

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **082012-009**

Project Number: 2011-09-068
Installation Number: 510-2790

Parent Company: Kinder Morgan Operating LP, C

Parent Company Address: 2 Monsanto Ave., Sauget, IL 62201

Installation Name: Kinder Morgan-Sarpy Railport

Installation Address: 1200 Central Industrial Drive, St. Louis, MO 63110

Location Information: St. Louis City, Latitude: 38.628027, Longitude: -90.243589

Application for Authority to Construct was made for:

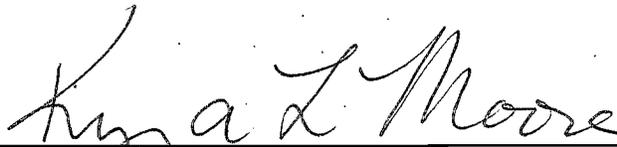
A construction permit of an existing transfer station for soda ash and alumina from railcar to truck. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

AUG 17 2012

EFFECTIVE DATE


DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of startup of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual startup of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 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 AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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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."

Kinder Morgan-Sarpy Railport

St. Louis City County, Latitude: 38.628027, Longitude:-90.243589

1. Particulate matter less than 2.5 microns in aerodynamic diameter (PM_{2.5})
Emission Limitation
 - A. Kinder Morgan-Sarpy Railport shall emit less than 10.0 tons of PM_{2.5} in any consecutive 12-month period from the entire installation (see table 1).

Table 1: Kinder Morgan-Sarpy Railport Emission Points

Emission Point	Description
EP-01	Drop point from railcar to conveyor
EP-02	Drop point from conveyor to truck
EP-03	Haul roads

- B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A.
2. Record Keeping and Reporting Requirements
 - A. Kinder Morgan-Sarpy Railport shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
 - B. Kinder Morgan-Sarpy Railport shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2011-09-068
Installation ID Number: 510-2790
Permit Number:

Kinder Morgan-Sarpy Railport
1200 Central Industrial Drive
St. Louis, MO 63110

Complete: November 2, 2011

Parent Company:
Kinder Morgan Operating LP, C
2 Monsanto Ave.
Sauget, IL 62201

St. Louis City, Latitude: 38.628027, Longitude: -90.243589

REVIEW SUMMARY

- Kinder Morgan-Sarpy Railport has applied for authority to operate a transfer station for soda ash and alumina from railcar to truck.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards apply to the installation.
- None of the National Emission Standards for Hazardous Air Pollutants apply to this installation. None of the currently promulgated Maximum Achievable Control Technology regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment. Kinder Morgan-Sarpy Railport's uses a loading spout that covers the entry into truck while loading. A 50 percent control efficiency was given to this emission points.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of particulate matter less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$) are conditioned below the de minimis level. Potential emissions of particulate matter less than 100 microns in aerodynamic diameter (PM) are above de minimis levels but below the major source level.
- This installation is located in St. Louis City County, a nonattainment area for the 8-hour ozone standard and the $PM_{2.5}$ standard and an attainment area for all other criteria pollutants.

- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling for particulate matter less than 10 microns in aerodynamic diameter (PM_{10}) and $PM_{2.5}$ was not performed since potential emissions of the application for these pollutants are conditioned below de minimis levels. Modeling is not required for PM.
- An emission testing is not required for the equipment.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION/PROJECT DESCRIPTION

Kinder Morgan Operating LP, C (Kinder Morgan) operates a transfer operation, Kinder Morgan – Sarpy Railport (Sarpy Railport), located in St. Louis, Missouri to transfer bulk material from enclosed hopper bottom rail cars to trucks. The transfers are completed with the use of a covered conveyor system. The transfer operation consists of two emission points. The first emission point is the drop point from the rail car to conveyor's drag chain (EP-01). The second emission point is the drop point from the conveyor into the truck (EP-02). Sarpy Railport handles two types of material, alumina and soda ash. A 50 percent control efficiency was given to each transfer point as the conveyor is completely enclosed and the truck loading spout covers the entry into truck while loading. The maximum hourly transfer rate of the conveyor is 70 tons per hour.

EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, 8.12 "Sodium Carbonate" (July 1993), 11.24 "Metallic Materials Processing" (August 1982), and 13.2.1 "Paved Roads" (January 2011). The emission factor for soda ash handling from AP-42 was for total particulate matter from soda ash storage/loading and unloading. The emission factor for alumina handling from AP-42 was for total particulate matter from material handling and transfer of bauxite/alumina. A 50 percent control efficiency was given for the loading spout that covers the entry into truck is used while the material is loading. Kinder Morgan supplied a particle size distribution for the alumina and soda ash that is handled by their equipment. The alumina particle size distribution showed that 55 percent of the material is PM, 2.80 percent of the material is PM_{10} , and 1.80 of the material is $PM_{2.5}$. The soda ash particle size distribution showed that 5.1 percent of the material is particulate matter less than 149 microns in aerodynamic diameter and 1.00 percent of the material is particulate matter less than 79 microns in aerodynamic diameter. Since no analysis for particles less than 79 microns in aerodynamic diameter was completed on the soda ash it was assumed that 5.1 percent of the material to be PM, 1.00 percent of the material to be PM_{10} and 1.00 percent of the material to be $PM_{2.5}$. Using the AP-42 emission factor, the

