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: 072017-010

Project Number: 2017-04-029
Installation Number: 510-2790

Parent Company: Watco Companies, LLC

Parent Company Address: 315 W 3rd St., Pittsburg, KS 66762

Installation Name: Watco Transloading, LLC

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

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

Application for Authority to Construct was made for:
The installation of a Rail Barge Truck (RBT) conveyor system for unloading soda ash, alumina, and alpite from railcar hoppers to tanker trucks. 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.

Hans Robinson

Prepared by
Hans Robinson
New Source Review Unit

Kyra L Moore

Director or Designee
Department of Natural Resources

JUL 19 2017

Effective Date

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 Enforcement and Compliance Section of 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 Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's 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 source(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 using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
http://dnr.mo.gov/regions/

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."

Watco Transloading, LLC
St. Louis County, Latitude: 38.628027,Longitude: -90.243589

1. Superseding Condition
   A. The conditions of this permit supersede all special conditions found in the previously issued construction permit amendment 082012-009A issued by the Air Pollution Control Program.

2. PM Emission Limitation
   A. Watco Transloading, LLC shall emit less than 250.0 tons of PM in any consecutive 12-month period from the entire installation as defined in Table 1

Table 1: Watco Transloading, LLC Emission Points

Emission Point	Description
EP-01	Drop point from railcar to 70 tph conveyor
EP-02	Drop point from 70 tph conveyor to truck
EP-03	Haul Roads
EP-04	Drop point from railcar to 100 tph conveyor
EP-05	Drop point from 100 tph conveyor to truck

   B. Filterable PM emissions from the facility shall include those generated during startup, shutdown and malfunction as reported to the Air Pollution Control Program Compliance and Enforcement section.

   C. 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 2.A.

3. Control Device Requirement – Baghouse, Fan Motor, Cleaner Motor
   A. Watco Transloading, LLC shall control emissions from the following emission points using baghouses, fan motors, and cleaner motors as specified in the permit application.
      1) Drop point from railcar to conveyor (EP-01)
      2) Drop point from conveyor to truck (EP-02)
      3) Drop point from railcar to conveyor (EP-04)
      4) Drop point from conveyor to truck (EP-05)

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

B. The baghouses, fan motors, and cleaner motors shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.

C. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance). The replacement filter material type and weight shall meet or exceed the specifications of the existing filter. The air to cloth ratio or air to filter ratio shall not be increased when filter replacement is performed.

D. Watco Transloading, LLC shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. Days with no production shall be indicated. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

E. Watco Transloading, LLC shall maintain a copy of the baghouse, fan motor, and cleaner motor manufacturer's performance warranty on site.

F. Watco Transloading, LLC shall maintain an operating and maintenance log for the baghouses, fan motors, and cleaner motors which shall include the following:
   1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
   3) Dates of all above schedules, incidents, activities, and actions.

4. Control Device Requirement – Retractable Tail Cover, Railcar Loadout

A. Watco Transloading, LLC shall control emissions from the railcar hopper loadout using a retractable tail cover. The opening of the tail cover shall extend to the opening of the railcar hopper such that all material from the railcar hopper falls into the tail cover.

B. In the event that the tail cover opening cannot completely reach the hopper opening due to the design of the railcar underside around the railcar hopper, the tail cover shall extend as far as possible toward the hopper such that the top of the tail cover is physically touching the interfering railcar underside.

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

C. Watco Transloading, LLC shall maintain an operating and maintenance log for the tail cover which shall include the following:
   1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
   3) Calculated emissions from shipments of alumina, soda ash, or aplite that result from conveying material without using the fully extended tail cover defined in Special Condition 4.A and 4.B. Watco Transloading shall calculate the resulting emissions using the *Overall EF without Tail Cover* factors found in Table 2 of the EMISSIONS/CONTROLS EVALUATION section. These emissions shall be added to the Monthly PM Emissions (tons) total found in column (e) of Attachment A.

5. Capture Device Requirement – Flex Spout to Tanker Truck
   A. Watco Transloading, LLC shall ensure that the opening of the flex spout is physically touching the opening of the tanker truck while material is being conveyed and dropped into the tanker truck.

