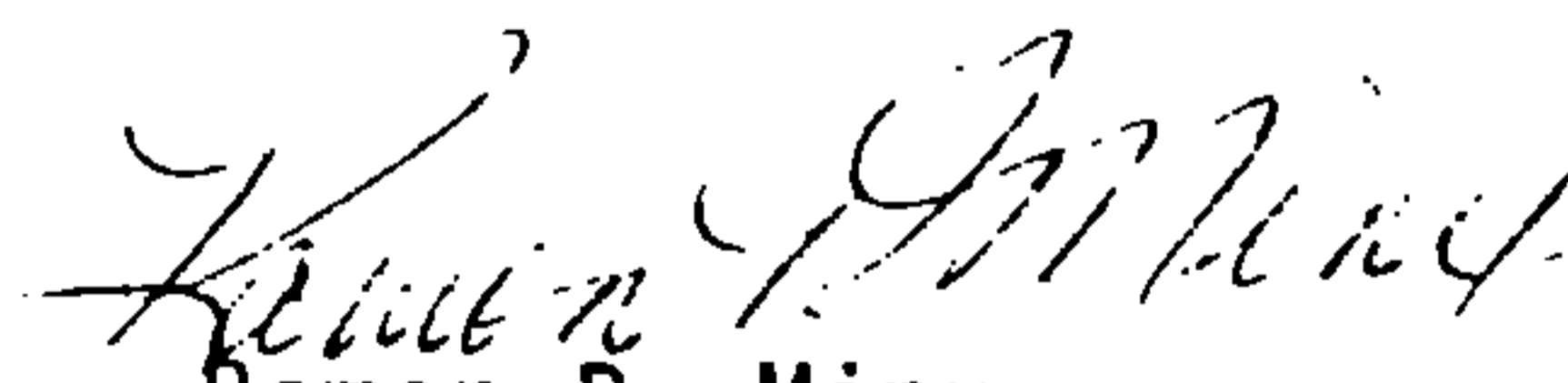


FILE

Memorandum To : Director, Division of Source Evaluation  
From : Director, Region VI  
Subject : Revised Massey and Dominion Coal Terminal Permits  
Enclosures : (1) Revised Massey and Dominion Coal Terminal Permits  
Date : February 17, 1987  
Serial No : 092-87

As requested by you in a memorandum dated February 10, 1987 (DSE-067-87) we have reviewed the draft Massey and Dominion Coal Terminal revised permits. All corrections have been made in red. As far as we are concerned, the revised permits may be issued once the corrections are made.

If you have further questions, please contact Frank Daniel.

  
Ramon P. Minx  
Director, Region VI

RPM/FLD/as

Enclosure

cc: Executive Director  
Assistant Executive Director, Operations

Memorandum To : Assistant Executive Director - Operations  
From : Director, Region VI  
Subject : Recommendations for Control of Coal Dust  
Reference : (a) Final Report for HJR-274 Titled "Report on Fugitive Emissions from Storage and Rail Transport of Coal"  
Enclosures : (1) Draft Revised Permit for Massey Coal Company  
(2) Draft Revised Permit for Dominion Terminal Associates  
(3) Draft Board Agenda Item Memo  
Date : January 20, 1987  
Serial No. : 038-87

