Tidewater Regional Office
5636 Southern Boulevard, Virginia Beach, VA, 23462
Phone #: (757) 518-2000

Registration #:	60979	**Report #:**	346409
Site Name:	Kinder Morgan Bulk Terminals - Pier IX	**CMS:**	
Address:	1900 Harbor Access Rd, Newport News, VA 23607	**Classification:**	Synthetic Minor
Contacts:	Joshua Miles (757) 928-1545 Sonia Wines (757) 438-1677 Mark Lieberman (757) 928-1554		

AIR INSPECTION REPORT

The purpose of this inspection report is to document DEQ's observations and, based on such observations, provide the compliance status at the date and time of the inspection for requirements applicable to the facility. Presented below are the following:

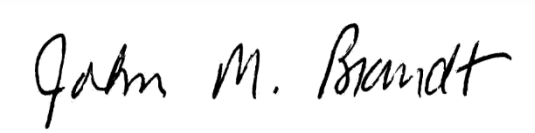
- **Inspection Details** describe this inspection report
- **Compliance Summary** lists individual requirements addressed in the report
- **Inspection Summary** provides an overview of the inspector's observations
- **Inspection Checklist** provides additional details and individual observations related to specific requirements

Inspection Details

Inspection Date:	**Oct 03, 2024**
Inspection Reason:	**Complete FCE (Full Compliance Evaluation)**
Inspection Type:	**FCE With Site Visit**
Inspector:	**Collin Blalock**
Inspection Result:	**In Compliance**

Program Code	Subpart
SIP	

Visit Date	Arrival Time	Departure Time	Weather
10/03/2024	09:15 AM	11:50 AM	Temperature 69 degrees F Wind 5 to 10 mph SW to NE Scattered Clouds

Approvals	
	
Inspector: Collin Blalock Signed Date: Oct 04, 2024	Supervisor: John Brandt Signed Date: Oct 07, 2024

Compliance Summary

In Compliance **The applicable requirements listed in the table below were confirmed during the inspection to be in compliance.**

Permit Effective Date or Regulation	Applicable Requirement
9/12/2013	NSR 2, NSR 3, NSR 4, NSR 5, NSR 6, NSR 7, NSR 8, NSR 9, NSR 10, NSR 11, NSR 12, NSR 13, NSR 13, NSR 14, NSR 18, NSR 19, NSR 20, NSR 21, NSR 22, NSR 24
4/29/2021 NSR	00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

Inspection Summary

Purpose:
To conduct a Full Compliance Evaluation (FCE)

Facility & Process Description:
The facility operates as a terminal through which bulk materials are transported to and from shipping vessels for storage at the facility or distribution by truck. The facility also receives coal via train car which is unloaded and stored on site or transported to shipping vessels. The facility maintains two operating piers (IX and X), with IX used for coal ship loading and X in place for other bulk commodities. The facility is equipped with three cement silos accessed via bucket elevator and pneumatic loading, which are used for truck loadout.

Permitting & Regulatory Standards:
The facility currently operates under two Article 6 - minor new source permit issued on September 12, 2013 and April 29, 2021.

Compliance History:
The most recent Full Compliance Evaluation took place on August 27, 2018
From the last Full Compliance Evaluation, the facility received a Warning Letter on April 12, 2019 for fugitive dust which appeared to be originating from blasting operations.

Inspection Notes:
Before the inspection took place, a request for records was issued to the facility. These records were submitted to DEQ electronically before the on site visit. Upon arrival Erica Murdock and I meet with Joshua Miles and Sonia Wines of Kinder Morgan. I began the inspection by discussing the applicable requirements for the Portland Cement operation as described in the 2013 article 6 permit. Records provided by the facility indicated that there had been no exceedance of the total cement throughput for the facility with the max throughput as 170,400 tons for April 2024. According to the facility no cement is uploaded pneumatically from carrier trucks via unit UP-6 and all cement comes from maritime vessels. It was stated that no granulated slag is handled by the facility. Records provided on site included the visible emission evaluation logs taken once per week during truck loading operations. These logs also indicated that VEEs were conducted at each baghouse during cement transfer from ship to silo. According to Mr. Miles, the facility monitors the negative pressure for loading via magnehelic gauge and baghouses are examined between ship unloading events and replaced as needed.

