

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

N672559715

FACILITY: A LINDBERG & SONS INC #456-99		SRN / ID: N6725
LOCATION: PLANT #4 CRUSHING PLANT #456-99, ISHPEMING		DISTRICT: Marquette
CITY: ISHPEMING		COUNTY: MARQUETTE
CONTACT: REED ALDERTON , CRUSHING SUPERINTENDENT		ACTIVITY DATE: 03/24/2021
STAFF: Joe Scanlan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced inspection to determine compliance with PTI# 456-99		
RESOLVED COMPLAINTS:		

## 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

A. Lindberg & Sons, Inc. (ALS) provides civil construction services including site development, road construction, utility infrastructure projects, and rock crushing, screening and washing. ALS is the largest aggregate and stone producer in the Upper Peninsula (UP). The company is headquartered in Ishpeming, Marquette County, and has multiple aggregate pits and portable crushing facilities throughout the UP. Aggregate is used for concrete and asphalt mixes, road gravel and subbase, foundation stone, erosion control, and architectural/landscaping purposes.

SRN N6725 is one of the ALS portable non-metallic crushing plants and is permitted under PTI# 456-99.

## PROCESS DESCRIPTION

A crushing plant produces smaller size aggregate from larger size rock. The final product can be used for a variety of applications from infrastructure projects to residential landscape purposes. A crushing plant can consist of loaders, haul trucks, generators, crushers, screens, conveyors, and stockpiles. The plant is normally located within a quarry, crushing stone that was generated from blasting. The process begins with large size rocks being fed into the primary crusher via a loader, producing an initial size product. From the primary crusher, the product can be conveyed into a screen plant that separates the crushed aggregate into various sized products. Smaller size material is filtered out and leaves on separate conveyors to stockpiles, while larger size material continues into the secondary crusher. A secondary crusher will break the aggregate down into smaller sizes before it enters the screen plant again or continues down the line to a tertiary screen and crusher. A crushing plant may have several crushers, screens, and conveyors depending on how many sizes of aggregate are to be produced.

## EMISSIONS

Stone crushing 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 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 moisture content of the material. Spray bars on crushers and screens, along with the use of dust suppressants on roadways reduces fugitive dust emissions from activity by 60% to 85%. Moisture on the surface of the material can cause fine particles to adhere resulting in a dust suppression effect

## EMISSIONS REPORTING

The company submits annual emissions to MAERS, however there is a discrepancy in the permitted primary crusher (PC-12) and cone crusher (CC-18) equipment originally permitted with PTI# 456-99 versus the actual equipment observed on site.

2020 emissions reported to MAERS for SRN N6725 included 269,116 tons of throughput producing 2691 lbs of PM10 with a control efficiency of 80%.

## COMPLIANCE HISTORY

There is no history of inspections performed at this facility and no violation notices have been issued.

## REGULATORY ANALYSIS

N6725 is a portable non-metallic crushing plant permitted under PTI# 456-99. New or additional equipment that is subject to the federal NSPS Subpart OOO, which has not been previously tested, shall comply with the testing requirements of the NSPS.

Equipment permitted under PTI# 456-99 includes:

• PC-09	Primary Crusher	1998 Nordberg 3749
• CC-10	Primary Cone Crusher	1989 Nordberg NC1560
• CC-11	Primary Cone Crusher	1995 Nordberg NB400
• SP-09	Screening Plant	1997 Superior Deister
• RS-02	Radial Stacker	1990 UP Fabricating 30" x 100'
• RS-04	Radial Stacker	Unknown
• RS-06	Radial Stacker	1991 Kolberg 36" x 105'
• RS-08	Radial Stacker	1994 UP Fabricating 36" x 85' (also permitted under PTI# 83-99)
• RS-29	Radial Stacker	2016 Kolberg 36" x 136' (rental)
• CV-01	Conveyor	Unknown
• CV-06	Conveyor	Unknown
• CV-19	Conveyor	1984 Lindberg shop made 30" x 30'
• CV-23	Conveyor	Unknown
• CV-27	Conveyor	1989 Nordberg 36" x 50'
• CV-28	Conveyor	1999 Allis Chalmers 36" x 60'
• CV-38	Conveyor	1996 Superior 42" x 40'

