

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

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JUN 09 2014

Mr. Robert E. Loch
Treasurer
Loch Sand and Construction Co.
Highway 71 N. Business Route
Maryville, MO 64468

RE: New Source Review Temporary Permit Request - Project Number: 2014-04-058

Installation ID Number: PORT-0065
Temporary Permit Number: **062014-004**
Expiration Date: June 1, 2015

Dear Mr. Loch:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to relocate PORT-0065 to Loch Sand and Construction Co.'s facility, located in Maryville, Missouri. The Air Pollution Control Program is hereby granting your request to conduct this temporary operation at this location in accordance with Missouri State Rule 10 CSR 10-6.060(3).

PORT-0065 has been in storage since its last relocation expired June 17, 2009. The existing concrete plant located at Site ID: 147-0013 is being repaired and PORT-0065 will relocate there to provide concrete while the stationary concrete plant is out of commission. The existing stationary plant and PORT-0065 shall not operate simultaneously. Once the stationary plant is repaired, PORT-0065 must cease production and move from that site. PORT-0065 shall only be allowed to operate 12 months at this site, ending June 1, 2015.

Permission to move to the new site at Highway 71 N. Business Route, Maryville, Missouri, Nodaway County (S6 T64N R35W) is conditioned upon the following:

- Loch Sand and Construction Co. must notify the Kansas City Regional Office of equipment start-up within fifteen (15) days after start-up of operations at the new site.
- Permission for the equipment to operate at this site expires on June 1, 2015.
- Ambient Air Impact Limitation-PORT-0065 shall not cause an exceedance of the National Ambient Air Quality Standard (NAAQS) for particulate matter less than ten microns in aerodynamic diameter (PM₁₀) of 150.0 µg/m³ 24-hour average in ambient air. PORT-0065

shall demonstrate compliance with NAAQS using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

Screening tools were used to evaluate the ambient air impact of the hourly emissions from this portable plant at a distance of 175 feet to the nearest property line. Loch Sand and Construction Co. has agreed to use Best Management Practices (BMPs), as defined in Attachment AA; haul roads and stockpiles are not modeled with screening tools. Instead, they are addressed as a background level of 20 $\mu\text{g}/\text{m}^3$ of PM_{10} . To ensure conformity with NAAQS, the remaining process emissions are limited to an impact of less than 130 $\mu\text{g}/\text{m}^3$ of PM_{10} at or beyond the property line.

Table 1: Ambient Air Quality Impact Analysis of PM_{10} , 24-Hour Averaging Time

Pollutant	NAAQS/ RAL ($\mu\text{g}/\text{m}^3$) ^a	Averaging Time	Maximum Modeled Impact ($\mu\text{g}/\text{m}^3$) ^b	Limited Impact ($\mu\text{g}/\text{m}^3$)	Background ($\mu\text{g}/\text{m}^3$)	Daily Limit (tons/day) ^c
PM_{10} (solitary) ^d	150.0	24-hour	907.36	130.0	20.0	2,411.2

^a National Ambient Air Quality Standards (NAAQS)

^b Modeled impact at maximum capacity with controls

^c Indirect limit based on compliance with NAAQS.

^d Solitary operation; existing stationary concrete plant is not allowed to operate concurrently.

The plant will be powered by a diesel engine, however it meets the definition of nonroad engine as defined in 40 CFR 89.2 (1)(i). Therefore, the emissions of the engine were not included in the project emissions.

Table 2: Emissions Summary (tons per year)

Air Pollutant	Regulatory <i>De Minimis</i> Levels	*Existing Actual Emissions (EIQ)	Potential Emissions of the Application	**Conditioned Potential Emissions
PM	25.0	N/D	438.02	73.34
PM_{10}	15.0	N/D	124.27	20.81
$\text{PM}_{2.5}$	10.0	N/D	37.29	6.24
SOx	40.0	N/D	0.0	0.0
NOx	40.0	N/D	0.0	0.0
VOC	40.0	N/D	0.0	0.0
CO	100.0	N/D	0.0	0.0
HAPs	10.0/25.0	N/D	0.0	0.0

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

*PORT-0065 has been in storage for the past five years and has not submitted an EIQ

** Conditioned Potential Emissions are based on control devices and ambient air limit to show compliance with NAAQS

PM , PM_{10} , and $\text{PM}_{2.5}$ emissions from the concrete batch plant were calculated using emission factors from AP-42, Section 11.12 "Concrete Batching," June 2006. This section cites Equation

Mr. Robert E. Loch

Page 3

(1) in Section 13.2.4 "Aggregate Handling and Storage Piles," November 2006 for calculating the emissions from aggregate and sand transfer. The cement and supplement silos are controlled with baghouses, so the controlled emission factors were used. PM, PM₁₀, and PM_{2.5} emissions from the aggregate weigh hopper were calculated using AP-42, Section 13.2.4, Equation (1). These emissions are controlled by a baghouse so a 99% control factor was applied to the calculation. PM, PM₁₀, and PM_{2.5} emissions from mix truck loading are controlled by a shroud vented to a baghouse, so the controlled/ emission factor was used.

You are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, or any other applicable federal, state, or local agency regulations. Specifically, you should avoid violating 10 CSR 10-6.045 *Open Burning Requirements*, 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.165 *Restriction of Emission of Odors*, 10 CSR 10-6.170 *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, and 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes*.

A copy of this letter should be kept with the unit and be made available to Department of Natural Resources' personnel upon request. If you have any questions regarding this determination, please do not hesitate to contact Kathy Kolb at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Kyfa L. Moore
Director

KLM:kk1

c: PAMS File: 2014-04-058
Kansas City Regional Office