total particulate matter potential emissions were calculated. The particle size distribution was then applied to the total particulate matter potential emissions to calculate to total PM, PM₁₀, and PM_{2.5} potential emissions. The PM potential emissions from the product transfer were found to be higher when handling alumina. The PM₁₀ and PM_{2.5} potential emissions from the product transfer were found to be higher when handling soda ash.

Missouri State Rule 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes* applies to the Sarpy Railport facility. After review of the potential emissions of this project Sarpy Railport was found to be in compliance with this rule.

The following table provides an emissions summary for this project. The PM potential emissions represent the potential emissions while handling alumina and PM₁₀ and PM_{2.5} potential emissions represent the potential emissions while handling soda ash. Potential emissions of the application represent the potential of the all the equipment at this installation, assuming continuous operation (8760 hours per year).

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/A	N/A	194.85	122.22
PM ₁₀	15.0	N/A	N/A	15.94	10.00
PM _{2.5}	10.0	N/A	N/A	15.94	<10.00
SOx	40.0	N/A	N/A	N/A	N/A
NOx	40.0	N/A	N/A	N/A	N/A
VOC	40.0	N/A	N/A	N/A	N/A
CO	100.0	N/A	N/A	N/A	N/A
HAPs	10.0/25.0	N/A	N/A	N/A	N/A

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

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM_{2.5} are conditioned below the de minimis level. The potential emissions of PM are above the de minimis level, but below the major source level.

APPLICABLE REQUIREMENTS

Kinder Morgan-Sarpy Railport shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Gerad Fox
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated October 31, 2011, received November 2, 2011, designating Kinder Morgan Operating LP, C as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Particle Size Distribution of Soda Ash and Alumina performed by Terracon, February 16, 2012 and June 14, 2012

Attachment A: PM_{2.5} Annual Emissions Tracking Sheet
 Kinder Morgan – Sarpy Railport 510-2790
 Project Number: 2011-09-068
 Permit Number:

This sheet covers the period from _____ to _____ (Copy this sheet as needed.)
 (Month, Day Year) (Month, Day Year)

(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Month	Product Transferred (tons)		PM _{2.5} Emission Factor (lb/ton)	Monthly PM _{2.5} Emissions (pounds)	Monthly PM _{2.5} Emissions (tons)	Previous Month's 12-Month PM _{2.5} Emissions (tons)	Monthly PM _{2.5} Emissions from Previous Year (tons)	Current 12-Month PM _{2.5} Emissions (tons)
<i>Example</i> 08/2012	<i>Soda Ash</i>	<i>4000</i>	<i>0.0795</i>	<i>214</i>	<i>0.139</i>	<i>0</i>	<i>0</i>	<i>.139</i>
	<i>Alumina</i>	<i>3000</i>	<i>0.0312</i>	<i>63.9</i>				
	Soda Ash		0.0795					
	Alumina		0.0312					
	Soda Ash		0.0795					
	Alumina		0.0312					
	Soda Ash		0.0795					
	Alumina		0.0312					
	Soda Ash		0.0795					
	Alumina		0.0312					
	Soda Ash		0.0795					
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	Soda Ash		0.0795					
	Alumina		0.0312					
	Soda Ash		0.0795					
	Alumina		0.0312					
	Soda Ash		0.0795					
	Alumina		0.0312					

- (a) Record the current date.
- (b) Record this month's product that has been transferred from railcar to truck.
- (c) PM_{2.5} emission factor for each material.
- (d) (d) = (b) x (c). Do this calculation for each material
- (e) (e) = [(d) for soda ash + (d) for alumina] / 2,000
- (f) Record the 12-month PM_{2.5} emissions (h) from last month.
- (g) Record the monthly PM_{2.5} emissions (e) from this month last year.
- (h) Calculate the new 12-month PM_{2.5} emissions. (h) = (e) + (f) – (g) A value less than 10.0 tons of PM_{2.5} indicates compliance.

Mr. Dana Yanchunas
EHS Manager
Kinder Morgan-Sarpy Railport
2 Monsanto Ave.
Sauget, IL 62201

RE: New Source Review Permit - Project Number: 2011-09-068

Dear Mr. Yanchunas:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions and your new source review permit application is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Gerad Fox, at the Department of Natural Resources' 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

Susan Heckenkamp
New Source Review Unit Chief

SH:gfl

Enclosures

c: St. Louis Regional Office
PAMS File: 2011-09-068

Permit Number: