COMMUNITIES FOR A BETTER ENVIRONMENT



Freedom to Breathe

CBE's goal is to bring environmental justice to the communities of East Oakland by addressing the cumulative health impacts of diesel truck idling.

Diesel Truck Factsheet

Health Impacts: Diesel truck emissions are a mixture of gases and solids, including particulate matter (PM), carbon monoxide, sulfur oxides, ozone precursors – volatile organic compounds and nitrogen oxides. Of these chemicals, 40 are listed as toxic chemicals by the California Environmental Protection Agency. Diesel PM can be smaller than the human eye can see and can penetrate deep into the lungs and enter the bloodstream. Diesel emissions contribute to adverse health problems.

- Exposure to diesel PM greatly increases a person's chances of developing lung cancer, cardiopulmonary disease, cardiovascular disease, asthma and bronchial infections.¹
- High exposure to diesel PM is especially dangerous to children, elderly and those with existing medical conditions.²
- Diesel trucks that transport freight contribute to approximately 50% of total diesel PM in California.³
- Diesel PM can aggravate allergies, asthma, bronchitis and other lung disease.⁴

- Truck drivers often face the highest exposure to diesel exhaust and are undercompensated for health effects in the freight transport industry.⁵
- Mothers' exposure to polycyclic aromatic hydrocarbons (PAHs) from diesel exhaust during pregnancy has been shown to lower their children's IQ levels.⁶
- It is estimated that local idling has lowered birth weights by 1.5 lbs

Neighborhood Impacts:

- Diesel trucks often idle leaving engines on while stopped or parked– in neighborhoods like in East and West Oakland (See box below).⁷
- Trucks often drive through residential streets. Heavy-duty trucks and related businesses have impacts on residents from noise, vibrations, safety, and damage to roads.⁸

Bay Area Truckers: Don't Sit Idle

- It is illegal for any diesel-fueled truck over 10,000 lbs. to idle its primary engine for more than 5 minutes
- Big rigs with sleeper cabs are only allowed to use auxiliary power systems when they are more than 100 ft. from residential areas
- School buses must turn off engine upon arrival
- When not waiting for passengers to board, it is illegal for transit buses to idle for more than 5 minutes. When waiting for passengers to board, they may idle for no more than 10 minutes. If passengers are on-board, they have no idling limit.
- Port terminals may not keep truckers waiting longer than 30 minutes

Violators face a \$300-\$1,000 fine or criminal charges

Report Violators:

- Call Bay Area Air District: 1-800-EXHAUST
- Call Air Resources Board: 1-800-END-SMOG
- Go online:

http://www.arb.ca.gov/enf/complaints/complaints.htm



In the Bay Area:

- The Bay Area is not meeting standards for PM 2.5 set by the US Environmental Protection Agency.
- In the Bay Area in 2005, annual estimates of health impacts from Port (heavy-duty trucks) trucks are:²
 - 18 premature deaths
 - 284 cases of asthma and other lower respiratory symptoms
 - 9 hospital admissions for respiratory reasons
 - 4 hospital admissions for cardiovascular reasons
 - 1,650 Work loss days
 - 17,875 Minor restricted activity days
 - 5,042 Missed school days



Adding up to approximately \$153 million in health costs

- Alameda County's childhood asthma hospitalization rate is the second highest in California.⁹
- East Oakland has a childhood asthma hospitalization rate 150 to 200% higher than the Alameda County rate.¹⁰ The childhood asthma rate for African American children is 2.5 times higher than the County rate; 12 times the Asian/ Pacific Islander rate and about 4 times the Latino and White rates.¹¹
- About 71% of cancer risk in West Oakland – a community heavily burdened by diesel pollution – is attributed to diesel PM from on-road heavy-duty trucks.¹²

CBE's Diesel Truck Research:

In 2007, CBE found 27 logistics or truck-related businesses in an area called "The Hegenberger Corridor" in East Oakland¹³. In a recent truck survey, CBE counted 11,018 diesel trucks in the Hegenberger Corridor over 8 half-days.

At the busiest intersection surveyed – 73rd St/ Hegenberger Rd and Baldwin St – CBE counted 2,146 diesel trucks over two days. At 98th St and San Leandro St – the second busiest intersection – CBE counted 2,016 diesel trucks.¹⁴

Diesel truck impacts are a serious issue that needs to be addressed to bring environmental justice to East Oakland!

http://www.pacinst.org/reports/taking_a_toll/taking_a_toll.pdf

http://www.pacinst.org/reports/freight_transport/PayingWithOur Health_Web.pdf

http://www.cdc.gov/pcd/issues/2006/jul/05_0187.htm

http://www.acphd.org/AXBYCZ/Admin/DataReports/00_2008_full_report.pdf



¹ Lin, J; S Prakash. August 2008. Taking a Toll: The High Cost of Health Environment & Worker Impacts of the Oakland Port Trucking System. East Bay Alliance for Sustainable Economy and Pacific Institute. Available:

² Lin, J; S Prakash. August 2008.

³ Lin, J; S Prakash. August 2008.

⁴ California Environmental Protection Agency, California Air resources Board and the Office of Environmental Health Hazard Assessment. April/ May 1998. Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant.

⁵ Palaniappan, M; S Prakash, D Bailey. November 2006. Paying With Our Health: The Real Cost of Freight Transport in California. Pacific Institute. Available:

⁶ Children's IQ Can Be Affected by Mother's Exposure to Urban Air Pollutants. Stephanie Berger. Columbia Univ. July, 2009

⁷ Palaniappan, M; S Prakash, D Bailey. November 2006.

⁸ Lin, J; S Prakash. August 2008.

⁹ Roberts EM, English PB, Wong M, Wolff C, Valdez S, Van den Eeden SK, et al. Progress in pediatric asthma surveillance II: geospatial patterns of asthma in Alameda County, California. Prev Chronic Dis. 2006 July. Available from:

¹⁰ Alameda County Public Health Department. August 2008. Life and Death from Unnatural Causes: Health and Social Inequity in Alameda County. Available:

¹¹ Alameda County Public Health Department. August 2008.

¹² Lin, J; S Prakash. August 2008.

 ¹³ Lee, A. September 2008. Cumulative Impacts in East Oakland: Findings from a community-based mapping study. Available: http://www.cbecal.org/pdf/cumulative_impacts_finalFULL.pdf
14 CBE conducted the diesel truck survey Monday through Thursday, from July 27 through August 6 and on October 26, 2009. Each day, surveyors counted trucks for about 4 hours during morning (9:30 – 1pm) shifts and afternoon (1pm – 5pm) shifts. Intersections with heavy traffic were counted for a total of two morning shifts and 2 afternoon shifts. Results will be released sometime in early 2010.