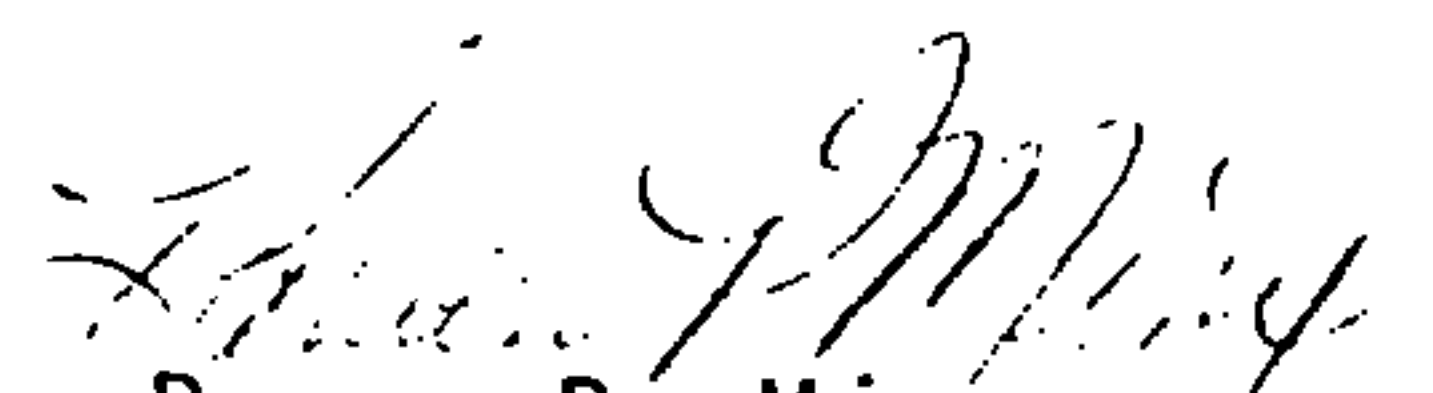
As per your request of January 16, 1987, forwarded herein are the recommendations based upon the findings of Reference (a).

It is recommended that the existing Massey and Dominion Permits be revised as per Enclosures (1) and (2), respectively. Both permits have been revised in accordance with the most recent Agency permit boilerplate and reflect additional control measures which were developed during the Coal Dust Study.

In addition, the following are the Region VI recommendations for the two "existing" terminals, Chessie and Norfolk and Southern:

1. Enclose all rotary railcar dumpers in addition to the wet suppression already in use at these emission points.
2. Implement a control strategy that will attain 80% reduction in fugitive coal dust emissions from static rail cars and rail cars in transit.

Also attached as Enclosure (3) is a draft Agenda Item Memo for incorporation into the February, 1987 Board Book.

  
Ramon P. Minx  
Director, Region VI

RPM/FLD/cf

Enclosures

cc: Executive Director

File  
Dominion  
1/22/87  
(initials)

AGENDA ITEM NO. \_\_\_\_: Fugitive Emissions from Storage and Rail  
Transport of Coal

PRIMARY SPEAKER : R. P. Minx  
Director, Region VI

DOCUMENTATION : HJR274  
Report on Fugitive Emissions from Storage and  
Rail Transport of Coal. January 1987 (Provided  
Separately)

### SUMMARY

Prior to 1983 two coal terminals operated in the Hampton Roads area. Norfolk and Southern Terminal in Norfolk and Chessie (CSX) in Newport News had operated for many years and were believed to be minor contributors to the ambient TSP. Both of these terminals stored coal in rail cars for subsequent ship loading. The only controls required was a wet suppression system at the rotary rail car dumper which was considered to be RACT.

Two new terminals were proposed for Newport News and SAPCB permits to construct and operate were granted in 1980 and 1981. Both new terminals were modern facilities employing BACT and no significant deterioration of ambient air quality was expected. These new terminals differed from the existing terminals in the method of coal storage using open ground storage piles rather than rail car storage.

The Massey Terminal began operating in early 1983 and no problems were experienced until the spring of 1983 when high wind speed following a drought period caused a major dust emission episode from the storage piles. This episode prompted a re-evaluation of controls for fugitive emissions from the storage piles. The permits for both new terminals were amended to include permanent wet suppression systems to be used periodically and when weather conditions indicated.

The Dominion Terminal Associates began operating in early 1984 and a second spring emissions episode occurred. The nuisance problem from fugitive coal emissions became chronic at an adjacent housing area with both wet suppression systems in operation. Although these systems were operable there was no scheduled spray system which appeared to be effective.

The General Assembly in 1985 by Joint Resolution (HJR274) directed that the SAPCB conduct a study to determine whether present environmental laws are stringent enough to control the problems from fugitive coal dust.

### BACKGROUND

See Report on Fugitive Emissions from Storage and Rail Transport of Coal.

## CONCLUSION

The existing environmental laws are stringent enough to permit regulation of fugitive coal emissions. (Section 10-17.18 (b) of the Air Pollution Control Law of Virginia).