I inquired as to the bulk commodity operations as listed in the 2021 article 6 permit. The facility stated that there has been no change in equipment. While the facility has permit requirements for groupings of bulk commodities I through VIII as outlined in the permit, I was informed that at this time, the facility has only handled coal and pet coke which fall under bulk commodity group VI. The facility has installed all equipment to handle bulk commodity groupings, such as the clamshell bucket, however these are not in use at this time. The facility states that no commodities are unloaded via marine vessel. Coal and pet coke are transported to the facility via rail car. Records provided by the facility indicate that there has been no exceedance to the daily aggregated quantity of bulk materials on site, as well as the annual throughput for bulk materials which had a maximum of 9,766,325 tons of group VI commodities. Records provided also included the rail car dumper checklist which was said to be completed daily before operations begin. I inquired as to the dust suppression system for the facility. The facility uses a system of rain birds controlled by an automated program to ensure that all material stored and transfered is sufficiently suppressed. This program (pro-control) calculates a k-factor in order to determine the amount of cycles required for suppression. The facility also

conducts a number of assurance cycles throughput the day. It was stated that each cycle consists of at least 20,000 gallons of water.

During the inspection, I requested to view the train car unloading operation. For this operation, train cars pass through an overhead spray bar while entering the dumper unit. During dumping nozzles located on each side provide suppression in order to ensure that fugitive dust does not escape. The car passes through a second spray bar as it departs the dumper mechanism. During observation of train car dumping there did not appear to be any visible emissions. While on site, I requested to view the cement silo and truck loading operation. During this time, the unit was not in use. I was provided with an overview of the cement transportation from the marine vessel to the silo through the conveyor belt system. Each belt was equipped with wind guards to minimize fugitive emissions. On site logs indicated that visible emission observations were being conducted as needed. While on-site I observed the coal piles stored in the facility yard, each of these piles were shaped with a flat top in order to suppress coal dust, it was stated that each pile is truncated following reclamation in order to maintain proper shape. The dust suppression system (rain birds) were visible during inspection. It was stated by Mr. Miles that the facility also has a water truck which is operated as needed. From the facility I observed the pier X marine unloading equipment, which was not in use. Departure from the facility was 1150.

Recommendations:
None

Attachments:
None

Inspection Checklist

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 2 **Compliance Status:** In Compliance

Applicable Requirement
EQUIPMENT: Equipment at this facility consists of the following:

PLEASE REFERENCE THE PERMIT FOR THE EQUIPMENT LIST TABLE.

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.
(9 VAC 5-80-1180 D 3)

Observation
Equipment was operating as permitted.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 3 **Compliance Status:** In Compliance

Applicable Requirement
FABRIC FILTERS: Particulate emissions from each of the following transfer operations shall be controlled by the use of fabric filters (baghouses) and completely enclosed conveyors (*except where noted below):

Equipment Ref. No.
Transfer Point
Control Device Ref. No.

01
Conveyor #1
Ship unloader to Conveyor #1 through screw elevators
DF-01

Conveyor #1
Conveyor #2
Conveyor #1 to Conveyor #2
DF-02

Conveyor #2
0
Conveyor #2 to bucket elevator
DF-03

UP-6
03
Trucks to bucket elevator through pneumatic transfer pipe
DF-04

03
ASD
Bucket elevator to air slide distribution box
DF-04

ASD
AS-1, AS-2, and AS-3
Silos #1, #2, and #3
Distribution box to storage silos #1, #2, and #3 through air slides
DF-04

Silos #1, #2, and #3
AS-4, AS-5, and AS-6
LO-1
Storage silos #1, #2, and #3 to carrier truck loading spout through air slide
DF-05

UP-1, UP-3, UP-4, and UP-5
Silos #1, #2, and #3
Trucks to storage silos #1, #2, and #3 through pneumatic transfer pipes
DF-06

Silos #1, #2, and #3
HOP
SB-1
Storage silos #1, #2, and #3 to railcar hopper through pneumatic transfer pipe
DF-07

SB-1
AS-7
LO-2
Railcar hopper to railcar loadout through air slide
DF-08

* Where the Siwertel gantry screw delivers product to the hooded discharge area of conveyor C13 there is a small open gap area. This is required for clearance purposes due to the traveling nature of the gantry.

Each baghouse shall be provided with adequate access for inspection. Whenever any of the transfer operations listed above are conducted, the appropriate baghouse used for controlling particulate emissions from that transfer process shall be in operation.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

Observation
Fabric filters are in use as needed.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 4 **Compliance Status:** In Compliance

Applicable Requirement
TRUCK LOADING: Fugitive particulate emissions resulting from carrier truck loading operations (Equipment Ref. No. LO-1) shall be controlled by automatically maintaining a negative pressure through the retractable delivery chute system for not less than 15 seconds after the truck loading has been completed.
(9 VAC 5-50-90 and 9 VAC 5-80-1180)

Observation
The facility states that there have been no events of silo upload from carrier truck

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 5 **Compliance Status:** In Compliance

Applicable Requirement
FUGITIVE DUST: Fugitive particulate emissions from carrier truck and other vehicle traffic shall include the following, or equivalent, as approved by DEQ:

a. Application of asphalt, water, or suitable chemicals on dirt roads and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition.

b. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.
(9 VAC 5-50-90 and 9 VAC 5-80-1180)

