COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
SOURCE INSPECTION REPORT FORM

I. GENERAL INFORMATION

SOURCE NAME: Dominion Terminal Associates **REGISTRATION NO.:** 60997

LOCATION: Pier 11, Harbor Road, Newport News **INSPECTION DATE:** 6/27/00

COUNTY NO. : 700 **PLANT ID:** 00074 **FILE NO.:** 194

SOURCE CLASS: _ A _ SM X B _ NSPS _ PSD _ NESHAP _ MACT ___

SOURCE CONTACT: Mr. John Davis & Mr. Frank Falcon

WEATHER CONDITIONS: 85°F and sunny with 20-25 mph SW winds

TYPE OF INSPECTION:

X CMS X Complete _ Permit Completion

_ Surveillance _ Follow up

_ Stack Test _ Complaint Investigation

_ CEMS Audit: _____

OTHER (EXPLAIN) _____

ANNOUNCED INSPECTION: No

INSPECTION LEVEL PERFORMED 2 **COMPLIANCE CODE** 3

VEE PERFORMED No

OPERATING RATE: @ approximately 50%

INSPECTOR: Jerome Brooks **STAFF CODE** P4116

CODING INFORMATION FOR COMPLIANCE STATUS

0 - UNKNOWN
1 - IN VIOLATION - NO SCHEDULE
2 - IN COMPLIANCE BY SOURCE TEST
3 - IN COMPLIANCE BY INSPECTION
4 - IN COMPLIANCE BY CERTIFICATION
5 - IN VIOLATION, MEETING SCHEDULE
6 - IN VIOLATION, NOT MEETING SCHEDULE
7 - IN VIOLATION, UNKNOWN WITH RESPECT TO SCHEDULE
8 - NO APPLICABLE REGULATION
9 - IN COMPLIANCE, CLOSED

CEDS 7/5/00 TAD

Dominion Terminal Associates
I.D.# **700-00074**
Reg# **60997**
Date: **6/27/00**

Permit Condition	Compliance Status
#3, #4, #5 – Emissions Controls	In compliance
#6, #7, #8 – Fugitive dust emissions controls	In compliance
#9, #10, #11, #12, #13 – Emissions controls	In compliance
#14, #22 – Monitoring	In compliance
#15 – Wet Suppression System	In compliance
#16 – Storage limit at any one time	In compliance
#17 – 12 month throughput	In compliance
#18 – Emissions Limits	In compliance based on actual throughput and storage
#19, #20, #21 – Visible emissions	In compliance
#23 – Record Keeping	In compliance
#32 – A copy of the permit on the premises	In compliance

I. INSPECTION COMMENTS:

Dominion Terminal Associates currently has a February 2000 permit to operate a coal storage and petroleum storage and export facility at the east end of Newport News. The facility is equipped with a sophisticated K-Factor program implemented by Simpson Weather Service consulting/research firm to control fugitive coal dust. This computerized system considers weather conditions such as temperature, wind speed, wind direction, and humidity to determine the number of cycles required to adequately control fugitives emissions.

Emissions Points

1. Transfer Point Baghouse – This baghouse is located on the top of the transfer where coal passes through to be stacked on the storage yard. There was no coal movement during the inspection however the baghouse was activated to demonstrate normal operation. The baghouse is equipped with a fairly new manometer to measure the differential pressure. The differential pressure across the bags was 1.7 inches water gauge. Pulse jet is the method used to remove particles from the bags every 8 to 10 seconds.

2. Rail Car Dumper – Coal and petroleum coke are transported to the facility in railcars, usually 150 at a time. During cold weather, the rail cars are sent through a thaw shed, where propane heaters thaw the coal. From there, the rail cars are sent to the rotary rail car dumper, which is enclosed. Here the rail cars are dumped 140 degrees and emptied into hoppers at a rated capacity of 100 tons/ minute. Wet suppression is used to control fugitive coal emissions as required by permit. The wet suppression system consists of a water blanket over the rail car while dumping and a water curtain at the exit of the dumper. Each time a car is dumped, 140 gallons of water is applied with a surfactant mixture. The water surfactant mixture is applied at a rate of 760 gallons/minute at a pressure between 150 to 180 psi. During the inspection, the rail car dumper was not in operation.

3. Coal Storage Yard – The facility uses a K-Factor system wet suppression system as the primary fugitive dust control for the storage yard. Seventy-four rainbirds are located around the perimeter of the storage yard. No additional rainbirds have been added since the last inspection. All of these rainbirds are linked to the K-factor program, four rainbirds are activated at one time under normal cycle for a period up to 3 minutes until all seventy-four rainbirds have been activated to complete the cycle. Under notice of heavy winds and harsh conditions eight rainbirds can be activated at one time to expedite a completed cycle. During each cycle, the system uses 145,000 gallons of water, this complies with the limit of the permit. The K-Factor system will compute the required frequency of cycles determined by an array of weather conditions. The operator can manually increase the frequency to ensure that the fugitive dust is adequately controlled. In addition to the seventy-four rainbirds, there are 4 high mast rainbirds that are manually operated when needed. The facility is also equipped with a water truck to ensure 100% coverage of the storage yard. The source provided

DEQ staff with a copy of the K-Factor report for the past 48 hours during the inspection. DEQ staff observed a complete cycle during the inspection. DEQ staff did not detect any fugitive dust emissions during the inspection.

