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Norfolk Southern Corporation
Environmental Protection
110 Franklin Road, S.E.
Roanoke, Virginia 24042-0013
540 981-4456

C. R. McDaniel
System Director

January 29, 2001
1-9-2-10-5-Coal Committee (VA)

Ms. Jane Workman
Virginia Department of Env. Quality
Tidewater Regional Office
5636 Southern Blvd.
Virginia Beach, VA 23462

Dear Ms. Workman,

Enclosed please find Norfolk Southern's 2000 "Annual Report to the Joint Subcommittee Studying Measures to Reduce Emissions from Coal-Carrying Railroad Cars." The report is submitted as required by Virginia Senate Joint Resolution No. 257.

The report outlines Norfolk Southern's coal dust control initiatives performed in 2000, and our proposed actions to continue the dust monitoring in 2001 as committed to the Senate Joint Committee.

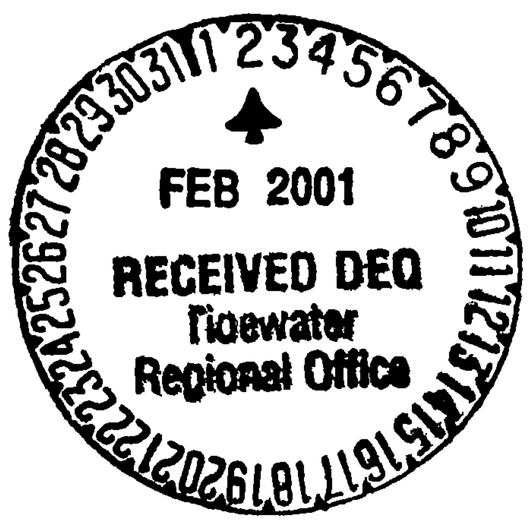
If you have any comments or questions after reviewing the report, please contact my office at (540)981-4456 or Mr. Bruce Wingo at (804)649-2485.

Sincerely,

C. Russell McDaniel

Enclosure

Cc: W. Bruce Wingo – Ns Office of Public Affairs, Richmond



ANNUAL REPORT TO THE JOINT SUBCOMMITTEE STUDYING MEASURES TO REDUCE EMISSIONS FROM COAL-CARRYING RAILROAD CARS PER SENATE RESOLUTION NO. 257

Submitted by

Norfolk Southern Railway Company
Environmental Protection Department
Roanoke, VA

January 2001

Summary of Key Accomplishments

- Norfolk Southern's Performance Monitoring Plan remains fully implemented

- The Trackside Monitor near Windsor, VA continues to monitor trains headed for the Tidewater area providing timely and valuable feedback to the mines participating in Norfolk Southern's coal dust reduction program.

- A second Trackside Monitor is currently deployed in Altavista, VA. This unit enables Norfolk Southern to acquire information on dusting trains in close proximity to an area associated with repeated reports of dusting made through the 1-800 system.

- 1-800 dusting report line continues to be available to record any complaints from persons and businesses located in the rail corridors through which Norfolk Southern transports coal.

- Monitoring of TSP and PM-10 near Lamberts Point in Norfolk, VA continues to demonstrate compliance with DEQ ambient air quality standards.

- The firm of Marshall Miller and Associates in Bluefield, Virginia, in collaboration with Simpson Weather Associates in Charlottesville, Virginia, continues to provide regular feedback to the coal mines served by Norfolk Southern regarding their participation in the reduction of fugitive emissions.

- Norfolk Southern continues to work with those mines that continue to be identified as not meeting the Performance Monitoring Plan's dust control standards. Marshall Miller and Associates conducts periodic audits of the mines to ensure optimal performance.

In accordance with the 1996 Senate Joint Resolution No. 257, Norfolk Southern Railway Company (NSRC) summarizes the efforts of the company and its consultants, Simpson Weather Associates and Marshall Miller and Associates, Inc., to identify and mitigate fugitive coal dust emissions from its rail corridors and facilities in the Commonwealth during the calendar year 2000. This report illustrates NSRC's specific compliance with the resolution and our commitment to the environment.

2000 Review

Performance Monitoring Plan

The Performance Monitoring Plan is NS's strategy for monitoring the effectiveness of coal treatments by participating mines and for identifying additional mines that may be encouraged to participate in the dust control program. The major components of the Performance Monitoring Plan currently implemented are:

- Trackside Monitor -- Isle of Wight County
- Mobile Trackside Monitor -- Altavista, VA
- 1-800 Dusting Report Line
- Rail Transport Emissions Profiling System
- Seasonally Adjusted Rail Transport Dustiness Index

The multi-component approach established by NS is designed to provide continuous and unbiased feedback on the performance of its dust control program with the Trackside Monitors and 1-800 line. The Rail Transport Emissions Profiling System and Seasonally Adjusted Rail Transport Dustiness Index serve, when called upon, to generate additional, quantitative data needed by Norfolk Southern and its customers to decide on the proper course of action to reduce emissions that have been detected.

