Air Resources Board

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Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

October 13, 2015

Mr. Gregory D. Workman
Vice President
Safety, Security, Environment and CSO
Union Pacific Railroad
1400 Douglas Street, STOP 1180
Omaha, Nebraska 68179-1180

Dear Mr. Workman:

This letter is to inform you that the California Air Resources Board (ARB) staff has completed its review of Union Pacific Railroad's (UP) submittal for Fleet Average Credit (FAC), for Calendar Year 2009, as provided for in the 1998 South Coast Locomotive Fleet Average Emissions Program (1998 Agreement).

The 1998 Agreement provides the opportunity for a participating railroad to create FAC as an incentive to accelerate fleet turnover in the South Coast Air Basin to meet the oxides of nitrogen (NOx) fleet average targets between 2005 and 2010. To generate these credits a railroad must calculate and submit its Final Fleet Average, pursuant to section IV.B.1, for the year for which emission reductions are to be credited. In 2009, a railroad could be credited for emissions below a Final Fleet Average Target of 8.0 g/bhp-hr.

This review covered UP's submittal for calendar year 2009. The submittal included the following:

(1) UP'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) UP's fleet summary information: This is information regarding the methodology used by the railroad to comply with the 1998 Agreement (Form F-S).

(3) UP'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).

Upon review, ARB staff determined that the submitted documents are complete and meet the reporting requirements set forth in the 1998 Agreement. Staff analyzed individual locomotive emission and activity levels for about 5,000 individual locomotives in 2009 to review the amount of fleet average credit supported by UP's submittal. For calendar year 2009, ARB staff determined that UP had a Final Fleet NOx level of 6.1 g/bhp-hr and created a total of 1.9 g/bhp-hr of FAC. FAC can be used in the future to comply with the NOx fleet average of 5.5 g/bhp-hr.

ARB will make all of 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 regarding staff's determination of UP's submittal for FAC, please contact me at (916) 322-8277 or elizabeth.yura@arb.ca.gov, or Harold Holmes, Manager, Rail Strategies Section at (916) 324-8029 or harold.holmes@arb.ca.gov.

Sincerely,

Elizabeth Yura, Chief
Emissions Assessment Branch
Transportation and Toxics Division

cc: See next page.

cc: Mr. Robert Toy, Director
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