Observation
Areas of the facility received wet suppression via the rain bird system and water truck as needed. During the inspection, no fugitive dust was observed.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 6 **Compliance Status:** In Compliance

Applicable Requirement
THROUGHPUT BUCKET ELEVATOR: :The annual throughput of bulk Type I/II Portland cement from carrier trucks to the storage silos via the bucket elevator (Equipment Ref. No. UP-6) shall not exceed 250,000 tons per year, calculated monthly as the sum of

each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)

Observation
The facility states that there have been no events where cement has been transported from carrier truck to the storage silos pneumatically via UP-6

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 7 **Compliance Status:** In Compliance

Applicable Requirement
THROUGHPUT FACILITY: The total annual throughput of bulk Type I/II Portland cement at the facility shall not exceed 500,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)

Observation
Records provided by the facility indicated that there has been no exceedance of the throughput limit for cement.

Current throughput:
169,509 tons (August 2024)

Maximum throughput:
170,400 tons (April 2024)

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 8 **Compliance Status:** In Compliance

Applicable Requirement
THROUGHPUT SLAG: The total annual throughput of granulated furnace slag at the facility shall not exceed 150,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)

Observation
It was stated that the facility has not received granulated furnace slag

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 9 **Compliance Status:** In Compliance

Applicable Requirement
EMISSION ESTIMATES: Emissions from the transfer of Type I/II Portland cement from carrier trucks to the storage silos via the bucket elevator (Equipment Ref. No. UP-6) shall not exceed the limits specified below:

Particulate Matter (PM)
0.5 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with this emission limit may be determined as stated in Conditions 3, 6, 11, and 13.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

Observation
According to the facility there have been no pneumatic uploading events from equipment unit UP-6.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 10 **Compliance Status:** In Compliance

Applicable Requirement
FACILITY EMISSION ESTIMATES: Total emissions from the operation of the dry bulk cement distribution facility shall not exceed the limits specified below:

Particulate Matter (PM)
1.5 tons/yr

PM-10
1.0 tons/yr

PM-2.5
1.0 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 3 - 8, 11, and 13.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

Observation
Compliance with throughput limitations indicates compliance with emission limitations.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 11 **Compliance Status:** In Compliance

Applicable Requirement
OPACITY: Visible emissions from any baghouse exhaust stack shall not exceed five percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

Observation
There is no indication that there have been any exceedance of opacity for the baghouse via recordkeeping.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 12 **Compliance Status:** In Compliance

Applicable Requirement
MONITORING: Each of the baghouse exhaust stacks shall be observed no less than once per week during daylight hours, for at least a one-minute period while particulate is being controlled, to determine if there are any visible emissions. The presence of visible emissions shall indicate the need for prompt corrective action. The permittee shall maintain a record log of the observations made. The record log shall include the name of the observer, the date and time of the observation, and the presence or absence of visible emissions. If visible emissions are observed, the record log shall also include the duration of excess emissions after discovery (in hours) and a description of any corrective actions taken to eliminate visible emissions, including the date repairs were completed. These records shall be available for inspection by DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-1180)

Observation
Records provided by the facility indicate that weekly visible emission checks are done for truck loadout
Records provided also indicate that visible emission checks are conducted at each baghouse when in operation during ship unloading.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 13 **Compliance Status:** In Compliance

Applicable Requirement
RECORDS: The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ, Tidewater Regional Office (Air Compliance Inspector). These records shall include, but are not limited to:

a. Annual throughput of Type I/II Portland cement transferred from carrier trucks to the storage silos via the bucket elevator (Equipment Ref. No. UP-6) (in tons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;

b. Annual throughput of Type I/II Portland cement for the entire facility (in tons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;

Observation
Records provided by the facility included annual throughput information for Portland cement for the entire facility.

The facility states that no cement has been uploaded to the cement silos pneumatically via carrier truck, but all cement is transferred from marine vessel.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 13 **Compliance Status:** In Compliance

Applicable Requirement

c. Annual throughput of granulated furnace slag for the entire facility (in tons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months; and

d. Record logs of the visible emissions observations, including the name of the observer, the date and time of the observation, and the presence or absence of visible emissions. If visible emissions are observed, the record log shall also include the duration of excess emissions after discovery (in hours) and a description of any corrective actions taken to eliminate visible emissions, including the date repairs were completed, as required in Condition 12.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-1180 and 9 VAC 5-50-50)

Observation

The facility states that there has been no handling of granulated furnace slag.