   B. Watco Transloading, LLC shall maintain an operating and maintenance log for the flex spout which shall include the following:
      1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
      2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
      3) Calculated emissions from shipments of alumina, soda ash, or aplite that result from conveying material without physically touching the flex spout to the tanker truck defined in Special Condition 5.A. Watco Transloading shall calculate the resulting emissions using the *Overall EF without Flex Spout* factors found in Table 2 of the EMISSIONS/CONTROLS EVALUATION section. These emissions shall be added to the Monthly PM Emissions (tons) total found in column (e) of Attachment A.

6. Record Keeping and Reporting Requirements
   A. Watco Transloading, LLC 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. Watco Transloading, LLC 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 shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW
Project Number: 2017-04-029
Installation ID Number: 510-2790
Permit Number: 072017-010

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

Parent Company:
Watco Companies, LLC
315 W 3rd St.
Pittsburg, KS 66762

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

REVIEW SUMMARY

- Watco Transloading LLC has applied for authority toThe installation of a Rail Barge Truck (RBT) conveyor system for unloading soda ash, alumina, and alpite from railcar hoppers to tanker trucks.
- The application was deemed complete on April 20, 2017.
- HAP emissions are not expected from the proposed equipment.
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- A baghouse is being used to control the PM, PM_{10}, $PM_{2.5}$ emissions from the equipment in this permit.
- 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 are above de minimis but conditioned below major source levels. Emissions of PM_{10} and $PM_{2.5}$ are below de minimis.
- This installation is located in St. Louis City, 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 was not performed since there is no ambient air standard for PM and all other pollutants are below de minimis.

- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Watco Terminals and Port Services operates a transfer operation, Watco Transloading LLC – Sarpy Railport (Sarpy Railport, formerly owned by Kinder Morgan), located in St. Louis, Missouri to transfer bulk material from rail car hoppers 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, EP-04). The second emission point is the drop point from the conveyor into the truck (EP-02, EP-05). Sarpy Railport handles three types of material: alumina, soda ash, and aplite. The maximum hourly transfer rate of the existing conveyor is 70 tons per hour. With this permit, a 100 tph conveyor will be added to the facility which will be nearly identical to the existing 70 tph conveyor in operation. The entire facility has received a 250 tpy PM limit. The facility is de minimis for $PM_{2.5}$ and PM_{10}, but a minor source for PM. All material leaving the facility will travel over a paved haul road (EP-03). The $PM_{2.5}$ limit imposed in construction permit amendment No. 082012-009A is no longer applicable because the 250 tpy PM limit indirectly restricts $PM_{2.5}$ to below the de minimis level.

The following New Source Review permits have been issued to Watco Transloading, LLC from the Air Pollution Control Program.

Table 2: Permit History

Permit Number	Description
082012-009	Single Wilson mobile conveyor system for transferring soda ash and Alumina
082012-009A	Amended 082012-009 to include Aplite material emissions

PROJECT DESCRIPTION

Watco Transloading – Sarpy has applied for authority to construct an additional covered conveyor system for transporting alumina, soda ash, and aplite from railcar to truck transport. The new conveyor will be able to transfer 100 tons per hour (tph) of material as opposed to the previous conveyor which could only transfer 70 tph of material. Otherwise both conveyors are nearly identical in operation (both conveyors will be housed in a covered conveyor system and controlled by a baghouse, fan motor, and cleaner motor. The fan motor will pull air through the baghouse and the cleaner motor will agitate the baghouse for cleaning purposes). There will be an increase in paved haul road emissions associated with the additional 100 tph of material transport.

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 11.24 "Metallic Materials Processing" (August 1982), and 13.2.1 "Paved Roads" (January 2011). The emission factor for alumina handling from AP-42 was for total particulate matter from material handling and transfer of bauxite/alumina. Kinder Morgan (who previously owned the Sarpy location) supplied a particle size distribution for the alumina and soda ash that is handled by their equipment. The alumina particle size distribution showed that 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 1.00 percent of the material to be PM_{10} and 1.00 percent of the material to be $PM_{2.5}$. The previous permit amendment (082012-009A) potential to emit calculations for Aplite used a particulate distribution of 1.4% as PM_{10} and 1.4% as $PM_{2.5}$. Using the AP-42 emission factors for Alumina and Aplite found in AP-42 Table 11.24-2, the total particulate matter potential emissions were calculated. The particle size distribution was then applied to the total particulate matter potential emissions to calculate the total PM, PM_{10}, and $PM_{2.5}$ potential emissions. It was assumed 100% of emissions would result in PM (PM includes PM_{10} and $PM_{2.5}$ emissions). Consequently, PM emissions will need to be voluntarily limited because PM emissions evaluated over an 8760 hour basis will surpass 250 tpy, the major source threshold.

