



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

DEPARTMENT OF NATURAL RESOURCES

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JUN 03 2016

Ms. Michelle Thomas
Managing Partner
Thomas Crushing, LLC
PO Box 1468
Lee's Summit, MO 64083

RE: New Source Review Temporary Permit Request - Project Number: 2016-05-029

Installation ID Number: 165-0007 (KCP&L Iatan Power Plant)

Expiration Date: November 25, 2016

Temporary Permit Number:

06 2 0 1 6 - 0 0 2

Dear Ms. Thomas:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to relocate PORT-500 to crush concrete and bottom ash at the Kansas City Power and Light Iatan's facility in Weston, Missouri in Platte County (S31 T54N R36W). 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).

Thomas Crushing, LLC plans to relocate PORT-0500 consisting of a grizzly, primary crusher and three conveyors. Broken concrete/ash from the existing stockpile will be loaded into the crusher, and then the crushed material will be conveyed onto a separate stockpile. Water spray devices will be operated while the portable plant is located at this site. All of the crushed aggregate will remain onsite; therefore, there are no haul roads calculated for this project. Once the broken concrete/ash is crushed, the portable crusher will be removed from this site.

Emissions for the project were calculated using emission factors found in the United States Environmental Protection Agency (EPA) document AP-42 Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources, Fifth Edition (AP-42). Emissions from the rock-crushing equipment were calculated using emission factors from AP-42 Section 11.19.2 "Crushed Stone Processing and Pulverized Mineral Processing," August 2004. The plant will be powered by 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.



Recycled Paper

There are trace element concentrations in coal bottom ash as stated in Table 6, "Reuse Options For Coal Fired Power Plant Bottom Ash and Fly Ash," Jayaranjan, Hullebusch, and Annachhatrewe, 01 April 2014, "Characterization of Coal Combustion Residues from Electric Utilities – Leaching and Characterization Data" EPA December 2009, "Chemical Constituents In Coal Combustion Product Leachate: Beryllium" EPRI November 2006, "Technical Memorandum, Technical Briefing Paper on Selenium" prepared by Exponent for TVA July 2010, and "Coal Ash: Characteristics, Management and Environmental Issues: EPRI September 2009. The highest concentration found in subbituminous coal ash for each of the concerned HAPs was used to calculate the HAPs emission from particulate matter. All individual HAPs were below the SMAL and de minimis level except for Arsenic. Combined HAPs are below the 25.0 ton de minimis level. Thomas Crushing, LLC shall take a voluntary production limit in order to remain below the SMAL for arsenic.

Permission to operate the portable crusher at this site is granted for the time period between July 1, 2016 and December 31, 2016 resulting in a maximum potential operating time 800 hours during the time period of 184 days. Potential emissions were calculated assuming hours of operation to be 800 hours. This voluntary limit is to insure arsenic emissions remain below the SMAL of 0.005 tons per year. Potential emissions for this project are summarized in Table 1 below:

Table 1: Allowable Emissions for 800 hours of Operation Summary (tons)

PM	PM ₁₀	PM _{2.5}	Arsenic/SMAL	HAPs
9.65	4.52	0.68	0.0049/0.005	0.0340

Thomas Crushing, LLC is authorized to construct and operate subject to the following special conditions:

1. Thomas Crushing, LLC shall install and operate wet spray devices on the crusher (EP-03). Watering may be suspended during periods of freezing condition, when use of the wet spray devices may damage the equipment. During these conditions, Thomas Crushing, LLC shall adjust the production rate to control emissions from these units. Thomas Crushing, LLC shall record a brief description of such events.
2. Once the broken concrete and bottom/fly ash is crushed, the portable crusher shall be removed from this site, in any case, no later than December 31, 2016.
3. Thomas Crushing, LLC shall not exceed 800 hours of operation. They shall keep records of the days operated with hours of operation on site.

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,

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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 portable plant and be made available to Department of Natural Resources' personnel upon verbal 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



Kyra L. Moore
Director

KLM:kkj

c: PAMS File: 2016-05-029
Kansas City Regional Office