• CV-40	Conveyor	1990 Lindberg shop made
• CV-42	Conveyor	1992 Lindberg shop made 42" x 80'
• CV-43	Conveyor	1990 Lindberg shop made
• CV-52	Conveyor	1992 Lindberg shop made 32" x 26'
• CV-56	Conveyor	1993 Lindberg shop made 26" x 33'
• CV-57	Conveyor	1993 Lindberg shop made 24" x 35'
• CV-60	Conveyor	Unknown
• CV-61	Conveyor	2000 Superior 36" x 60'
• CV-62	Conveyor	Unknown
• CV-71	Conveyor	1996 DRM 36" x 45'
• CV-79	Conveyor	2016 Kafka 36" x 70'
• CV-78	Conveyor	2016 Kafka 36" x 70'
• FC01	Conveyor	1989 Kolberg 36" x 60'
• FC02	Conveyor	1999 Lindberg shop made

Per NSPS Subpart OOO, all equipment listed have undergone visible emissions Method 9 testing and results are on file in the district office.

## INSPECTION

This portable non-metallic crushing facility has been operating in Marquette County for the last 12 months. At the time of inspection, the facility was operating just north of the city of Marquette in Marquette Township at the ALS County Road 550 Pit. The plant was in operation at the time of my inspection; however federal MSHA inspectors were on site as well; I did not have an opportunity to speak with the operator at that time. There were no fugitive dust issues associated with the portable crushing facility, work area, or haul roads as the ground was damp from recent rains.

At the County Road 550 Pit the plant produced 156,000 tons of various size road gravel for local road projects as well as 3" minus for Eagle Mine cementation/backfill. At the end of June, the plant relocated to the Longyear Quarry off the AAA Road in northern Marquette County, just west of the community of Big Bay. The facility intends to continue crushing 300-400,000 tons of 3" minus for Eagle Mine cementation/backfill at this location.

## Equipment on site at the County Road 550 Pit included:

• PC-12	Primary Crusher	PN 3352 (PTI#419-99)
• CC-18	Cone Crusher	Sandvik CS-440 (PTI# 83-99)
• RS-11	Radial Stacker	Superior 36" x 50' (PTI#83-99)
• RS-14	Radial Stacker	RB Scott (PTI#83-99)
w/relocation		Not on equipment list provide
• RS-28	Radial Stacker	Kafka-Feed 42" x 60' (PTI# 83-99)
• RS-29	Radial Stacker	KPI Superstacker 36" x 136' (PTI# 456-99)
• SP-18	Screening Plant	Cedar Rapids 7 x 20 (PTI# 113-99)
• CV-78	Conveyor	Kafka 36" x 70' (PTI# 456-99)
• CV-77	Conveyor	Unknown make/model (PTI# 113-99)
w/relocation		Not on equipment list submitted notice.

- CV-79                      Conveyor                      Kafka 36" x 70' (PTI# 456-99)
- CV-81                      Conveyor                      Kafka 36" x 70' (PTI# 113-99)

None of the numbered equipment on site corresponds with the permitted equipment for PTI# 456-99 except RS-29.

The following pieces of equipment were on the Plant #4 equipment list sent with the relocation notices but were not observed at the County Road 550 Pit:

- CC-15                      Cone Crusher                      Nordberg HP400 (PTI# 48-99)
- SP-09                      Screening Plant                      Superior Diester 6 x 16 x 6 x 20 (PTI# 456-99)

Two pieces of equipment were observed at the County Road 550 Pit that were not on the Plant #4 equipment list included with the relocation notice:

- RS-14                      Radial Stacker                      RB Scott (PTI#83-99)                      Not on equipment list
- provide w/relocation
- CV-77                      Conveyor                      Unknown make/model (PTI# 119-99)                      Not on equipment list submitted w/relocation notice.

**COMPLIANCE**

The company is associating SRN 6725 with a primary crusher (PC-12) permitted under SRN 6722 (PTI# 419-99) and a cone crusher (CC-18) permitted under SRN N6721 (PTI# 83-99). A crushing facility is associated with the SRN the primary crusher is permitted under; in this instance the company should be associating the facility with SRN N6722 since the primary crusher (PC-12) is permitted under SRN 6722 (PTI# 419-99).

The facility has been reporting emissions to MAERS for N6725 but should be reporting these emissions for SRN N6722. The last year of emissions reported to MAERS for N6722 was 2016 with 0 tons of throughput; no throughput was also reported for 2015. 2014 was the last year throughput (33,170 tons) and emissions were reported in MAERS for N6722.

The facility has equipment on site that was not included in the relocation notice for the County Road 550 Pit relocation.

