

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

Submitted by  
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In accordance with the 1997 Virginia Senate Joint Resolution No. 257, Norfolk Southern Corporation (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 2018. This report illustrates Norfolk Southern's compliance with the resolution and its commitment to protect the environment.

### **Summary of Key Accomplishments in 2018**

- Norfolk Southern's Performance Monitoring Plan remains fully implemented.
- The Trackside Monitor in Altavista, 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. Norfolk Southern continues to improve characterization of emissions using statistical tools to help identify sources of excessively dusty events.
- 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. No calls from Virginia were received on the line in 2018.

Monitoring of particulate matter (PM<sub>10</sub>) near Lamberts Point in Norfolk, VA continues to demonstrate PM<sub>10</sub> levels are far below the National Ambient Air Quality Standard (NAAQS) set by the U.S. Environmental Protection Agency (EPA).

## **2018 Review**

### **Performance Monitoring Plan**

The Performance Monitoring Plan in 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 in Virginia are:

- Trackside Monitor – Altavista, VA
- 1-800 Dusting Report Line
- Community Air Quality Monitoring at Lambert's 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 Monitor and 1-800 Dusting Report Line.

Norfolk Southern will continue the Performance Monitoring Plan in 2019. Norfolk Southern will continue its efforts 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. The monitor uses an autonomous system to monitor the amount of dust generated by individual trains. . In 2018, Norfolk Southern invested in an integrated database platform and analytical tools to assist in evaluating the large datasets collected via the Trackside Monitor. In addition to tracing the sources of individual dusty events, Norfolk Southern has worked to take a statistical approach to identifying the most significant contributors of fugitive emission and continue its mitigation efforts with the mines.

### **1-800 Dusting Report Line**

There were no calls to the 1-800 Dusting Report Line originating from Virginia in 2018.

## **Lamberts Point Community Air Quality Monitoring**

The Lamberts Point Community Monitoring Program monitors airborne particulates in the area surrounding the Lamberts Point coal pier in Norfolk, VA using PM<sub>10</sub> monitors. Norfolk Southern continued its monitoring since the completion of 12-month study to DEQ's satisfaction in 2016. A sampler located at the Hampton Roads Sanitation District's (HRSD) wastewater treatment facility adjacent to the pier according to EPA-prescribed particulate sampling schedule. In 2018, the average PM<sub>10</sub> concentration reported at the site was 15.96 µg/m<sup>3</sup>, and the maximum concentration was 41.05 µg/m<sup>3</sup>. The 24-hour National Ambient Air Quality Standard (150 µg/m<sup>3</sup>) was not exceeded at any time in 2018.