

November 9, 2023

Mr. John Lovenburg
Vice President, Environmental
BNSF Railway Company
2500 Lou Menk Drive
Fort Worth, Texas 76131
John.Lovenburg@bnsf.com

Dear Mr. Lovenburg,

The California Air Resources Board (CARB) received Burlington Northern Santa Fe Railway's (BNSF) 2022 Fleet Average Agreement Annual Compliance Report (Compliance Report) pursuant to Section IV.B. of the 1998 Memorandum of Mutual Understanding and Agreements, South Coast Locomotive Fleet Average Emissions Program (1998 Agreement). CARB staff determined that BNSF complied with provisions of the 1998 Agreement for its operations in 2022.

BNSF's reported activity met the fleet average emissions standard in the South Coast Air Basin. Although BNSF has met the 1998 Agreement requirements, CARB continues to be concerned about the harmful diesel emissions from locomotives. The In-Use Locomotive Regulation, adopted April 2023, will address the adverse exposure from locomotives that has burdened communities for far too long.

Compliance with the 1998 Agreement

The 1998 Agreement requires that the annual locomotive final fleet average be under 5.5 grams per brake horsepower-hour (g/bhp-hr) for oxides of nitrogen (NOx) for locomotive operations in the South Coast Air Basin, to meet the final fleet average standard.

Compliance Evaluation: Calendar Year 2022

BNSF's Compliance Report included the following:

1. BNSF's letter of certification: This letter is signed by BNSF and certifies that the information in this report is true, accurate, and complete.
2. BNSF's fleet summary information: This is information regarding the methodology used by BNSF to comply with the 1998 Agreement (Form F-S).
3. BNSF's fleet average calculation: This information includes individual locomotive megawatt-hours and emissions levels, as well as calculations and any necessary adjustments (Form F-A-1 through F-A-6).

Staff reviewed BNSF's 2022 Compliance Report submittal, which included activity information (in megawatt-hours) and emissions levels for over 5,000 locomotives. Staff

determined that for calendar year 2022, BNSF's final fleet average of 5.3 g/bhp-hr meets the NOx compliance level set forth in the 1998 Agreement.

CARB will make the BNSF Compliance Report information publicly available except for individual locomotive activity levels, which are business confidential according to California Government Code Section 6254.7. The activity data will be aggregated by tier and emission level.

If you have any questions or comments, please contact Layla Gonzalez, Staff Air Pollution Specialist, Freight Systems Section at Layla.Gonzalez@arb.ca.gov or Jaskamal Kaur, Air Pollution Specialist, Freight Systems Section at Jaskamal.Kaur@arb.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Ajay Mangat". The signature is written in a cursive, flowing style.

Ajay Mangat, Chief, Freight Technology Advancement Branch, Transportation and Toxics Division.