Records provided by the facility included visible emission observation logs for the baghouses and filters, conducted weekly and during ship unloading.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 14 **Compliance Status:** In Compliance

Applicable Requirement

TESTING: The facility shall be constructed/modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the baghouse exhaust vents and safe sampling platforms and access shall be provided.
(9 VAC 5-50-30 F and 9 VAC 5-80-1180)

Observation

OK

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 18 **Compliance Status:** In Compliance

Applicable Requirement

The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;

b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;

c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and

d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
(9 VAC 5-170-130 and 9 VAC 5-80-1180)

Observation

DEQ was given adequate access to the facility and all requested records.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 19 **Compliance Status:** In Compliance

Applicable Requirement

O&M: At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable,

maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.
(9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

Observation
OK
The facility is aware of this requirement

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 20 **Compliance Status:** In Compliance

Applicable Requirement
MALFUNCTION RECORDS: The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-20-180 J and 9 VAC 5-80-1180 D)

Observation
According to the facility, there have been no malfunctions resulting in excess emissions.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 21 **Compliance Status:** In Compliance

Applicable Requirement
MALFUNCTION NOTIFICATION: The permittee shall furnish notification to the Director, Tidewater Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Tidewater Regional Office.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

Observation
OK
The facility is aware of this requirement.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 22 **Compliance Status:** In Compliance

Applicable Requirement
NAAQS VIOLATION: The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I and 9 VAC 5-80-1180)

Observation
OK
The facility is aware of this requirement.

Effective Date: Sep 12, 2013 **Applicable Requirement #:** NSR 24 **Compliance Status:** In Compliance

Applicable Requirement
PERMIT COPY: The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180)

Observation
A copy of the facility's permit was available on site.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 00 **Compliance Status:** In Compliance

Applicable Requirement
Equipment List - Equipment at this facility covered by this permit consists of:

Reference No.
Equipment Description

Rated Capacity Delegated Federal Requirements

B-1 and B-2
Marine vessel grab unloaders
3,500 tons/hr -

C-1 -
C-5 Conveyor belts for bulk material transport from railcars to storage piles
5,000 tons/hr -

C-6A and C-6B
Two (2) overhead conveyors for bulk material delivery from existing conveyor system to storage piles
5,000 tons/hr -

C-7A and C-7B
Two (2) reclaim conveyors for bulk material reclaim from storage piles to reclaim conveyor system
6,000 tons/hr -

C8 - C11
Reclaim conveyor belts for bulk material transport from storage piles to Ship Loader
6,000 tons/hr -

C15 - C17 Conveyor belts for transport of bulk material from hoppers to ground storage
3,500 tons/hr -

H1 and H2
Pier side hoppers
3,500 tons/hr -

R-1
Railcar rotary dumper
5,000 tons/hr -

SL-1
Ship Loader
6,000 tons/hr -

SP
Two (2) Storage Piles in expanded storage yard area and numerous Ground Storage Piles
2,595,000 tons of total storage capacity -

Specifications included in the above tables are for informational purposes only and do not form enforceable terms or conditions of the permit.

Observation
There have been no changes in facility equipment.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 01 **Compliance Status:** In Compliance

Applicable Requirement
PROCESS REQUIREMENTS

1. Bulk Material Transfer Operations - Operations involving the transfer of delivered bulk material from railcars to the terminal facility's ground storage pile area and the reclaim of the bulk material from the ground storage pile area to marine vessels (ship and barge) for loading shall utilize the following transfer system pathways and associated conveyance equipment:

Bulk Material Transfer Equipment Pathways

Transfer System
Reference No. Unit Description

Bulk material delivery from railcars to storage piles
R-1 Railcar rotary dumper to C-1

Bulk material delivery from railcars to storage piles
C-1 Conveyor belt from R-1 to C-2

Bulk material delivery from railcars to storage piles
C-2 Conveyor belt from C-1 to C-3

Bulk material delivery from railcars to storage piles
C-3 Conveyor belt from C-2 to C-4

Bulk material delivery from railcars to storage piles
C-4 Conveyor belt from C-3 to C-5 or C-6A

Bulk material delivery from railcars to storage piles
C-5 Conveyor belt from C-4 to C-6B

Bulk material delivery from railcars to storage piles
C-6A Conveyor belt from C-4 to Storage Pile or C-6C

Bulk material delivery from railcars to storage piles
C-6B Conveyor belt from C-5 to Storage Pile

Bulk material delivery from railcars to storage piles
C-6C Conveyor belt from C-6A to Storage Pile or C-6D

Bulk material delivery from railcars to storage piles
C-6D Conveyor belt from C-6C to Storage Pile

Bulk material reclaim from storage piles to vessel load-out
C-7A Conveyor belt from Reclaim Hopper to C-8

Bulk material reclaim from storage piles to vessel load-out
C-7B Conveyor belt from Reclaim Hopper to C-8

Bulk material reclaim from storage piles to vessel load-out
C-8 Conveyor belt from C-7A or C-7B to C-9

Bulk material reclaim from storage piles to vessel load-out
C-9 Conveyor belt from C-8 to C-10