4. Storage Silo Baghouses – The storage silo is equipped with two baghouses (SS2 & SS3). The baghouses are located at the top of the silos. As the coal is reclaimed from the storage yard it passes through the silos where it can be mixed/blended with different grades of coal to meet the owners specifications. Each silo has a rated capacity of 4000 tons. The coal is the transported via conveyer belts to cargo ships for export. The baghouses are used to control particulate emissions from the silo when in operation. During the inspection there was no coal movement, however the baghouses were activated to demonstrate normal operations. The manometers on both baghouses, as well as the air valve have been replaced since the last inspection. When activated baghouse SS2 exhibited a differential pressure reading of 1 inch water gauge and baghouse SS2 exhibited a differential pressure of 4.5 inches of water gauge. Pulse jet is the method used to remove particles from the bags every 8 to 10 seconds.

Monitoring

Dominion Terminal Associates operates, maintains, supplies, and retrieves filters from a PM10 monitor located approximately 200 feet across from the facility on the top of the Newport News Housing Authority Maintenance Building. Operation of this monitor is to be done in accordance with Appendix J of 40 CFR part 50. This monitor runs synonymously with the other PM10 monitors located throughout the region. The source maintains a logbook of times when filters were retrieved with a comment column for instances that deviated from Appendix J. The monitoring results are submitted to DEQ-TRO on a quarterly basis for review. The most recent report was submitted February 29, 2000 for the 2nd quarter. The PM10 monitor was not running during the inspection however DEQ staff conducted a visual inspection to verify its existence as well as inspect the monitor's maintenance up keep. DEQ staff did not detect problems with the monitor during the inspection.

Recordkeeping

Throughput records are currently kept in a database, the necessary records were retrieved in hard copy format for DEQ staff during the inspection. The table below is a illustrates the throughput and limit as well as the applicable permit condition.

	Limit	**Actual Throughput**
Storage at any one time	1.4×10^6	6.6×10^5
12 month throughput	24×10^6	7.2×10^6

In addition, the source maintains written operating procedures and records of employee training for the air pollution control equipment. Records of maintenance performed at the facility are kept and the source has

developed a computerized system that prints out a preventative maintenance checklist when the scheduled maintenance time arrives. When any maintenance is completed it is entered into the computer database.

General Notes

The source has one area in the storage yard for petroleum coke storage only. This area is coned off and employees are instructed to steer clear of the area to prevent contact until reclaiming. There was not much pet coke in storage during the inspection and DEQ staff did not detect any fugitive emissions.

DEQ-TRO has not received any complaints about Dominion Terminal Associates in approximately 2 years. The source was in compliance with their permit during the inspection.

INSPECTOR'S SIGNATURE _____ **DATE:** June 30, 2000

SUPERVISOR'S COMMENTS: _____

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SUPERVISOR'S SIGNATURE _____ **DATE:** 7/5/00

OCR

The following pages contain the Optical Character Recognition text of the preceding scanned images.

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DEPARTMENT OF ENVIRONMENTAL QUALITY
SO UR CE INSPECTION REPOR T FORM

1. GENERAL INFORMATION

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LOCATION: Pier I 1, Harbor Road, Newport News INSPECTION DATE: 6/27/00

COUNTY NO.: 700 PLANT ID: 00074 FILE NO.: 194

SOURCE CLASS: A SM X B NSPS PSD NESHAP MACT

SOURCE CONTACT: Mr. John Davis & Mr. Frank Falcon

WEATHER CONDITIONS: 85'F and sunny with 20-25 mph SW winds

TYPE OF INSPECTION:

X CMS X Complete Permit Completion

Surveillance Follow up

Stack Test Complaint Investigation

CEMS Audit:

OTHER (EXPLAIN)

ANNOUNCED INSPECTION:-No

INSPECTION LEVEL PERFORMED 2 COMPLIANCE CODE 3

VEE PERFORMED No

OPERATING RATE: A, approximatel-v 50%

INSPECTOR: Jerome Brooks STAFF CODE P4116

CODING INFORMATION FOR COMPLIANCE STATUS

0 - UNKNOWN 6 - IN VIOLATION, NOT MEETING SCHEDULE
I - IN VIOLATION - NO SCHEDULE 7 - IN VIOLATION, UNKNOWN WITH RESPECT
2 - IN COMPLIANCE BY SOURCE TEST TO SCHEDULE
3 - IN COMPLIANCE BY INSPECTION 8 - NO APPLICABLE REGULATION
4 - IN COMPLIANCE BY CERTIFICATION 9 - IN COMPLIANCE, CLOSED
5 - IN VIOLATION, MEETING SCHEDULE

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Dominion Terminal Associates
I.D.# 700-00074
Reg# 60997
Date: 6/27/00

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#3, #4, #5 - Emissions Controls In compliance
#6, #7, #8 - Fugitive dust emissions controls In compliance
#9, # I 0, # I 1, # 1 2, # 1 3 - Emissions controls In compliance
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1 5 - Wet Suppression System In compliance
1 6 - Storage limit at any one time In compliance
1 7 - 12 month throughput In compliance
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1 9, #20, #21 - Visible emissions In compliance
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1. INSPECTION COMMENTS:

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INSPECTOR'S SIGNATURE DATE: June 3 0, 2000
SUPERVISOR'S COMMENTS:
SUPERVISOR'S SIGNATURE DATE: