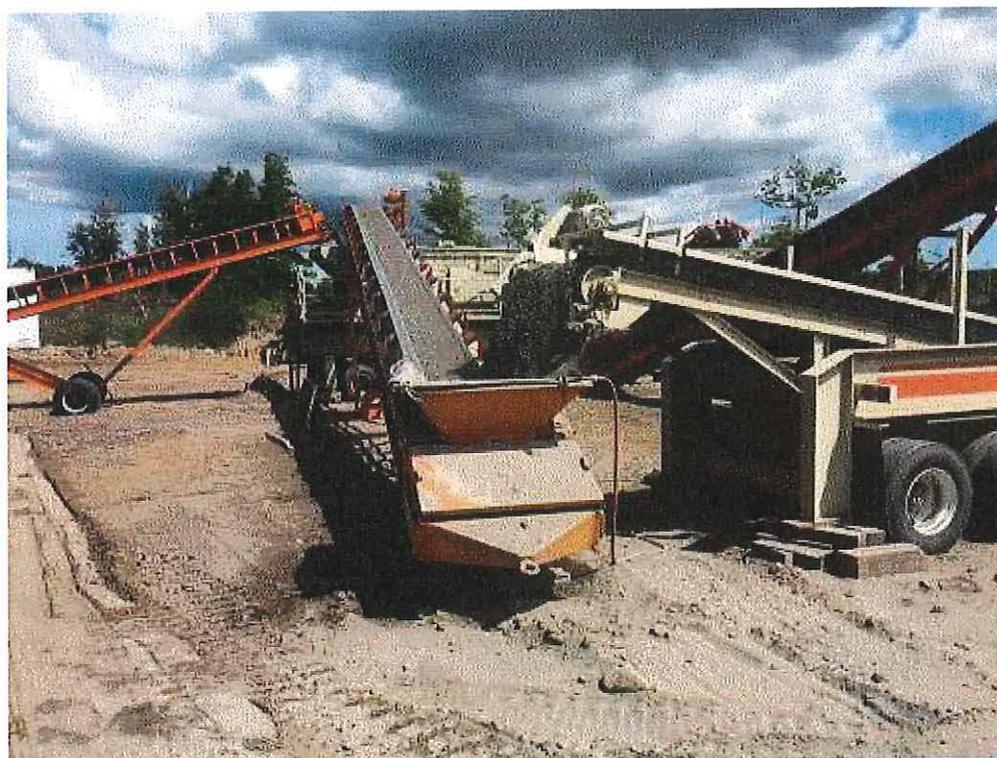


Image 4(Transfer Point) : Transfer point from tertiary crusher.



Image 5(Water Truck) : Water truck with pump.