The facility is also not in compliance with the Non-Metallic Mineral Crushing Plants General PTI requirements of 1.12(a) & (d) found in both PTI#s 419-99, 456-99, and 83-99:

- 1.12 The permittee shall not replace or modify FGCRUSHING, or any portion of FGCRUSHING, including control equipment, unless all of the following conditions are met:**
- a) The permittee shall update the general permit by submitting a new Process Information Form (EQP5756) to the Permit Section and District Supervisor, identifying all existing and new or additional equipment added to the process a minimum of 10 days beofre the equipment is replaced or modified.
  - d) The permittee shall notify the Air Quality Division, within 15 days after startup of any new or additional equipment, of the actual date of initial startup.



The facility is in compliance with the remainder of the PTI requirements and has been reporting emissions to MAERS for both PTI# 456-99 and PTI# 83-99, however the emissions being reported are incorrectly associated with wrong primary crushing equipment.

The company must correct the violation by associating the correct SRN with the correct primary and cone crushing equipment or modify existing PTI's to include additional primary and cone crushing equipment.



**Image 1(Tilden1) :** PC-12 Primary Crusher SRN N6722 PTI# 419-99

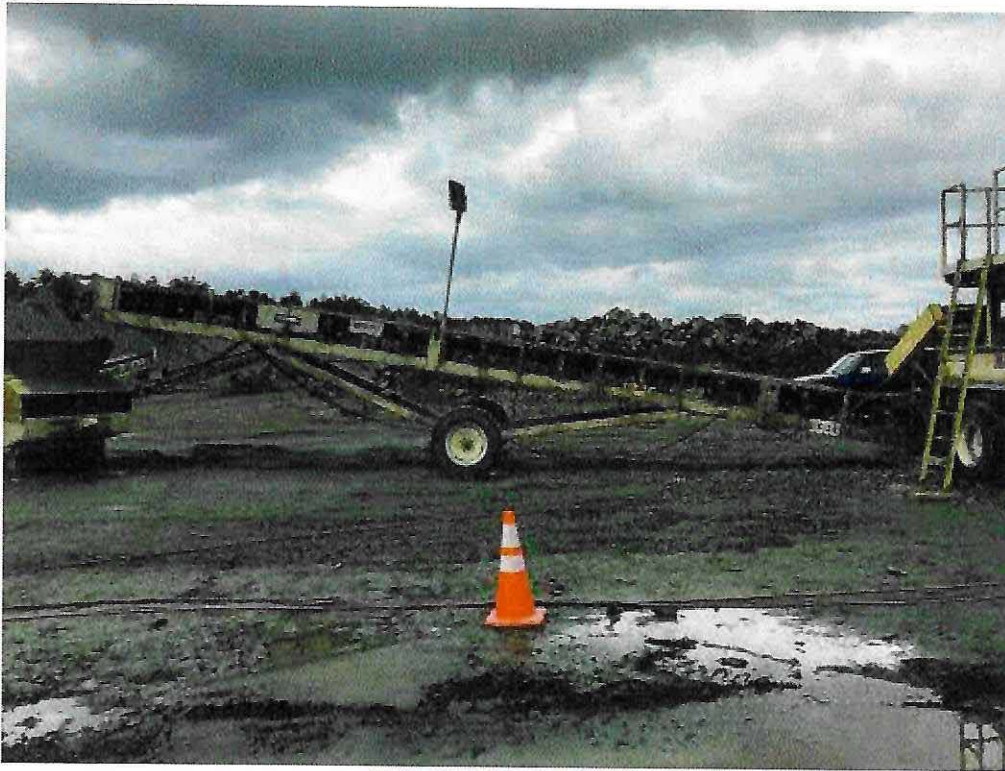


Image 2(Tilden2) : CC-18 Cone Crusher SRN N6721 PTI# 83-99



Image 3(Tilden3) : RS-11 Radial Stacker





**Image 4(Tilden4)** : RS-14 Radial Stacker



**Image 5(Tilden5)** : RS-28 Radial Stacker



**Image 6(Tilden6)** : RS-29 Radial Stacker





**Image 7(Tilden7)** : SP-18 Screen Plant



**Image 8(Tilden8)** : CV-77 Conveyor



**Image 9(Tilden9)** : CV-78 Conveyor





**Image 10(Tilden10)** : CV-79 Conveyor





Image 11(Tilden11) : CV-81 Conveyor



Image 12(Tilden12) : H2O is sourced from a pond on site at the CR 550 Pit



**Image 12(Tilden12) :** H2O is sourced from a pond on site at the CR 550 Pit

NAME

J. S. [Signature]

DATE

9/27/21

SUPERVISOR

[Signature]