Norfolk Southern Railway Company will continue the Performance Monitoring Plan in 2001. NSRC will, as it has done in the past, work to expand mine participation should the Rail Transport Emissions Profiling System, the Trackside Monitors, the Seasonally Adjusted Rail Transport Dustiness Index, or the 1-800 Dusting Report Line identify major new sources. Norfolk Southern Railway Company will also continue to participate in the evaluation of advanced dust control agents for use in the coal dust treatment program.

Trackside Monitor -- Isle of Wight County

The Trackside Monitor near Windsor, VA in Isle of Wight County, is designed to detect coal dust emissions from trains destined for Lamberts Point. The Isle of Wight location was chosen since it permits monitoring of treated coal

shipments after their exposure to more than 300 miles of transport. NSRC designed this monitor for two primary purposes:

1) to provide continuous monitoring of the effectiveness of dust mitigation treatments being performed by participating load-out facilities; and

2) to identify additional coals to be considered for inclusion in the coal car treatment program.

The Trackside Monitor is collecting data from both the northern and southern sides of the track. A tower on the north side holds a laser sensor that is aligned with a detector mounted on the south side tower. The laser data provides redundancy in the dust detection system that is valuable in discriminating between dusting and non-dusting coal shipments.

For each dusting train that passes the Trackside Monitor, a report is developed by NS. Each mine's shipment is graded (A – E) by Simpson Weather Associates and a summary table identifies those shipments that are most likely responsible for the dust signal as well as those shipments that appear to have no coal dust emissions. Marshall Miller and Associates then uses the individual mine's report card to communicate the level of dust control being achieved.

Trackside Monitor -- Altavista, VA

A mobile version of the Trackside Monitor remains deployed in Altavista, VA. In response to persistent complaints from that area, NSRC has decided to upgrade the current equipment to have nearly the same capability as that at the IOW installation. The Trackside Monitor at Altavista monitors both trains bound for export through Lamberts Point as well as those destined for regional domestic uses. Thus the data collected at this site have identified mines for participation in NSRC's dust mitigation program that would not have been seen by the IOW Trackside Monitor.

1-800 Dusting Report Line

The total number of calls to the 1-800 Dusting Report Line for 2000 is approximately 20% less than in 1999. The data from the Trackside Monitor sites suggest a modest reduction in the number of dusting trains and a somewhat greater reduction in the magnitudes of the detected dust signals.

The combination of 1-800 reports and the details provided through the Trackside Monitor and subsequent train tracking efforts provides the information needed by Marshall Miller and Associates to visit and encourage the responsible mines to participate in the NS dust mitigation program.

Lamberts Point Community Air Quality Monitoring

The Lamberts Point Community Air Monitoring Program monitors airborne particulates in the area surrounding the Lamberts Point coal pier in Norfolk. It consists of three TSP monitors and one PM-10 monitor in the neighborhood surrounding Lamberts Point. TSP monitors are located at the Virginia Initiative Project's waste water treatment facility adjacent to the pier, Taylor Elementary School in the West Ghent neighborhood, and the Health Sciences building on Old Dominion University's campus. The PM-10 monitor is located at the ODU site. No exceedances of the DEQ ambient air quality standards have been recorded in 2000. A major benefit of these data has been to establish a consistent baseline of relative dust levels around the facility that can be used to evaluate and prioritize fugitive dust mitigation efforts.

Norfolk Southern Rail Emissions Study

NSRC continues to have access to the Rail Transport Emissions Profiling System developed during the Rail Corridor Study. The Rail Transport Emissions Profiling System is attached to the rear sill of a loaded coal car and records numerous parameters including wind speed, rainfall, coal temperature, and dust emissions during transit. The Rail Transport Emissions Profiling System is primarily used to:

1) gather data during coal transport to demonstrate to individual mines that it is in their economic interest to reduce material loss from their coal shipments; and

2) periodically test the effectiveness or diagnose detected failures of dust mitigation techniques being used on coal in transit.

Anticipated 2001 Program Improvements

NSRC continues to fund improvements in the tools needed to execute its Performance Monitoring Plan. Funds have been provided to "light-weight" the Rail Transport Emissions Profiling System to facilitate its deployment by only two persons. NSRC is also installing a new video camera at its Trackside Monitor sites to provide visual records of the condition of car top treatments applied at those mines participating in NSRC's dust control program.

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

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FEB 2001

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Operating Subsidiary: Norfolk Southern Railway Company

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