Bulk material reclaim from storage piles to vessel load-out
C-10 Conveyor belt from C-9 to pier-side C-11

Bulk material reclaim from storage piles to vessel load-out
C-11 Conveyor belt from C-10 to SL-1 Ship Loader

Bulk Material Delivery from Vessels to storage piles
C-15 Conveyor belt from Hopper System to C-16

Bulk Material Delivery from Vessels to storage piles
C-16 Conveyor belt from C-15 to C-17

Bulk Material Delivery from Vessels to storage piles
C-17 Conveyor belt from C-16 to ground storage

(9VAC5-80-1180) [April 29, 2021]

Observation
Ok
There have been no changes in the transfer pathways

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 02 **Compliance Status:** In Compliance

Applicable Requirement
2. Emission Controls - Particulate emissions from handling Groups I, II, IV, V, and VIII materials using each marine vessel grab unloader (Ref. Nos. B-1 and B-2) shall be controlled by an environmental clamshell bucket. The environmental clamshell bucket shall be maintained in proper working order and be periodically inspected to ensure that the rubber sealing strips on the grab lips of the clamshell leaves are seating together properly.

(9VAC5-80-1180 and 9VAC5-50-260) [April 29, 2021]

Observation
According to the facility, there has been no handling of any bulk commodities other than group VI.
Marine unloading has not taken place at this time.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 03 **Compliance Status:** In Compliance

Applicable Requirement
3. Emission Controls - Particulate emissions from each marine vessel unloading hopper (Ref. Nos. H-1 and H-2) shall be controlled by the use of hinged baffles on the hoppers. The hoppers shall be provided with adequate access for inspection.

(9VAC5-80-1180 and 9VAC5-50-260) [September 11, 2015]

Observation
Marine unloading has not taken place for bulk commodities at this time.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 04 **Compliance Status:** In Compliance

Applicable Requirement
4. Emission Controls - Particulate emissions from transferring Group VI and Group VII materials through the conveyor belt system associated with marine vessel unloading shall be controlled by wet suppression and covered or enclosed conveyor belts. The conveyors shall be provided with adequate access for inspection.

(9VAC5-80-1180 and 9VAC5-50-260) [April 29, 2021]

Observation
The facility states that marine unloading for bulk commodities has not taken place at this time.
While the facility has received group VI commodities, they are delivered via railcar.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 05 **Compliance Status:** In Compliance

Applicable Requirement
5. Emission Controls - Particulate emissions from the rotary railcar dumper (Ref. No. R-1) building shall be controlled by wet suppression using water sprayers located at the railcar entrance and exit and by filters on each exhaust fan opening to the outside air.

(9VAC5-80-1180 and 9VAC5-50-260) [September 11, 2015]

Observation
Observation of the rotary railcar dumper found that wet suppression was in use during each dumping event. There was no visible emissions from these events.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 06 **Compliance Status:** In Compliance

Applicable Requirement
6. Fugitive Emission Controls - Particulate emissions from all ground storage piles (Ref. No. SP) containing Group VI and Group VII materials shall be controlled by a permanent wet suppression system capable of wetting the entire storage pile area. All ground storage piles shall be truncated and compacted so as to minimize fugitive emissions. The wet suppression system shall be provided with adequate access for inspection.

(9VAC5-80-1180, 9VAC5-50-90, and 9VAC5-50-260) [April 29, 2021]

Observation
Wet Suppression is maintained by an automated system which uses a k-factor to establish cycles of wet suppression delivered via the rain bird system

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 07 **Compliance Status:** In Compliance

Applicable Requirement
7. Fugitive Emission Controls - Particulate emissions from ground storage piles (Ref. No. SP) containing Group I, II, and III materials shall be controlled by covering the entire storage pile area with a tarping material, except when adding or removing Group I, II, and III materials for a reasonable amount of time not to exceed 10 days. Uncovered Group I, II, and III materials shall be minimized as much as possible during this time period.

(9VAC5-80-1180, 9VAC5-50-90, and 9VAC5-50-260) [April 29, 2021]

Observation
The source states that there has been no receiving or handling of group I, II, or III materials.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 08 **Compliance Status:** In Compliance

Applicable Requirement
8. Wet Suppression System - The wet suppression system for the ground storage piles shall be implemented as specified in Appendix A of the permit or by any other procedure as may be approved by the DEQ prior to its use. Such approval shall be contingent on adequate documentation that any alternative procedure shall achieve at least as high a control efficiency as in Appendix A. This applies to all other dust control measures required by this permit. Requests for changes in procedures shall be accompanied by an explanation of the proposed changes and the anticipated effect they shall have. These requests, if approved by the DEQ, shall be subject to a test and evaluation procedure prior to being accepted as permanent changes to the control procedures.

