



Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

**MAY 30 2019**

Mr. Scott Jinks  
Plant Manager  
Capital Sand Proppants, LLC  
418 County Road 347  
Jackson, MO 63755

RE: New Source Review Permit Amendment - Permit Number: 032018-012B  
Project Number: 2018-12-020; Installation Number: 031-0133

Dear Mr. Jinks:

Capital Sand Proppants, LLC (Capital Sand) owns a sand manufacturing facility located near Jackson, Missouri. The plant currently operates under Construction Permit 032018-012 and 032018-012A which limits installation wide NO<sub>x</sub> emissions to 40 tons per year. Capital Sand is requesting to remove the 40 tons per year NO<sub>x</sub> plant wide emission limit. In order to remove the NO<sub>x</sub> limit, ambient air quality modeling was performed. The installation includes two NO<sub>x</sub> emission sources both of which are natural gas fueled dryers. Dryer EP-19 has heat input of 125 MMBtu/hr and dryer EP-59 has a heat input of 150 MMBtu/hr.

Capital Sand was issued a permit amendment 032018-012A to revise the NO<sub>x</sub> emission factor for the dryers to 110 lb/MMCF (from manufacturer documentation) as calculated using guarantees of the dryer manufacturers. The amendment allowed Capital Sand to remain under the 40 tpy plant wide NO<sub>x</sub> limit with current operations. Capital Sand now has requested to remove this 40 tpy plant wide NO<sub>x</sub> limit by performing ambient air quality modeling. The ambient air quality modeling completed with this project uses the more conservative AP-42 NO<sub>x</sub> emission factor of 140 lb/MMCF. More information regarding the modeling analysis can be found in the memo "Ambient Air Quality Impact Analysis (AAQIA) for Capital Sand Proppants, LLC – NO<sub>x</sub> Amendment (January 2019)" from the Modeling Unit. The results in the memo show compliance with applicable standards.

Table 1 provides an updated emission summary for the installation. Existing actual emissions are from the 2017 EIQ. The new installation potential emissions represent the updated emissions which account for all applicable special conditions.



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Table 1: Emissions Summary (tpy)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Actual Emissions (2017 EIQ)	New Installation Potential
PM	25.0	N/D	69.25
PM <sub>10</sub>	15.0	8.02	44.96
PM <sub>2.5</sub>	10.0	6.09	34.96
SO <sub>x</sub>	40.0	0.06	0.71
NO <sub>x</sub>	40.0	13.97	165.33
VOC	40.0	0.54	6.49
CO	100.0	8.38	99.19
GHG (CO <sub>2</sub> e)	N/A	N/D	142,568
GHG (mass)	N/A	N/D	141,711
HAPs	10.0/25.0	N/D	2.23

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

Since potential NO<sub>x</sub> emissions now exceed 100 tpy, a submittal of an application for an Intermediate Operating Permit is required for this installation within 90 days of permit issuance or a Part 70 Operating Permit is required within a year of permit issuance.

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](http://www.ao.mo.gov/ahc).

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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

A handwritten signature in cursive script that reads "Kendall B. Hale".

Kendall B. Hale  
Permits Section Chief

KBH:sck

Enclosures

c: Southeast Regional Office  
PAMS File: 2018-12-020

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Permit No.	032018-012B
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**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

*The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."*

Capital Sand Proppants, LLC  
Cape Girardeau County, S36, T32N, R11E; S1, T31N, R11E; S6, T31N, R12E; and LG 3142

1. **Superseding Condition**  
This condition supersedes and remove Special Conditions 2 found in the previously issued construction permit 032018-012A issued by the Air Pollution Control Program.
2. **Modification to Release Parameters Requirement**  
Capital Sand Proppants, LLC shall notify the Air Pollution Control Program prior to making any modifications to the facility that impact the release parameters and/or emission rates listed in the memo: *Ambient Air Quality Impact Analysis (AAQIA) for Capital Sand Proppants, LLC – NO<sub>x</sub> Amendment*. In the event that the Air Pollution Control Program determines the changes are significant, Capital Sand Proppants, LLC shall submit an updated AAQIA indicating compliance with the NAAQS.