The primary source of fugitive emissions from the coal export terminals located in Newport News is the coal storage piles. The application of water suppression, in accordance with an optimized plan, appears to represent BACT. It appears, when this optimized plan is properly implemented, emissions of coal dust from the terminals will comply with all State and Federal air quality standards. The optimized control plan developed during this study indicates that a control efficiency of 80 - 85% can be achieved using water suppression.

The analysis of particle size distribution indicates that most of the dust emissions are larger than 20 um and do not fall into the respirable range. As a consequence, no health hazard appears to exist. The quality of life, however, is subject to deterioration from the nuisance or soiling characteristics, when controls are not properly applied.

It has been determined that emissions from the previously existing CSX and Norfolk and Southern terminals are significant. It now appears that Reasonably Available Control Technology should be revised to decrease the emissions from these terminals. These revisions may include enclosing the car dumpers and application of a crusting agent or water suppression to control emissions from rail cars.

Fugitive emissions from unit coal trains are significant. Proper maintenance of the rail cars, to prevent spillage in transit, should be considered as a minimum for control. The exposed surface of coal in transit and in storage may be controlled in numerous ways. It appears that the application of a chemical sealant or crusting agent applied at the loading facility would be the most cost effective method to assure reasonable control both during transit and in storage.

## RECOMMENDATION

To be provided at Board Meeting.

1985 SESSION  
ENGROSSED

MAR 28 1985

HP9082509

HOUSE JOINT RESOLUTION NO. 274

House Amendments in [ ] - February 4, 1985

[ *Establishing a joint subcommittee Requesting the Air Pollution Control Board* ] to study whether present environmental laws are stringent enough to control the problems resulting from fugitive coal dust.

Patrons—Maxwell, Robinson, W. P., Lambert, Morrison, Forehand, Dicks, and Miller, Y. B.;  
Senator: Scott

Referred to the Committee on Rules

WHEREAS, residents of the Commonwealth place a high priority on a clean air environment; and

WHEREAS, a pollutant known as fugitive coal dust <sup>from whatever sources</sup> presents a potential environmental problem for residents of the Commonwealth; and

WHEREAS, there are no federal or state coal dust standards for piers or coal loading facilities other than requiring the best available control technology; and

WHEREAS, there are no air monitoring stations presently measuring the extent of fugitive coal dust <sup>emanating from various sources</sup> in the area of coal loading piers; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That [ a joint subcommittee be established to study whether present environmental laws are stringent enough to control the problems resulting from fugitive coal dust. The joint subcommittee shall be composed of three members of the House Committee on Conservation and Natural Resources appointed by the Speaker of the House, and two members of the Senate Agriculture, Conservation and Natural Resources Committee appointed by the Senate Committee on Privileges and Elections.

The subcommittee shall complete its work in time to submit recommendations to the 1986 Session of the General Assembly.

The cost of this study, including direct and indirect costs are estimated to be \$11,375. the Air Pollution Control Board conduct a study to determine whether present environmental laws are stringent enough to control the problems resulting from fugitive coal dust, and if they find that such laws are not, to proceed to promulgate appropriate regulations to do so as soon as possible. ]

Official Use By Clerks

Agreed to By

The House of Delegates  
without amendment ☐  
with amendment ☐  
substitute ☐  
substitute w/amdt ☐

Agreed to By The Senate  
without amendment ☐  
with amendment ☐  
substitute ☐  
substitute w/amdt ☐

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Clerk of the House of Delegates

Clerk of the Senate

\*\*\*OCR\*\*\*

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

Memorandum To Director, Division of Source Evaluation

From Director, Region VI

Subject Revised Massey and Dominion Coal Terminal Permits

Enclosures (1) Revised Massey and Dominion Coal Terminal Permits

Date February 17, 1987

Serial No 092-87

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If you have further questions. please contact Frank Daniel.