(9VAC5-80-1180 and 9VAC5-50-260) [September 11, 2015]

Observation
Wet Suppression is maintained by an automated system which uses a k-factor to establish cycles of wet suppression delivered via the rain bird system

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 09 **Compliance Status:** In Compliance

Applicable Requirement
9. Operating Work Practices - Marine Vessel (Ship / Barge) Unloading and Transloading - The following best management practices (BMPs) shall be taken to minimize fugitive emissions from bulk material ship/barge unloading operations:

a. Unloading shall not take place when the sustained wind speed (five-minute average) exceeds 15 mph or results in excessive fugitive emissions. The permittee shall continuously monitor the wind speed during marine vessel unloading operations by using an on-site anemometer. The anemometer shall be equipped with an alarm which sounds when the sustained wind speed (five-minute average) exceeds 15 mph. The anemometer readings shall be reduced to five-minute averages which shall be recorded using an automated recordkeeping system; [April 29, 2021]

b. The clamshell bucket shall be shaken entirely within the ship hold prior to each transfer in order to dislodge any attached loose material. The clam shell bucket shall be lowered into the material handling hopper on the dock as far as possible without damaging the hopper's baffle system before dumping; [September 11, 2015]

c. The grab buckets shall be completely closed during transfer of material from marine vessel to the receiving hoppers or marine vessel; [September 11, 2015]

d. The permittee shall maintain an optimum level of material in the hopper to minimize emissions; and [September 11, 2015]

e. Spilled material from the hopper or clamshell shall be removed within 24 hours after completion of a marine vessel unloading. Spilled material shall be removed by sweeping, vacuuming, or other best management practices which minimizes fugitive dust emissions. [September 11, 2015]

(9VAC5-80-1180, 9VAC5-50-50, 9VAC5-50-80, and 9VAC5-50-260)

Observation
Marine unloading has not taken place for bulk commodities at this time.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 10 **Compliance Status:** In Compliance

Applicable Requirement
10. Operating Work Practices - Rotary Railcar Dumper (Ref. No. R-1) Building - The following best management practices (BMPs) shall be taken to minimize fugitive emissions from the Rotary Railcar Dumper building:

a. Dumping operations shall be conducted inside a building whose openings are the entrance and exit access ways for the railcars; [September 11, 2015]

b. All suppression sprays shall be fully functional and maintained; and [September 11, 2015]

c. All exhaust fan-driven air shall be filtered and the filtration systems shall be properly maintained. [September 11, 2015]

(9VAC5-80-1180, 9VAC5-50-50, 9VAC5-50-80, and 9VAC5-50-260)

Observation
Observation of the rotary rail car dumper found that dumping took place exclusively inside the designated building. During operation, wet suppression and exhaust fan filtration were in use.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 11 **Compliance Status:** In Compliance

Applicable Requirement
11. Operating Practices - Whenever the permittee:

a. Uses the railcar dumper (Ref. No. R-1), the wet suppression controls shall be utilized, unless the use of such wet suppression controls would otherwise cause a safety hazard or damage to the dumper from freezing; and [September 11, 2015]

b. Uses handling equipment (e.g., conveyors, etc.), the equipment shall be monitored and wet suppression shall be applied as necessary to control particulate emissions. [September 11, 2015]

(9VAC5-80-1180 and 9VAC5-50-260)

Observation
Rail cars pass through a spray bar as they enter the dumper, once the dumping process begins, sprayers are activated to limit fugitive dust until the rain car is emptied. Once the car leaves the dumper it passes under a second spray bar.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 12 **Compliance Status:** In Compliance

Applicable Requirement
12. Operating Practices - Whenever the permittee is using a piece of auxiliary handling equipment (e.g., front-end loader, bulldozer, etc.), the area to be worked shall be monitored and wet suppression shall be applied as necessary to control fugitive particulate emissions.

(9VAC5-80-1180 and 9VAC5-50-260) [September 11, 2015]

Observation
Wet suppression is used on the entire Kinder Morgan Pier IX/X property to ensure fugitive emissions are minimal.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 13 **Compliance Status:** In Compliance

Applicable Requirement
13. Operating Practices - The following actions shall be taken to maintain control of bulk material fugitive dust emissions:

a. The permittee shall stop any material movement operation when it becomes known that installed air pollution control system(s) is inoperative and would cause excess emissions; [September 11, 2015]

b. The permittee shall stop a material movement operation when it becomes known that the material handling equipment required for that operation is malfunctioning or operating significantly below its designated specifications; [September 11, 2015]

c. The permittee's equipment operators shall take immediate precautions to preclude fugitive dust emissions from the operation of bulldozers, front-end loaders, automobiles, or trucks (e.g., the use of water suppressant or limiting the speed of movement to below ten miles per hour); and [September 11, 2015]

d. The permittee shall institute a policy that instructs operational personnel to give preference to designated personnel with the responsibility for controlling dust emissions. [September 11, 2015]

(9VAC5-80-1180 and 9VAC5-50-260)

Observation
OK
The facility is aware of these requirements

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 14 **Compliance Status:** In Compliance

Applicable Requirement
14. Operating Practices - One person each shift shall be designated as responsible for compliance with the procedures of Appendix A. Required actions in support of these control procedures shall take precedence over routine bulk material handling procedures.

