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Agency Secretary

Air Resources Board

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Arnold Schwarzenegger
Governor

October 14, 2004

Mr. Larry F. Greene
Air Pollution Control Officer
Sacramento Metro Air Quality
Management District
777 12th Street, 3rd Floor
Sacramento, California 95814

Dear Mr. Greene:

Enclosed is the Roseville Rail Yard Study final report, dated October 14, 2004. As you know, this study is the result of a comprehensive multi-year cooperative effort among the Air Resources Board (ARB) staff, the Placer County Air Pollution Control District (District), and representatives from the Union Pacific Rail Road (UP). We believe the study will prove invaluable in our efforts to reduce exposures to diesel particulate matter (diesel PM).

The objective of the study was to evaluate the potential health risks caused by locomotive diesel PM emissions in the vicinity of the community surrounding the J.R. Davis Rail Yard (Yard) in Roseville, California. Air dispersion modeling was used to predict the diesel PM concentrations in the ambient air resulting from the locomotive activity. The potential cancer risk to the public living around the Roseville Rail Yard was estimated using the predicted concentrations of diesel PM and standard risk assessment methods developed by the Office of Environmental Health Hazard Assessment (OEHHA). Our results are presented in the report.

Our analysis concludes that there were approximately 25 tons of diesel PM emitted from locomotive activity at the Yard in 2000. These emissions result in increased concentrations of diesel PM over a wide region of Placer and Sacramento Counties with increased potential cancer risk levels occurring over a large area. The predicted cancer risk impacts are greatest adjacent to and northwest of the Yard. However, increased exposure is estimated to occur over a 100 plus square mile area.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

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As a result of the increased potential cancer risk and the large area of impact, ARB staff recommends and is pursuing both short-term and long-term diesel PM reduction measures to be undertaken on as expeditious schedule as possible. These measures include, but are not limited to:

- greater use of low sulfur/lower aromatic diesel fuel,
- the reduction of unnecessary locomotive idling,
- an enhanced smoking locomotive inspection and maintenance program,
- acceleration of new locomotive purchases and existing engine rebuilds, and
- development and application of advanced retrofit PM control technologies.

ARB will continue to work with you and UP to help identify feasible and timely emission reduction measures that should be applied in the Roseville area. We are also concurrently working to identify measures that can be addressed at the statewide level, and which would be beneficial to all major rail yards.

If you have any questions regarding the health risk assessment, please contact Mr. Dan Donohoue, Chief of the Emissions Assessment Branch at (916) 322-6023. If you would like to discuss our efforts to address locomotive emissions at the statewide level, please contact Mr. Michael H. Scheible, Deputy Executive Officer, at (916) 322-2890.

Sincerely,

/s/

Catherine Witherspoon
Executive Officer

Enclosure

cc: Michael H. Scheible
Deputy Executive Officer

Daniel E. Donohoue, Chief
Emissions Assessment Branch