

US EPA ARCHIVE DOCUMENT



EPA SCHOOLS MONITORING INITIATIVE

FELTON ELEMENTARY SCHOOL

10417 Felton Avenue, Lennox, CA 90304

United States Environmental Protection Agency • Region 9 • San Francisco, CA • October 2011

What is EPA's School Monitoring Initiative?

On March 31, 2009, EPA released a list of priority schools for outdoor air quality monitoring, as part of an initiative to understand whether outdoor toxic air pollution poses health concerns to school children. EPA, with the support of the South Coast Air Quality Management District, would:

- Collect samples of outdoor air near selected schools over 60 days,
- Analyze those samples for selected air toxics,
- Report to the community on levels of air toxics found,
- Evaluate actions that may be needed to reduce levels of pollutants of concern.



The schools selected for monitoring include schools near large industries that are sources of air toxics and schools in urban areas, where emissions of air toxics come from a mix of large and small industries, cars, truck, buses and other sources.

Why is EPA monitoring the air at my school?

Felton Elementary was identified for this Schools Initiative because of its close proximity to the I-405 freeway and Los Angeles Airport (LAX). As part of this study, EPA worked closely with the South Coast Air Quality Management District to monitor the outdoor air for

several air toxics associated with on-road vehicles and general aviation aircraft. These pollutants have been associated with a wide range of potential health impacts, including cancer and respiratory disease.

When was the work completed?

Monitoring at Felton Elementary School was conducted during 08/09/09 – 03/12/10. Between ten to twenty samples were collected during this period and tested for several pollutants..

What are the key findings?

Measured levels of lead, a pollutant for which there are national standards for ambient air, are below the level of the national standard for protection of public health.

Measured levels of naphthalene, 1,3-butadiene, and benzene in the air are below the levels of significant concern suggested by previously available information; however, these results indicate the influence of mobile source pollutants of concern that are the focus of EPA actions nationwide.

Levels detected in this study are not unusual for the LA area and fall in the range of what we consider background levels for these chemicals in the LA area. However, they are known to cause the following potential health effects at high levels.

What are the potential health effects of these chemicals at high levels?

Lead. Inhalation and ingestion may affect the developing nervous system if people are exposed to high levels.

Naphthalene. Inhalation at high levels can damage or destroy red blood cells and can cause hemolytic anemia.

1,3-Butadiene. Inhalation may affect the reproductive system if people are exposed to high levels.

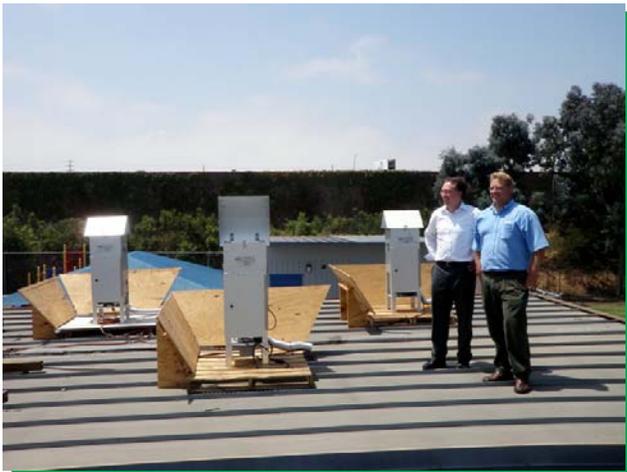
Benzene. Inhalation of benzene at high levels can affect the bone marrow and can cause anemia and leukemia.

What does this mean?

With the monitoring results indicating that levels for the key pollutants are below the levels of significant concern, EPA is concluding this monitoring project and will continue to work to further reduce emissions locally and across the country.

What are the next steps?

EPA remains concerned about emissions from stationary sources of air toxics and continues to work to reduce those emissions across the country, through national rules and by providing information and suggestions to assist with reductions in local areas. Additionally, EPA remains concerned about mobile source emissions and continues to work to reduce those emissions across the country, through national rules and by providing information and suggestions to assist with reductions in local areas.



The South Coast Air Quality Management District (SCAQMD) will continue to oversee industrial facilities in the area through air permits and other programs. The California Air Resources Board (CARB) will continue to implement reductions in mobile sources through implementation of national programs and its own programs.

Where can I go for more information?*

EPA has created a national website for the schools monitoring initiative, where anyone can go to obtain additional information on the initiative, next steps, and results:

<http://www.epa.gov/schoolair/>

Select Felton Elementary School for all related information on the study, including all the data and the final report.

Additionally, you can find information about resources for healthy school environments, such as EPA's *Indoor Air Quality Tools for Schools*, at:

<http://epa.gov/schools/index.html>

The South Coast Air Quality Management District has also created a fact sheet, available at their website:

<http://www.aqmd.gov>

Phone calls can be directed to Mike Bandrowski, Chief of the Air Toxics, Radiation, and Indoor Air Office at EPA, Region 9 (415-947-4194), or you may email us at:

R9schoolmonitoring@epa.gov

Questions or concerns about the monitoring equipment can be directed to:

Phillip Fine
Atmospheric Measurements Manager
South Coast Air Quality Management District
(909) 396-2239

*If you do not have internet access you may call us to request a copy of materials available from the website.