

The Need for Locomotive & Rail Yard Regulations

Fall 2009



Fighting for life

Importance

Currently, diesel emissions from locomotives and rail yard support equipment contribute significantly to the exceedance of the state and federal ozone and particulate matter standards in various California air districts. Diesel emissions are known toxic air contaminants and thus far, emissions from locomotives and certain rail yard equipment have not been effectively regulated by the state and federal government.

Locomotive and rail yard equipment, including trucks, negatively impacts air quality due, in large part, to the reliance on diesel fuel for mobility and operations. Rail yards have proven to be a huge source of diesel and other types of pollution, through trains, trucks, and cargo-handling equipment. In addition to air quality, locomotives and rail yards impact almost all other areas of the environment and community, including health, water, noise, and general quality of life.

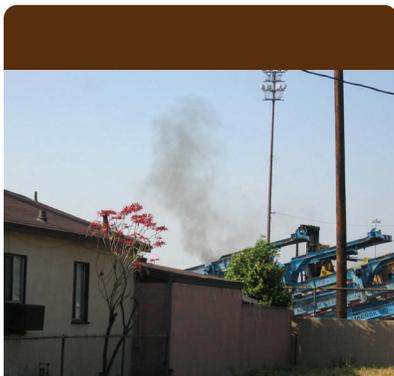
Although there have been emission reduction efforts in these rail yards, the population exposures and remaining risk levels continue to be unacceptably high, and additional emissions reductions are necessary to reduce public health risks around rail yards.

Health Risks

- Health Risk Assessments (HRA) on 18 rail yards in California have demonstrated that living near a rail yard, a large diesel emission source, poses significant public health risk resulting from exposure to diesel particulate matter (PM). The Air Resource Board identified diesel particulate matter (PM) as a toxic air contaminant based on its potential to cause cancer and other adverse health problems, including respiratory illnesses and increased risk of heart disease.
- The HRAs found that in total, these rail yards are responsible for 210 tons of diesel pollution a year and put more than 3 million people at risk of cancer. Five of these rail yards pose an excessive individual cancer risk of 500-2,500 chances per million, well beyond the level EPA considers acceptable³.
- Nationally, diesel exhaust poses a cancer risk that is 7.5 times higher than the *combined* total cancer risk⁴.
- Because of their very small size, diesel PM particles can penetrate deep in to the lungs and enter the bloodstream, carrying with them an array of toxins. Exposure to diesel PM is a health hazard, particularly to children, whose lungs are still developing; and the elderly, who may have other serious health problems.
- Breathing in diesel exhaust contributes to cancer, asthma, heart disease, premature birth, increased school absence, and other health problems.

What you can do

1. Join EYCEJ at the California Air Resource Board hearing in Diamond Bar on September 25th
2. Contact your legislators and tell them that the health risks from these emission sources are unacceptable and request their presence at the hearing
3. Sign a post-card
4. Learn More! Visit www.eycej.org to find a list of upcoming events, trainings, and workshops



AQMD MATES III study¹

- Health risks are unacceptable and are higher near sources of emissions, such as rail yards. A continued focus on reduction of toxic emissions, particularly from diesel engines, is needed to reduce air toxics exposure.

California Air Resource Board Land Use Guidelines on Rail yards²

- "Avoid siting new sensitive land uses within 1000ft of a service or maintenance yard"
- "within one mile of a rail yard, consider possible siting limitations or mitigation measures"



» 2317 Atlantic Blvd., Commerce CA 90003 — 323.263.2113 — www.eycej.org «

1. South Coast Air Quality Management District (2008). MATES III Multiple Air Toxics Exposure Study. <http://www.aqmd.gov/prdas/matesIII/matesIII.html>
2. California Air Resource Board (2005). Air Quality and Land Use Handbook. <http://www.arb.ca.gov/ch/handbook.pdf>
3. California Air Resource Board (2007). Health Risk Assessment for the Four Commerce Railyards. http://www.arb.ca.gov/railyard/hra/4com_hra.pdf
4. Clean Air Task Force (2005). Diesel and Health in America: The Lingering Threat. http://www.catf.us/publications/reports/Diesel_Health_in_America.pdf
5. California Air Resource Board (2009). Recommendations to Implement Further Locomotive and Railyard Emission Reductions

What do California Residents Need?

- Since the release of the HRAs, mitigation plans have been developed and vetted throughout the communities. These mitigation plans are inadequate and will not achieve the reductions necessary to protect the public's health
- More emission reductions that will benefit the environment, clean the air, reduce cancer and other health risks.
- Adoption of rules, regulations and guidelines that focus on health risk reductions that include site-specific measures
- Health protective buffers between sensitive receptors / residential areas and rail yard facilities
- "No Idle" Zones for locomotives near schools, parks & residential areas
- Enforcement of the use of alternative fuel for locomotives & other emission source equipment and use new technology.

Proposed Recommendations

1. Repower older switch and medium horsepower locomotives
2. Retrofit switch and medium horsepower locomotives with after-treatment devices
3. Accelerate the Introduction of Tier 4 Interstate Line Haul Locomotives

Will these recommendations be enough to reduce diesel emission reduction to levels that are health protective that California residents deserve?

Long term emission reductions:

- Under the California Health and Safety Code, ARB is required to reduce all possible mobile source emissions to comply with state and federal air quality standards unless preempted by federal law.
- When faced with a public health concern of this magnitude, ARB has a moral obligation to identify every possible health risk reduction.
- Public health benefits from reducing exposure and diesel pollution levels should be part of the measures of the equation for the feasibility analysis.

What's Next?

Upcoming Meetings

Urge the Air Resource Board to pass regulations that address locomotive and rail yard pollution. Send a letter or call:

Air Resources Board

1001 "I" Street

P.O. Box 2815

Sacramento, CA 95812

916.322.5840