

November 16, 2021

Mr. Bob Toy, Senior Director Environmental Programs
Union Pacific Railroad
1400 Douglas Street, STOP 1030
Omaha, Nebraska 68179
Bmtoy@up.com

Dear Mr. Toy:

The California Air Resources Board (CARB) received Union Pacific Railroad's (UPRR) 2020 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 MOU Agreement). CARB staff determined that UPRR complied with provisions of the 1998 Agreement for its operation in 2020 by utilizing ULEL credits.

As you know, since 2019 CARB has presented In-Use Locomotive Concepts designed to address the impact of harmful emissions from locomotives and environmental justice concerns throughout the State. Subsequently, the Governor issued an Executive Order that calls for off-road vehicles, equipment, and operations to transition to zero emission by 2035. As a reminder, the statewide reporting concept is key to implementing these efforts. If you have any questions about the reporting component or would like to discuss any other proposed regulatory concepts, please let us know.

Compliance Evaluation under the 1998 MOU

The 1998 Agreement requires that the annual locomotive final fleet average be at least 5.5 grams per brake horsepower-hour (g/bhp-hr) for oxides of nitrogen (NOx) for locomotive operations in the South Coast Air Basin. The 1998 Agreement allows UPRR to use fleet average credits, including credits procured from the use of ultra-low emitting locomotives in the South Coast Air Basin, to meet the locomotive final fleet average.

Compliance Evaluation: Calendar Year 2020

UPRR's Compliance Report included the following:

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

Staff reviewed UPRR's submittal of its Compliance Report, which included activity information (in megawatt-hours) and emission levels for over 4,600 locomotives in 2020. CARB staff determined that for calendar year 2020, UPRR's final fleet average of 6.0 g/bhp-hr, met the NOx compliance level set forth in the 1998 Agreement after adjustments were made by utilizing 0.5 of their ULEL credits bringing the final fleet average to 5.5 g/bhp-hr.

CARB will make the 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.

Should you have any questions or comments, please contact Ajay Mangat, Manager, Freight Systems Section at ajay.mangat@arb.ca.gov or Jaskamal Kaur, Air Pollution Specialist, Freight Systems Section at jaskamal.kaur@arb.ca.gov.

Sincerely,



Cari Anderson, Branch Chief,
Freight Transport Branch,
Transportation and Toxics Division

cc: See next page

cc: Melissa Schop, Senior Manager of Environmental Programs, Union Pacific Railroad

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Christi Hornick, General Director of Environmental Management, Union Pacific Railroad Clhornick@up.com

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