Permit amendment No. 082012-009A also assumed that the AP-42 Table 8.12-3 emission factor for 'Soda ash storage/loading and unloading' would be sufficient for calculating both railcar loadout and truck load-in emissions of soda ash. However, the emission factor rated 'E' and background documents suggest the emission factor was developed from a completely unrelated emission process (handling Soda Ash that results from ore refining and crushing). The AP-42 uncontrolled emission factor listed was also back calculated from a controlled emission factor which naturally adds inaccuracies to the factor. Ultimately it was deemed more appropriate to use the emission factor from AP-42 Table 11.12-2 Cement supplement unloading to elevated storage silo (pneumatic, SCC 3-05-011-17).

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. Worst case emissions result from the 100 tph railcar loadout of Soda Ash which has the potential to emit of 34.226 lbs/hour of PM. However if controls are not used, the emissions increase will put Watco Transloading in violation of 10 CSR 10-6.400. The lbs/hour PM limit, defined within the following equation was not exceeded with controls:

$$E\left(\frac{lb}{hour}\right) = 55.0 * \frac{tons}{hour}^{0.11} - 40 = 55.0 * 100^{0.11} - 40 = 51.277 \frac{lbs}{hour}\ limit \qquad \text{(eq 1)}$$

The length of the conveyor will be completely enclosed except for the bottom end which reaches under railcars and the top flex spout which unloads the conveyed material into a tanker truck. The flex spout is placed firmly against the top of the tanker truck such there are no emissions associated with the spout directly. However, as the tanker truck is filled, air is displaced. The displaced air will travel down the length of the enclosed conveyor where it will meet a dust collector (polyester fabric filter) approximately 7 feet from the bottom opening of the conveyor. There exists a 1 HP diesel fan motor rated at 600 CFM which will pull air within the conveyor through the filter on the 100 tph conveyor (the 70 tph uses a 5.7 hp motor). Manufacture's specifications for the filter are cited as controlling greater than 99% of PM/PM_{10}/$PM_{2.5}$. An additional 1/3 hp diesel cleaner motor will be attached to the 100 tph conveyor which will agitate the filter (the 70 tph conveyor uses a 5.3 hp motor). Agitated filter particulate buildup will fall into a wire mesh insert which will be cleaned in accordance with the manufacturer's performance warranty. The diesel fan motor and cleaner motor meet the definition of non-road engine as defined in 40 CFR 89.2 (1)(i) since both motors are attached to the conveyor and the conveyor is supported by a platform with wheels (i.e. the conveyor system can be wheeled around freely depending on where it is needed). Therefore, the emissions of the engine were not included.

When railcars are being unloaded, process material will fall from a railcar hopper onto a tray that feeds the conveyor. This drop point is covered by a retractable tail cover which creates a shroud around the bottom of the railcar hopper and the conveyor. After the initial fall to the feed tray, particulate emissions are expected to remain low. Essentially alumina, soda ash, or aplite will create a conic pile directly below the hopper. Once the top of the pile touches the bottom of the railcar hopper, material will no longer drop but instead roll down the sides of the pile, creating significantly less emissions then having material free fall to the conveyor tray. Most importantly, the fan motor for the filter will be pulling air, and particulate emissions, from the bottom of the conveyor. The previous permit amendment No. 082012-009A assigned the railcar loadout a 50% control efficiency. However, with the enclosed tail cover for Railcar loadout, 90% capture efficiency was used for the housing. Since 99% of material will be filtered from the conveyor, the resulting overall control efficiency of 89.1% was used for railcar loadout. In order to comply with Special Conditions 4.C.3 and 5.B.3, the following table lists various emission factors that should be used in the cases where emissions must be calculated when controls were not used.

