ANNUAL REPORT TO THE JOINT SUBCOMMITTEE STUDYING MEASURES TO REDUCE EMISSIONS FROM COAL-CARRYING RAILROAD CARS PER SENATE RESOLUTION NO. 257 AND HOUSE JOINT RESOLUTION NO. 25

Submitted by

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In accordance with the 1997 Virginia Senate Joint Resolution No. 257 and 2020 House Joint Resolution No. 25, 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 2020.

2020 Review

Performance Monitoring Plan

Norfolk Southern has implemented a Performance Monitoring Plan as its primary tool to monitor coal dust from its railway company subsidiary's operations. The major components of the Performance Monitoring Plan currently implemented in Virginia are:

- Trackside Dust Monitoring 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 monitor and 1-800 dusting report line. Norfolk Southern will continue its efforts to identify significant sources of in-transit dust emission and the changes in performance by the dust contributors via continuous monitoring. Norfolk Southern will also continue to monitor the ambient air quality near Lamberts Point in Norfolk, VA.

• Trackside Dust Monitoring – Altavista, VA

The trackside dust monitor at Altavista, VA monitors both trains bound for export through Lamberts Point as well as those destined for regional domestic coal consumers. The trackside monitor operates continuously and uses an autonomous system to evaluate the amount of dust generated by individual trains passing the site. By analyzing a large dataset collected by the trackside monitoring system, Norfolk Southern has continued to identify the most significant contributors of in-transit dust emission to engage in cooperative emission reduction efforts. Norfolk Southern also continued to improve the analytical tools for the trackside monitoring system. In addition to identifying high-dusting sources, tools to characterize the dusting level at Altavista, VA site have been developed by compiling integrated dust values calculated in recent years so that the trends in dusting level can be closely monitored and be promptly responsive to substantial changes in the trend.

• 1-800 Dusting Report Line

Norfolk Southern continues to operate a toll-free call line (1-800-621-0772) to receive reports on dusting events and coal dust related complaints. Norfolk Southern has also developed a dashboard service that allows for prompt attention to complaint calls by engaged personnel. There were no calls to the 1-800 line originating from Virginia in 2020, and as such no public meetings were held in 2020.

• 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 a PM₁₀ sampler. Norfolk Southern continues to monitor the air quality in the area by operating a PM₁₀ sampler located at the Hampton Roads Sanitation District's (HRSD) wastewater treatment facility adjacent to the pier. The sampling is regularly conducted every six days, consistent with EPA protocols for particulate sampling schedules, and the monitor is calibrated each quarter. As in the past, the 24hour National Ambient Air Quality Standard (150 µg/m³) was not exceeded at any time in 2020. The average PM_{10} concentration reported at the site in 2020 was 18.69 $\mu g/m^3$. Norfolk Southern has conducted engineering studies to determine the feasibility and cost effectiveness of covering the rotary dumpers at Lamberts Point. The engineering studies concluded that it is impractical to enclose the structures due to the age and design of the rotary dumpers, along with the fire hazards presented by enclosing the equipment. In addition, because the average PM₁₀ readings have been and continue to be an order of magnitude below the EPA National Ambient Air Quality Standard, the benefits of enclosing the dumpers are far outweighed by the costs. Pursuant to an agreement in resolution of a lawsuit, Norfolk Southern understands that BNSF Railway is continuing a study of coal car covers. Norfolk Southern will review the results of that study when they are available.