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Zil  
amon P. Minx  
Director, Region VI

RPM/FLD/as

Enclosure

cc: Executive Director  
Assistant Executive Director, Operations

Memorandum To Assistant Executive Director - Operations

From Director, Region VI

Subject Recommendations for Control of Coal Dust

Reference (a) Final Report for HJR-274 Titled "Report on Fugitive Emissions from Storage and Rail Transport of Coal"

Enclosures (1) Draft Revised Permit for Massey Coal Company

(2) Draft Revised Permit for Dominion Terminal Associates

(3) Draft Board Agenda Item Memo

Date January 20, 1987

Serial No. 038-87

As per your request of January 16, 1987, forwarded herein are the recommendations based upon the findings of Reference (a).

It is recommended that the existing Massey and Dominion Permits be revised as per Enclosures (1) and (2), respectively. Both permits have been revised in accordance with the most recent Agency permit boilerplate and reflect additional control measures which were developed during the Coal Dust Study.

In addition, the following are the Region VI recommendations for the two existing terminals, Chessie and Norfolk and Southern:

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2. Implement a control strategy that will attain 80% reduction in fugitive coal dust emissions from static rail cars and rail cars in transit.

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IV

Ramon P. Mink  
Director, Region VI

RPM/FLD/cf

Enclosures

cc: Executive Director

AGENDA ITEM NO. Fugitive Emissions from Storage and Rail  
Transport of Coal

PRIMARY SPEAKER R. P. Minx  
Director, Region VI

DOCUMENTATION HJR274  
Report on Fugitive Emissions from Storage and  
Rail Transport of Coal. January 1987 (Provided  
Separately)

SUMMARY

Prior to 1983 two coal terminals operated in the Hampton Roads area. Norfolk and Southern Terminal in Norfolk and Chessie (CSX) in Newport News had operated for many years and were believed to be minor contributors to the ambient TSP. Both of these terminals stored coal in rail cars for subsequent ship loading. The only controls required was a wet suppression system at the rotary rail car dumper which was considered to be RACT.

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The General Assembly in 1985 by Joint Resolution (HJR274) directed that the SAPCB conduct a study to determine whether present environmental laws are stringent enough to control the problems from fugitive coal dust.

BACKGROUND

See Report on Fugitive Emissions from Storage and Rail Transport of Coal.

ENCLOSURE (3)

## CONCLUSION

The existing environmental laws are stringent enough to permit regulation of fugitive coal emissions. (Section 10-17.18 (b) of the Air Pollution Control Law of Virginia).

The primary source of fugitive emissions from the coal export terminals located in Newport News is the coal storage piles. The application of water suppression, in accordance with an optimized plan, appears to represent BACT. It appears, when this optimized plan is properly implemented, emissions of coal dust from the terminals will comply with all State and Federal air quality standards. The optimized control plan developed during this study indicates that a control efficiency of 80 - 85% can be achieved using water suppression.

The analysis of particle size distribution indicates that most of the dust emissions are larger than 20 um and do not fall into the respirable range. As a consequence, no health hazard appears to exist. The quality of life, however, is subject to deterioration from the nuisance or soiling characteristics, when controls are not properly applied.

It has been determined that emissions from the previously existing CSX and Norfolk and Southern terminals are significant. It now appears that Reasonably Available Control Technology should be revised to decrease the emissions from these terminals. These revisions may include enclosing the car dumpers and application of a crusting agent or water suppression to control emissions from rail cars.

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## RECOMMENDATION

To be provided at Board Meeting.

1985 SESSION

HP9082509 EN-GROSSED

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HOUSE JOINT RESOLUTION NO. 274

House AmendmenLs in February 4, 1985

3 I F-slablishing tv joini vubeommietee Requesti'ng the Air Pollution Control Board to study

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5 resulting from fugitive coal dust.

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7 Patrons-Maxwell, R'binson. W. P., Lambert, Morrison, Forehand, Dicks, and Mi ller, Y. B.:

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9 Senator: Scott

10 Referred to the Committee on Rules

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22 enough to Gentr-ol th-e pr-oblern resu4ing fr-om fugifive cDa4 dust. T4e jo int eommktee

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Official Use By Clerks

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The House of Delegates Agreed to By The Senate

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Clerk of the House of Delegates Clerk of the Senate

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