Table 3: Overall EF (emission factors) Without Controls (lbs/ton)

Material	Overall EF without Tail Cover (EP-01, 04)			Overall EF without Flex Spout (EP-02, 05)			Overall EF no Controls (EP-01, 02, 04, 05)		
	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
Alumina	1.14448	0.03780	0.02164	1.253384	0.040854	0.023602	2.3979	0.0787	0.0452
Soda Ash	3.20488	0.03841	0.03336	3.515744	0.041519	0.036466	6.7206	0.0799	0.0698
Alpite	0.15468	0.00839	0.00334	0.166564	0.00856	0.003507	0.3212	0.0170	0.0068

All material will travel over an existing paved haul road. Estimated unloaded truck weight is 14.6 tons and loaded truck weight is 37.5 tons. The paved haul road to the installation averages between 875 feet for haul trucks entering the facility and 1,300 feet for hauling out of the facility (though neither distance is constant). The difference in haul road length arises from the fact that hauling occurs within a large paved lot. Most trucks will enter the lot and exit the lot on differing paths. Additionally, railcar unloading will happen at different spots along the 1200 feet of track bordering the lot. Total haul rate per hour is the same as the MHDR of both conveyors (170 tph).

The following table provides an emissions summary for this project. Existing potential emissions were taken from permit amendment 082012-009A. Existing actual emissions were taken from the installation's 2016 EIQ. Potential emissions of the application represent the potential of both conveyors and haul roads, assuming continuous operation (8760 hours per year).

Table 4: Emissions Summary (tpy)

Pollutant	Regulatory *De Minimis* Levels	Existing Potential Emissions	Existing Actual Emissions (2016 EIQ)	Controlled Potential Emissions of the Application[1]	New Installation Conditioned Potential[2,3]
PM	25.0	122.2	N/A	188.6	< 250
PM_{10}	15.0	10.0	1.088	6.6	7.7
$PM_{2.5}$	10.0	< 10.0	1.011	2.9	3.5
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

[1]On an 8760 hour basis, Soda Ash yields the worst emissions of $PM/PM_{10}/PM_{2.5}$.

[2] For continuous operation, the facility would meet the 250 tpy PM limit at 7086.3 hours of operation loading only soda ash. Therefore soda ash $PM_{10}/PM_{2.5}$ emissions evaluated over 7086.3 hours were compared to Alumina emissions over 8760 hours (note: aplite emissions are much lower than soda ash and alumina). Alumina PM_{10} emissions were largest and therefore listed above, while Soda Ash $PM_{2.5}$ emissions were largest and listed above. Essentially PM_{10} and $PM_{2.5}$ emissions are indirectly limited by the PM installation-wide limit. PM_{10} and $PM_{2.5}$ emissions were evaluated for each material when limiting PM emissions to 250 tpy and the worst-case for each pollutant is listed above.

[3]Potential Emissions of the Project include the emissions associated with both the 70 tph conveyor and the 100 tph conveyor. Calculations for the 70 tph conveyor were redone since new assumptions for PM emission rates and control efficiencies were used for the calculations in this permit.

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 are conditioned below major source levels.

APPLICABLE REQUIREMENTS

Watco Transloading LLC 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

- *Start-Up, Shutdown, and Malfunction Conditions,* 10 CSR 10-6.050
- *Submission of Emission Data, Emission Fees and Process Information,* 10 CSR 10-6.110
    - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.
- *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*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 4/14/2017, received 4/14/2017, designating Watco Companies, LLC as the owner and operator of the installation.

Other Relied Upon Documents

- E-mail Communications between John Vogler (Watco Transloading Contact) and the Missouri Air Pollution Control Program. This includes supplemental data submitted along with the e-mails.

Attachment A – PM Emissions Tracking Sheet

Watco Transloading LLC
St. Louis County, Latitude: 38.628027, Longitude: -90.243589
Project Number: 2017-04-029
Installation ID Number: 510-2790
Permit Number: 072017-010

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

(a)	(b)		(c)	(d)	(e)	(f)	
Month	Product Transferred (tons)		PM Emission Factor (lb/ton)	Monthly PM Emissions (pounds)	Monthly PM Emissions (tons)	Previous Month's 12-Month PM Emissions (tons)	Monthl from
Example 04/2013	*Soda Ash*	*4000*	*0.4071*	*1628.6*	*1.238*	*180.0*	
	Alumina	*4000*	*0.1644*	*657.5*			
	Aplite	*4000*	*0.0478*	*191.1*			
	Soda Ash		*0.4071*				
	Alumina		*0.1644*				
	Aplite		*0.0478*				
	Soda Ash		*0.4071*				
	Alumina		*0.1644*				
	Aplite		*0.0478*				
	Soda Ash		*0.4071*				
	Alumina		*0.1644*				
	Aplite		*0.0478*				
	Soda Ash		*0.4071*				
	Alumina		*0.1644*				
	Aplite		*0.0478*				
	Soda Ash		*0.4071*				
	Alumina		*0.1644*				
	Aplite		*0.0478*				