(9VAC5-80-1180, 9VAC5-50-50, 9VAC5-50-80, and 9VAC5-50-260) [September 11, 2015]

Observation
OK
The facility is aware of this requirement.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 15 **Compliance Status:** In Compliance

Applicable Requirement
OPERATING LIMITATIONS

15. Bulk Material Commodities Inventory List - Kinder Morgan Pier IX/X facility is approved to transfer, store, and handle the following bulk materials or equivalent as specified below:

Group Number:
Title and Description:
Materials:

I Fertilizer Products (non-processed)
Standard Potassium
Nitrate
Potash

II
Fertilizer Products (prilled or processed)
Granulated Ammonium Nitrate
Dried Sludge

III
Non-Fertilizer Products (Moisture Content <4%)
Mined Salt
Magnetite/ Ferrous Oxide

IV
Non-Fertilizer Products (Moisture Content >4%)
Granulated Furnace Slag
Clay

V
Bauxite/Alumina Products
Distressed Cement
Soda Ash

VI
Aggregate Products Coal
Petcoke
Sand/ Gravel (garnet and others)
Pumice

VII
Metal Products
Pig Iron
Shredded Scrap Metal

VIII
Agricultural Products
Soybean
Wheat
Rye
Barley

A change in the bulk material commodities shall be considered a change in the method of operation of the bulk material handling operations and may require a new or amended permit. However, if a change in the material is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.

(9VAC5-80-850) [April 29, 2021]

Observation
As stated, the source has indicated that only bulk commodities under group VI have been received and handled by the facility.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 16 **Compliance Status:** In Compliance

Applicable Requirement
16. Wet Suppression Cycles - Each wet suppression cycle shall consist of no less than 20,000 gallons of water and attain 100 percent (100%) coverage of the bulk material storage area.

(9VAC5-80-1180, 9VAC5-50-90, and 9VAC5-50-260) [September 11, 2015]

Observation
The source indicated that the pro-control system used for wet suppression ensures that each cycle consists of no less than 20,000 gallons of water.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 17 **Compliance Status:** In Compliance

Applicable Requirement
17. Bulk Material Storage - The maximum aggregated quantity of bulk materials in ground storage piles at any time shall not exceed 1,400,000 tons, as determined by daily calculations.

(9VAC5-80-1180) [September 11, 2015]

Observation
Records provided by the facility indicated that there had been no exceedance of the maximum aggregated quantity of bulk materials stored at the facility.

Current maximum:

491,537.44 tons - September 17, 2024

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 18 **Compliance Status:** In Compliance

Applicable Requirement
18. Throughput - The annual throughput of bulk materials at Pier IX terminal shall not exceed 25,000,000 tons per year, combined, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month

period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-1180) [April 29, 2021]

Observation
Records provided by the facility indicated that there have been no exceedance of the throughput for bulk materials at the Pier IX terminal.

Current/Maximum throughput of Bulk Materials:
9,766,325 tons - September 2024

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 19 **Compliance Status:** In Compliance

Applicable Requirement
19. Bulk Material Throughput - The combined annual throughput for Groups I through VIII commodity materials unloaded during marine vessel unloading operations at Pier X terminal shall not exceed 2,500,000 tons per year, combined, and calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-1180) [April 29, 2021]

Observation
According to the facility there have been no commodity unloading via marine vessel at the facility. The facility has only handled Group VI commodities which are unloaded by train car.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 20 **Compliance Status:** In Compliance

Applicable Requirement
EMISSION LIMITS

20. Emission Limits - Total emissions from the marine handling operations from railcar and ship loading at Pier IX terminal shall not exceed the limits specified below:

PM
39.8 tons/yr

PM10
17.6 tons/yr

PM2.5
2.7 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 22, and 23.

(9VAC5-80-1180 and 9VAC5-50-260) [April 29, 2021]

Observation
Compliance with throughput limitations and air pollution control practices indicates compliance with emission limitations.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 21 **Compliance Status:** In Compliance

Applicable Requirement
21. Emission Limits - Total emissions from the marine vessel unloading operations at Pier X terminal shall not exceed the limits specified below:

PM
51.5 tons/yr

PM10
24.3 tons/yr

PM2.5
3.7 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1 - 4, 6, 8, 9, 13, 14, 15, 16, 17, 19, 22, and 23.

