



Missouri Department of

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NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

SEP 19 2017

Mr. Schuyler Johnson
Environmental, Health and Safety Manager
Lhoist North America of Missouri, Inc.
PO Box 488
Ste. Genevieve, MO 63670

RE: New Source Review Permit Amendment - Permit Number: 042017-001A
Project Number: 2017-08-001; Installation Number: 186-0035

Dear Mr. Johnson:

This amendment is in response to your plans to replace the existing crusher, screen, and associated conveyors described in permit 042017-001. Lhoist North America of Missouri, Inc (LNA) is planning to replace the current IROCK TC-20 rock crusher with a 1400-45 CCS Crushing and Screening System manufactured by Eagle Crusher. The maximum hourly design rate of the new crusher will be 350 tons per hour. In permit 042017-001, LNA has a production limit of 400,000 tons per year of crushed rock. This production limit will remain in place. All other conditions in permit 042017-001 remain in place as well.

Other changes associated with replacing the crusher and screening system includes eliminating the two 100 square feet oversized rock storage piles and removing the nonroad engines. With the new system the oversized rock will be directly conveyed back to the new crusher. By eliminating the oversized piles, there will no longer be any wind erosion emissions from the oversized rock piles. Wind erosion emissions were the only emissions previously considered from the oversized rock storage piles.

The rock crusher is being replaced to switch the equipment to all electric power and improve the efficiency. The new equipment is all electric and will be powdered off the grid so the two nonroad engines have been removed from the equipment list. The new equipment list for this project is listed in the following table.



Recycled paper

Table 2: Equipment List

Unit ID	Equipment	Make/Model	True Capacity (tons/hour)	Plant Capacity (tons/ hour) ^a	MFG Year
EP-275	Truck unloading		N/D	350	
EP-276	Primary Crusher	Eagle Crusher 1400-45 CCS	Varies per manufacturer	350	2017
EP-277	Crusher Conveyor to Conveyor				
EP-278	Conveyor to Conveyor for Screen		N/D	350	
EP-279	Screen	Eagle Crusher 1400-45 CCS	Varies per manufacturer	350	2017
EP-280	Conveyors (2) off screen ^b				
EP-281	Conveyor for Oversized Rock		N/D	350	
EP-282	Conveyor to Limestone Storage Conveyor		N/D		
EP-283	Conveyor to Limestone Storage		N/D	350	
EP-284	Haul Road	Unpaved (3,643 feet)	N/D	350	
EP-285	Delivery Storage piles Load-in		N/D	350	
EP-286	Delivery Storage piles Load-out		N/D	350	
EP-287	Storage pile vehicular activity	Unpaved (100 feet)	N/D	350	
EP-288	Storage pile wind erosion		N/D	0.21 Acres (9,000 square feet)	

N/D= Not Determined

^aThe primary crusher serves as a bottleneck for the plant since all rock is initially processed by the primary crusher. The capacity of the primary crusher is 350 tons per hour.

^bEmissions were calculated such that 100% of the product was transferred off of each screen across one conveyor

The Table below summarizes the updated emissions of this project. The potential emissions of the process equipment exclude emissions from haul roads and wind erosion. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). Previously, the MHDR of the rock crusher was 500 tons per hour. The new Eagle Crusher has an MHDR of 350 tons per hour and as a result unconditioned potential emissions are lower. According to the applicant the MHDR varies

depending on the rock being crushed. The manufacturer provided the applicant a performance standard of 250 tph. The MHDR of 350 tph was selected as a conservative estimate. The conditioned potential emissions remain approximately the same since the project still includes the same 400,000 tons of processed rock limit. There was a slight decrease from the removal of the oversized rock storage piles and associated wind erosion; however with only 200 square feet of oversize storage piles the change was not significant enough to affect the values in the table. Conditioned potential emissions account for a voluntary production limit in any 12 month period to less than 400,000 tons of processed rock in order to avoid a PSD review.

Table 3: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	Existing Potential Emissions	^a Potential Emissions of Application Process Equipment (tons/yr)	^b Potential Emissions of the Application	Conditioned Potential Emissions Of the Application
PM	25.0	Major	6.29	152.67	19.91
PM ₁₀	15.0	Major	2.31	59.31	7.73
PM _{2.5}	10.0	Major	0.47	11.15	1.45
SO _x	40.0	Major	N/A	N/A	N/A
NO _x	40.0	Major	N/A	N/A	N/A
VOC	40.0	Major	N/A	N/A	N/A
CO	100.0	Major	N/A	N/A	N/A
CH ₂ O (formaldehyde)	2.0	Major	N/A	N/A	N/A
HAPs	10.0/25.0	Major	N/A	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

^aProcess Equipment excluding haul roads and storage pile emissions.

^bIncludes haul road and storage pile emissions

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.ao.mo.gov/ahc.

Mr. Schuyler Johnson
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If you have any questions regarding this amendment, please do not hesitate to contact Chad Stephenson, at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Handwritten signature of Kendall B. Hale in cursive.

Kendall B. Hale
Permits Section Chief

KBH:csj

Enclosures

c: Southeast Regional Office
PAMS File: 2017-08-001