(a) Record the current date.
(b) Record this month's product that has been transferred from railcar to truck.
(c) PM emission factor for each material. If the Tail Cover and/or Flex Spout were not used to control emissions, substitute the appropriate uncontrolled emission factors from Table 2.
(d) (d) = (b) x (c). Do this calculation for each material
(e) (e) = [(d) for soda ash + (d) for alumina + (d) for aplite] / 2,000
(f) Record the 12-month PM emissions (h) from last month.
(g) Record the monthly PM emissions (e) from this month last year.
(h) Calculate the new 12-month PM emissions. (h) = (e) + (f) – (g) Include the startup, shutdown, and malfunction emissions as reported to the Air Pollution Control Program's Compliance/Enforcement Section during the same time period according to the provisions of 10 CSR 10-6.050. **A value less than 250 tons of PM indicates compliance.**

APPENDIX A

Abbreviations and Acronyms

% .....percent
°F .....degrees Fahrenheit
acfm.....actual cubic feet per minute
BACT.....Best Available Control Technology
BMPs.....Best Management Practices
Btu.....British thermal unit
CAM .....Compliance Assurance Monitoring
CAS.....Chemical Abstracts Service
CEMS .....Continuous Emission Monitor System
CFR.....Code of Federal Regulations
CO.....carbon monoxide
CO_2.....carbon dioxide
CO_2e.....carbon dioxide equivalent
COMS.....Continuous Opacity Monitoring System
CSR.....Code of State Regulations
dscf.....dry standard cubic feet
EIQ.....Emission Inventory Questionnaire
EP.....Emission Point
EPA.....Environmental Protection Agency
EU .....Emission Unit
fps.....feet per second
ft .....feet
GACT .....Generally Available Control Technology
GHG.....Greenhouse Gas
gpm .....gallons per minute
gr .....grains
GWP .....Global Warming Potential
HAP.....Hazardous Air Pollutant
hr.....hour
hp .....horsepower
lb.....pound
lbs/hr.....pounds per hour
MACT.....Maximum Achievable Control Technology
$\mu g/m^3$.....micrograms per cubic meter
m/s.....meters per second
Mgal .....1,000 gallons
MW .....megawatt
MHDR.....maximum hourly design rate
MMBtu ....Million British thermal units
MMCF .....million cubic feet
MSDS .....Material Safety Data Sheet
NAAQS ....National Ambient Air Quality Standards
NESHAPs National Emissions Standards for Hazardous Air Pollutants
NO_x.....nitrogen oxides
NSPS .....New Source Performance Standards
NSR.....New Source Review
PM.....particulate matter
$PM_{2.5}$.....particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10} .....particulate matter less than 10 microns in aerodynamic diameter
ppm .....parts per million
PSD.....Prevention of Significant Deterioration
PTE .....potential to emit
RACT.....Reasonable Available Control Technology
RAL.....Risk Assessment Level
SCC .....Source Classification Code
scfm .....standard cubic feet per minute
SDS.....Safety Data Sheet
SIC.....Standard Industrial Classification
SIP.....State Implementation Plan
SMAL.....Screening Model Action Levels
SO_x.....sulfur oxides
SO_2.....sulfur dioxide
tph .....tons per hour
tpy.....tons per year
VMT.....vehicle miles traveled
VOC .....Volatile Organic Compound

Missouri Department of dnr.mo.gov
NATURAL RESOURCES
Eric R. Greitens, Governor Carol S. Comer, Director

JUL 19 2017

Mr. John Vogler
Environmental Manager - Rivers
Watco Transloading, LLC
1200 Central Industrial Drive
St. Louis, MO 63110

RE: New Source Review Permit - Project Number: 2017-04-029

Dear Mr. Vogler:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions 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, your new source review permit application and with your operating permit 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

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.oa.mo.gov/ahc.

If you have any questions regarding this permit, please do not hesitate to contact Hans Robinson 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:hrj

Enclosures

c: St. Louis Regional Office
PAMS File: 2017-04-029

Permit Number: 072017-010