(9VAC5-80-1180 and 9VAC5-50-260) [April 29, 2021]

Observation
According to the facility there have been no commodity unloading via marine vessel at the facility. The facility has only handled Group VI commodities which are unloaded by train car.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 22 **Compliance Status:** In Compliance

Applicable Requirement
22. Visible Emission Limit - Visible emissions from any emission point (i.e. stack, vent, conveyance transfer point, or functionally equivalent opening) shall not exceed five percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(9VAC5-80-1180, 9VAC5-50-20, and 9VAC5-50-80) [September 11, 2015]

Observation
Records provided by the facility indicated that there has been no exceedance of the visible emission limitation.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 23 **Compliance Status:** In Compliance

Applicable Requirement
RECORDS

23. On Site Records - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:

a. Daily records of the maximum quantity of all bulk materials in storage (in tons) [September 11, 2015];

b. Annual combined throughput of Group I through Group VIII bulk commodity materials unloaded during marine vessel unloading operations (in tons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months; [April 29, 2021]

c. Annual combined throughput of bulk materials at Pier IX terminal (in tons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months; [April 29, 2021]

d. Record log for each marine vessel unloading event which shall include the unloading starting date and time, unloading completion date and time, any date and time periods of ceased operation due to excessive wind speed, and the date and name of the person entering the information; [September 11, 2015]

e. Records of all 5-minute wind speed averages recorded during each marine vessel unloading event; [September 11, 2015]

f. A checklist for railcar unloading events, which shall include the following information: daily inspection of the first railcar unloading event for each operating day to ensure the equipment referenced in Condition 10.a. through 10.c. of this permit is fully functional and maintained in proper working order, including the date and the time the observation was made, any corrective actions taken on observed equipment malfunctions, and the name of the person performing the observation. A copy of the facility's current BMPs and completed checklists shall be maintained at the terminal and shall be available for inspection by the DEQ; [September 11, 2015]

g. Records of malfunctions and notifications, as required by Conditions 27 and 28; [September 11, 2015]

h. Record log of all bulk materials transferred, stored, and handled; [April 29, 2021]

i. Record log of days in which ground storage piles for Group I, II, and III materials are uncovered from tarping, as required by Condition 7; and [April 29, 2021]

j. Record log of gallons of water used in wet suppression cycles, as required by Condition 16. [April 29, 2021]

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-1180 and 9VAC5-50-50)

Observation
The facility provided all applicable records requested for the inspection.

As stated, the facility indicated that no marine vessel unloading has been conducted on site.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 24 **Compliance Status:** In Compliance

Applicable Requirement
GENERAL CONDITIONS

24. Permit Suspension/Revocation - This permit may be suspended or revoked if the permittee:

a. Knowingly makes material misstatements in the permit application or any amendments to it;

b. Fails to comply with the conditions of this permit;

c. Fails to comply with any emission standards applicable to a permitted emissions unit;

d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or

e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emissions limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

(9VAC5-80-1210(G))

Observation
OK
The facility is aware of these conditions

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 25 **Compliance Status:** In Compliance

Applicable Requirement
25. Right of Entry - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;

b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;

c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and

d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

(9VAC5-170-130 and 9VAC5-80-1180)

Observation
DEQ was provided adequate access to the facility and all requested records.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 26 **Compliance Status:** In Compliance

Applicable Requirement
26. Maintenance/Operating Procedures - At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

(9VAC5-50-20(E) and 9VAC5-80-1180(D))

Observation
OK
The facility is aware of this requirement

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 27 **Compliance Status:** In Compliance

Applicable Requirement
27. Record of Malfunctions - The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.

(9VAC5-20-180(J) and 9VAC5-80-1180(D))

Observation
It was stated that there has been no malfunctions resulting in excess emissions.

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 28 **Compliance Status:** In Compliance

Applicable Requirement
28. Notification for Facility or Control Equipment Malfunction - The permittee shall furnish notification to the Tidewater Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour. Such notification shall be made no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Tidewater Regional Office.

(9VAC5-20-180(C) and 9VAC5-80-1180)

Observation
OK
The facility is aware of this requirement

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 29 **Compliance Status:** In Compliance

Applicable Requirement
29. Violation of Ambient Air Quality Standard - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9VAC5-20-180(I) and 9VAC5-80-1180)

Observation
OK
The facility is aware of this requirement

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 30 **Compliance Status:** In Compliance

Applicable Requirement

30. Change of Ownership - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current minor NSR permit issued to the previous owner. The new owner shall notify the Tidewater Regional Office of the change of ownership within 30 days of the transfer.

(9VAC5-80-1240)

Observation

There has been no change in ownership

Effective Date: Apr 29, 2021 **Applicable Requirement #:** 31 **Compliance Status:** In Compliance

Applicable Requirement

31. Permit Copy - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.

(9VAC5-80-1180)

Observation

A copy of the permit was available on site during the inspection.