COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
SOURCE INSPECTION REPORT FORM

I. GENERAL INFORMATION

SOURCE NAME: Norfolk Southern, Corp. REGISTRATION NO.: 60180

LOCATION: Norfolk, Lamberts Point INSPECTION DATE: 6/14+15/99

COUNTY NO. : 710 PLANT ID: 48 FILE NO.: 388

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

SOURCE CONTACT: Wayne Henley, Paul Contrada

WEATHER CONDITIONS: 80°F, SW winds @ 10 mph., mostly clear; 80°F, light winds, overcast

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: 1 ship loading; N. dumper operating

INSPECTOR: Ken Pinzel STAFF CODE: 0747

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

II. PROCESS DESCRIPTION:

General: This is a coal terminal. Coal is transported from the mines to the facility via rail car. Most of the coal remains in the cars until transfer to a ship. Some is off loaded for temporary storage in two surge silos.

Dumpers: Rail cars move through a thaw house where heaters can warm the car melt ice. From there, they move to the dumpers, two at a time. The dumper rolls them over dumping the coal into a hopper. Dust is controlled during dumping by spraying a surfactant/water mixture at as many as 3 levels. Also, fiberglass panels, about 8 ft. high, have been installed along the exterior side of each dumper to provide wind protection.

Conveyor Transfer & Surge Silos: Conveyors carry the coal to the ship or to the surge silo. The silos have dust collectors. Some of the conveyors (C_{ext}, $C1_{ext}$, T, T1 & SR) have hoods and wind guards. They wind guard & hood are separated by gap about 4 in. wide to allow access and visible inspection. Transfer points have water sprays.

III. INSPECTION COMMENTS:

A. PERMIT for SURGE SILO'S & ASSOC. CONVEYORS: A permit was issued April 6, 1992, for the two surge silos and 5 conveyors (T, T1, C_{ext}, $C1_{ext}$, & SR). The following table is a review of non-construction permit conditions and compliance status.

PERMIT REQUIREMENT	COMPLIANCE STATUS
5. FUGITIVE DUST at TRANSFER PTS.: Achieve no visible emissions through wet suppression and as necessary, surfactant.	OK. No visible emissions observed.
7. COAL THRUPUT: Max. throughput of 55,000,000 tons for any consecutive 12 month period. Interpretation: limit is for the entire facility, even though the permit addresses only a portion of the facility.	OK. Total coal dumped from the whole facility was 27,302,248 in 1998.
9. OPACITY: Max. opacity from baghouse exhausts is 5%.	OK. No visible emissions from baghouses (turned exhaust fan on for demo.)
10. RECORDS: Keep records of a) monthly thruput of coal, & b) <u>weekly</u> pressure drop across each baghouse.	a) OK. They have monthly records of coal dumped. (They have not been keeping 12 month totals, but will in the future.) b) OK. Entries are made in the pressure drop log each shift. If no coal is being received into the silo, they indicate such instead of recording the pressure drop. Pressure drops typically 1.5 - 2 in. w.c. My readings today: 1.0 & 1.1 on S and S1, respectively.
15. MINIMIZE MALFUNCTIONS: For process & APC equipment, a) develop maintenance schedule, b) maintain records of schedule & non-scheduled maintenance, c) maintain inventory of spare parts. Interpretation: applies only to baghouses.	a) OK. Maintenance done when pressure drop is out of range. b) OK. Log has been set up. Maintenance is infrequent; last entry was 3/96. c) They have a full set of replacement bags.
16. OPERATING PROCEDURES & TRAINING: For facility & APC equipment: a) written operating procedures, b) operators trained in operation of APC equipment & familiar with written operating procedures, c) records of training (names, dates, & nature).	a) Operating procedures are in a manual entitled, "Operating Procedures for Surge Silo System ...," dated 2/21/94. b) Training records have names & date 2/94.

B. FUGITIVE DUST: Rule 4-1 requires, *"reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following: ... 2. Application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles and other surfaces which may create airborne dust; the paving of roadways and maintaining them in a clean condition. 3. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. ... 4. Open equipment for conveying or transporting materials likely to create, objectionable*

air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion. 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion."

OBSERVATIONS:

1. Roadways are paved and most are clear of coal dust. They use a vacuum sweeper as needed. Roads near the dumper/ship loading had coal dust accumulations. Passage of a truck generated fugitive dust. Within in next week or so, they will be ordering a new vacuum sweeper that should improve conditions.

2. Dumper: Water/surfactant is sprayed during each dumping in non-freezing weather. The mix ratio is 1 gal. Dustky-S to 1500 gal of water. Only one day last winter was the weather cold enough that water had to be turned off. Improvements have been made to the system with the result that nozzles do not clog as often: a) water is pre-filtered, b) better nozzles are used, c) water is stored in a new, larger tank allowing sediment to settle out and d) a larger inventory of spare parts is maintained. To reduce wind impact around the dumpers, fiberglass screens have been erected along the length of each dumper. The screens are about 8 ft. tall. They cover about half the height.

DAY 1: A cloud of dust was emitted with each dumping. Perhaps the relatively high winds were a factor. Operator lunch hour prevented close up inspection. I did question whether a movable curtain would provide better protection from the wind.

DAY 2: Considerable coal dust was observed coming from the dumper, upon arrival. All three levels of spray were being used. If the dump is dusty, the operator can dump more slowly. Water sprays over the top of the car were providing good coverage except for one section, about 3 ft. in length. On some dumps, dust was escaping through that gap. Mr. Henley scheduled maintenance over the lunch hour. Dusting was minimal for some dumps. For others, it was considerable. Mr. Henley said that the variation might be explained by the fact that 3 different types of coal were being loaded onto this ship. We noted that most of the dust was coming from the far side of the car. I requested that they investigate to see whether the dust can be better controlled and suggested they might consider altering the spray pattern or pre-wetting the dusty coal.

3. Conveyors are covered. Transfer points have sprays. No visible emission were noted today.

4. Coal in rail cars (at least most) have been treated with a crusting agent to minimize emissions in transit and while sitting in the yard. No visible emissions were noted.

Complaints: They say complaint incidence has dropped to almost none. There may not have been any complaints in the last year.

C. OTHER EQUIPMENT: They have 3 safety kleen parts washers and one paint booth which has not been used for well over a year.

ENFORCEMENT: A Request for Corrective Action was written regarding dusty roadways and dust coming from the dumper.

INSPECTOR'S SIGNATURE K Rungel DATE: June 15, 1999

SUPERVISOR'S COMMENTS: _____

SUPERVISOR'S SIGNATURE _____ DATE: 6/17/99

OCR

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

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II. PROCESS DESCRIPTION:

General: This is a coal terminal. Coal is transported from the mines to the facility via rail car. Most of the coal remains in the cars until transfer to a ship. Some is off loaded for temporary storage in two surge silos.

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16. OPERATING PROCEDURES & TRAINING: For a) Operating procedures are in a manu
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operating procedures, b) operators trained Silo System dated 2/21/94.
in operation of APC equipment & familiar b) Training records have names & date

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