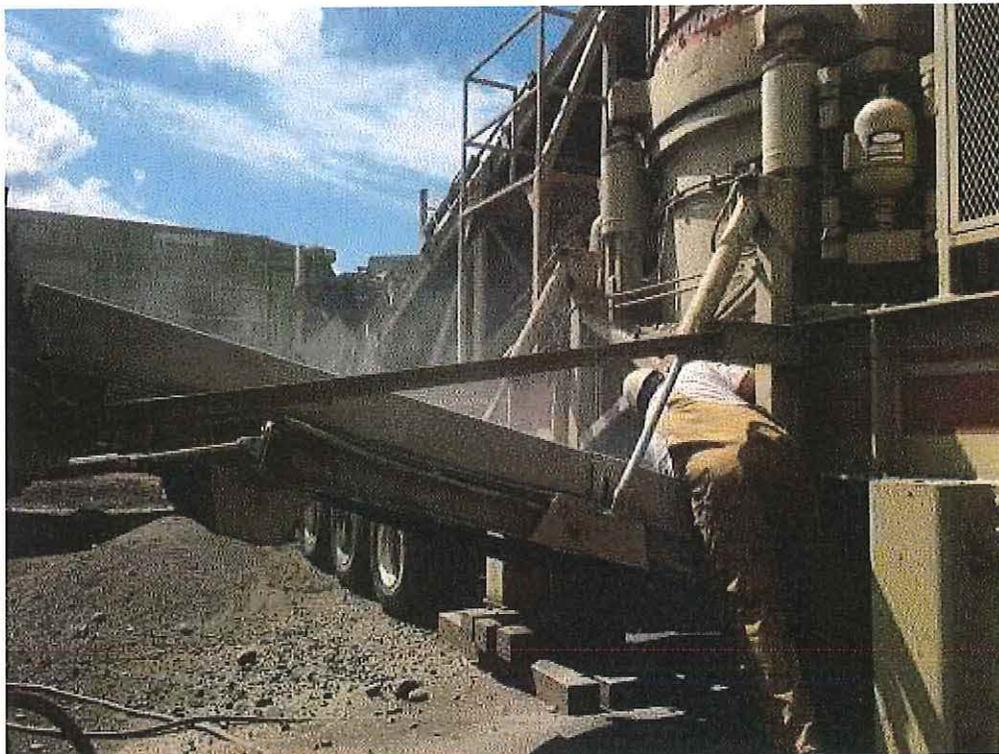


Image 6(Secondary Crusher) : Installing second spray bar on secondary crusher.



Image 7(Transfer Point) : Transfer point from secondary crusher.

Production and Water Usage Log
 Month: 1/12 Year: 2011
 Work File: 20-1

Day	Score Reading (Tons)	Daily Production (Tons)	Est. Water Usage (U.S. Gallons)	Comments
1				
2				
3				
4				
5				
6				
7				
8	3600	3000	3000	Score 28A
9	7000	4000	4000	
10	14000	5000	2000	
11	18000	4000	2000	
12	22000	4000	2000	
13				OFF
14				OFF
15	20000	4000	2000	
16	24000	5000	2000	
17	32000	5000	2000	
18				All Production Done
19	41000	4000	2000	
20				OFF
21				OFF
22	44000	3000	1500	
23	48000	4000	2000	
24	52000	4000	2000	
25	56000	2000	1000	Score 28B
26	60000	4000	2000	Score 28A
27				All Production Done
28				OFF
29	70000	4000	2000	
30	80000	4000	2000	
31				

Image 8(Records) : April 2019 records.

Month: <u>April</u>		Year: <u>2019</u>			Production and Water Usage Log
Day	Scale Reading (Tons)	Daily Production (Tons)	Est. Water Usage (U.S. Gallons)	Comments	
1					
2	13800	3000	1000	ON THE WATER MAIN	
3	15800	4000	1500	OFF	
4					
5					
6	19800	3000	1000	ON THE WATER MAIN	
7	21800	4000	1500	OFF	
8	23800	4000	1500	ON THE WATER MAIN	
9					
10					
11					
12					
13					
14					
15	3000	3000	1000	ON THE WATER MAIN	
16	3200	4000	1500	OFF	
17	3400	4000	1500	ON THE WATER MAIN	
18	3600	4000	1500	OFF	
19					
20	4000	3000	1000	OFF	
21	4200	5000	2000		
22	4400	4000	1500		
23	4600	5000	2000		
24	4800	4000	1500		
25	5000	3000	1000		
26				OFF	
27				OFF	
28	4700	4000	1500		
29	4900	4000	1500		
30	5100	4000	1500		
31	5300	5434	2000		

Image 9(Records) : May 2019 records.

Month: <u>May</u>		Year: <u>2019</u>			Production and Water Usage Log
Day	Scale Reading (Tons)	Daily Production (Tons)	Est. Water Usage (U.S. Gallons)	Comments	
1					
2					
3	63500	5000	2000	ON THE WATER MAIN	
4	65500	4000	1500	OFF	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

Image 10(Records) : June 2019 records.

Production and Water Usage Log

Mine: J/L/LP Year: 2019 NDEP PER: 75177

Day	Scale Reading (Tons)	Daily Production (Tons)	Est. Water Usage (U.S. Gallons)	Comments
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19	2000	2000	1000	OFF
20				OFF
21				
22	1000	3000	1500	
23	6000	3000	1500	
24	11000	3000	1500	
25	14000	3000	1500	
26	18000	4000	2000	
27	20000	2000	1000	
28				OFF
29				TRAIN DOWNTIME
30				OFF
31				OFF

Image 11(Records) : July 2019 records.

NAME Michael Mahlin DATE 8/15/2019 SUPERVISOR EJL