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W. Bruce Wingo Resident Vice President Government Relations

February 28, 2011

The Honorable Susan Clarke Schaar Clerk of the Senate of Virginia Post Office Box 396 Richmond, Virginia 23218

Dear Susan:

Enclosed is Norfolk Southern Corporation's 2010 Annual Coal Dust Report. The report highlights Norfolk Southern's continuing efforts to identify and mitigate coal dust emissions from our rail corridors and facilities throughout the Commonwealth.

If you have any questions or comments about this report, please do not hesitate to contact Mr. Richard P. Russell, System Director for Environmental Protection, at (404) 582-4456.

Sincerely

W. Bruce Wingo

### Enclosure

The Honorable Bruce F. Jamerson, Clerk of the Virginia House of Delegates w/e cc: Mr. Richard P. Russell

# 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 Corporation Environmental Protection Department Atlanta, GA

February 2011

# Summary of Key Accomplishments in 2010

- Norfolk Southern Corporation's (Norfolk Southern's) Performance Monitoring Plan remains fully implemented.
- The Trackside Monitor in Altavista, VA has been upgraded and 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.
- The 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. In 2010 there were no complaints logged from Virginia on the 1-800 line.
- Monitoring of Total Suspended Particulate (TSP) and very fine particulate matter (PM-10) near Lamberts Point in Norfolk, VA continues to demonstrate compliance with DEQ ambient air quality standards.

In accordance with the 1997 Virginia Senate Joint Resolution No. 257, Norfolk Southern summarizes the efforts to identify and mitigate fugitive coal dust emissions from its rail corridors and facilities in the Commonwealth during the calendar year 2010. This report illustrates Norfolk Southern's compliance with the resolution and our commitment to protect the environment.

### 2010 Review

## **Performance Monitoring Plan**

The Performance Monitoring Plan is Norfolk Southern'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 Altavista, VA
- 1-800 Dusting Report Line
- Community Air Quality Monitoring at Lamberts Point in Norfolk, VA

The multi-component approach established by Norfolk Southern is designed to provide continuous and unbiased feedback on the performance of its dust control program with the Trackside Monitors and 1-800 line.

Norfolk Southern will continue the Performance Monitoring Plan in 2011. Norfolk Southern will, as it has done in the past, work to expand mine participation should the Trackside Monitors or the 1-800 Dusting Report Line identify significant new sources. Norfolk Southern will also continue to participate, as needed, in the evaluation of advanced dust control agents for use in the coal dust treatment program.

### Trackside Monitor – Altavista, VA

The Trackside Monitor at Altavista monitors both trains bound for export through Lamberts Point as well as those destined for regional domestic coal consumers. A continuing goal is to reduce the time taken to alert the mines of any evidence of treatment failure and thus to enable prompt corrective measures, if necessary. To this end, Norfolk Southern has completed the first phase in the implementation of an improved evaluation technique developed for use with existing Norfolk Southern trackside dust monitors. The first phase of this upgrade involved the installation of new dust monitors and wireless communications. The second phase of the project, which involves an autonomous grading system developed to monitor fugitive dust emissions, is anticipated to be completed in 2011.

Norfolk Southern develops a report for each dusting train that passes the Trackside Monitor. Each mine's shipment is graded (A to E) and a summary table identifies the originating mine believed responsible for the dust signal as well as those shipments that appear to have no coal dust emissions.

In 2010, the Altavista Trackside Monitor reported that 70% of all coal trains produced little measurable dust (<25 micrograms per cubic meter). While this demonstrates a decrease from the 2009 value of 80%, it represents continued improvement since 2003. The average of the dust signals produced by the remaining 30% of the trains was 102 micrograms per cubic meter, which is slightly above Norfolk Southern's performance target of 100 micrograms per cubic meter, but lower than the average of 109 micrograms per cubic meter in 2009. Maintaining an average intensity of dusting events below or close to 100 micrograms per cubic meter is the most likely reason for the continued low number of 1-800 reports. Norfolk Southern continues monitoring performance to determine whether a series of excessive dusting events occurs.

### 1-800 Dusting Report Line

As has been the case since 2007, no calls to the Virginia 1-800 Dusting Report Line were received in 2010. Historically, the Virginia 1-800 Dusting Report Line has received few calls, with only one call in each of years 2002, 2003, 2005, and 2006, two calls in 2001, and no calls in 2004. The data from the Trackside Monitor sites suggest little change from 2007 to 2010 in the number of dusting trains and/or the magnitudes of the detected dust signals.

The combination of 1-800 reports, the details provided through the Trackside Monitor, and subsequent train tracking efforts provides a basis to encourage the mines to continue to participate in the dust mitigation program and improve existing efforts.

# **Lamberts Point Community Air Quality Monitoring**

The Lamberts Point Community Monitoring Program monitors airborne particulate in the area surrounding the Lamberts Point coal pier in Norfolk. A PM10 monitor is operated at the Virginia Initiative Project's waste water treatment facility adjacent to the pier. The DEQ ambient air quality standards were not exceeded at any time in 2010.

### **Anticipated 2011 Program Improvements**

Norfolk Southern continues to fund improvements in the tools needed to execute its Performance Monitoring Plan. Sensor upgrades to the Altavista Trackside Monitor and implementation of a new grading system have been partially completed. An advanced grading system developed for coal leaving the Powder River Basin in Wyoming is being evaluated for use in Virginia. Norfolk Southern plans to implement that system once it is fully developed and tested within its network of Trackside Monitors.

As the Altavista Trackside Monitor hardware has been upgraded to include new dust monitors and wireless communications, Norfolk Southern is preparing to convert to an improved monitoring and alert system consistent with that used on other portions of Norfolk Southern's system. Continued evaluation of the Trackside Monitoring is critical to maintaining confidence in the Performance Monitoring Plan by Norfolk Southern, its customers and the citizens of the Commonwealth of Virginia.

Norfolk Southern will continue to explore ways to improve the efficacy of the treatments and expand their applications to additional mines by evaluating the continued monitoring of the performance of implemented treatment programs.