Environmental Management Group

September 20, 2011

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95812

Dear Ms. Nichols,

Union Pacific Railroad Company (UPRR) is providing these comments in response to the proposed amendments to the Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards (CHE Regulation), as presented in the August 3, 2011 Notice of Public Hearing and the subsequent revisions proposed by CARB via email on September 15, 2011. UPRR operates equipment at six (6) California facilities, which are subject to the CHE Regulation, and welcomes this opportunity to comment.

First, UPRR has several comments and concerns related to the recently added provision requiring annual engine exhaust opacity testing for all CHE. While UPRR is committed to reducing exhaust emissions from all of our facilities, we believe that the proposed opacity testing requirements would be overly burdensome and costly.

1. **The annual opacity test requirement will require significant work to achieve minimal emission reductions.** As discussed in Appendix C of the Staff Report: Initial Statement of Reason (ISOR) for the proposed amendments, CARB has estimated that the statewide cost for the mandated opacity testing will require an initial capital investment of $1.25 million plus the recurring costs of annual testing of approximately $1.76 million dollars per year. UPRR has estimated that the testing program for our California facilities will require an initial capital investment, for the purchase of opacity meters and staff training, of nearly $70,000. Since this is a new program, we do not have historic data to accurately estimate the annual testing cost, but believe that costs could be substantial due to equipment downtime and labor. However, the ISOR fails to estimate the emission reductions that will be achieved for this cost. The ISOR simply states that the opacity testing requirement will keep equipment operating "more cleanly" and "...could result in in a reduction in soot levels from CHE." Furthermore, the ISOR states that "... these proposed amendments are not anticipated to result in any significant increase or decrease in

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GHG's. However there is potentially a **small decrease** in carbon black emissions." (emphasis added)

2. **The testing program will require the fabrication of equipment-specific "test manifolds" for all VDECS equipped units**. To complete the testing for equipment with a verified Diesel emission control strategy (VDECS), the VDECS must be removed. In VDECS-equipped units, the VDECS replaces the traditional exhaust system. Once the VDECS has been removed, the unit no longer has an exhaust manifold where the testing probe can be inserted. A "test manifold" would need to be installed on each VDECS-equipped unit, to complete the testing. Since most VDECS installations require custom fabrication of piping and connectors, custom equipment-specific "test manifolds" would be needed for each VDECS-equipped unit. The fabrication of these "test manifolds" will increase capital costs of the testing program and the annual costs would also increase due to the time and labor required to install and remove the test manifold.

3. **Costs associated with the opacity testing program are in addition to costs incurred to comply with the retrofit and repower requirements of the Regulation**. To date, UPRR has spent in excess of $16 million and will be spending at least an additional $3 million on replacement equipment, engine repowers, and engine retrofits necessary to comply with the existing CHE Regulation. The implementation of the proposed opacity testing program will add to the already high cost of compliance with this Regulation.

4. **Extensive recordkeeping requirements will be burdensome.** The proposed Rule includes extensive recordkeeping requirements associated with the opacity testing provision, which are in addition to the recordkeeping requirements that are already required by the Regulation. The collection and maintenance of these records is burdensome and adds to the overall costs associated with the opacity testing program for which no emission benefits have been quantified.

In addition to the provisions discussed above, CARB staff has proposed additional conditions related to the compliance extension provisions proposed in the ISOR, in a September 15, 2011 email. Specifically, CARB staff has proposed to include the following requirement for the proposed third and fourth years of the "No VDECS Available" compliance extension, included in Section 2479 (f)(2) of the Regulation:

> "Equipment owners or operators would agree to replace the equipment for which a third or fourth year of 'No VDECS Available' compliance extension was granted with either electric or hybrid equipment, if available, at the end of the extension period."

UPRR has concerns regarding how the "availability" of hybrid and electric equipment would be determined. While hybrid and/or electric units may be commercially available, they may not be suitable for use at an intermodal facility. Also, the requirement is prescriptive and removes the operator's flexibility to choose the compliance option that best fits their operations – such as the repowering of the equipment with the then-currently available Tier engine.

If you have any questions, please feel free to call Jon Germer at 402-544-2235.

Sincerely,

Lanny A. Schmid
Director of Environmental Operations

cc: Brenda Douglass, Sierra Research