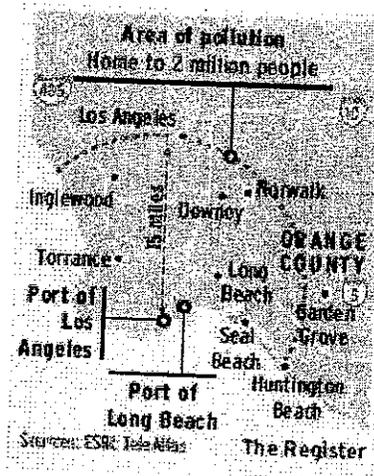


Focus | SCIENCE

# Cancer threat from ports reaches far inland

## *New study finds diesel emissions at L.A.-area cargo sites are spreading out farther from coast.*

THE ASSOCIATED PRESS



**LOS ANGELES** Diesel emissions from the Los Angeles and Long Beach ports are increasing cancer risks miles inland, according to a new study.

The study by the California Air Resources Board concluded air pollution from the ports creates a possible risk of 50 additional cancer cases per 1 million people within 15 miles of the ports. About 2 million people live in the area.

For the 53,000 residents closest to the ports, the risk leaps to 500 cases per 1 million people, according to a draft of the study, which is the first thorough examination of the cancer risk from diesel fumes generated at the ports.

"I'm not aware of any other assessment on emissions and risks from the ports that have been done in so much detail," said Jean Ospital, health effects officer at the South Coast Air Quality Management District, the area's air quality regulator.

Ospital said it's surprising that port pollution seeps so far inland.

The draft version of the study was done to help the air board as it reviews proposed rules for limiting ship and cargo equipment pollution. Both ports have launched emission reduction programs.

The study concluded that the two ports emitted 1,760 tons of diesel pollution in 2002. Researchers compared that figure to air dispersion models and the standard cancer potency of diesel to come up with the increased risk assessment for the area surrounding the ports.

"What they're essentially saying is this is the estimate of risk based on a person being exposed

of Huntington Beach

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to that amount of pollution for their entire life," said Dr. Dean Baker, director of the Center for Occupational and Environmental Health and professor of medicine at UC Irvine.

About 250,000 in 1 million Californians will get cancer from any cause, studies have shown.

The main risk from diesel emissions is lung cancer, which is usually fatal, said Jerry Martin, an Air Resources Board spokesman.

Diesel pollution from the ports also causes 29 premature deaths of people ages 30 and older, 750 asthma attacks, 6,600 lost workdays, according to the study.

Activity at the two ports is expected to triple by 2020.

Register staff writer Blythe Bernhard contributed to this report.

Tuesday, November 29, 2005

OCTA moves along on shift from diesel  
Millions allocated to run buses on compressed natural gas.

By JIM RADCLIFFE  
THE ORANGE COUNTY REGISTER

ORANGE – Diesel-belching buses are on the way out in Orange County.

The Orange County Transportation Authority, which runs the area's public bus system handling 68 million fares annually, is converting its fleet to alternative fuels to cut pollution. On Monday, the agency authorized almost \$20 million to retool its Santa Ana refueling station to handle compressed natural gas. Earlier, the OCTA ordered 50 compressed natural gas buses for about \$21 million.

The South Coast Air Quality Management District, the regional air-quality authority, is forcing public transit systems to make the move.

**Q. Are these the first low-emission buses OCTA will operate?**

A. No. Five years ago, OCTA began replacing diesel buses with liquefied natural gas buses. It now has 232.

**Q. How many buses does the OCTA have?**

A. More than 600, with 560 being the 40-foot coaches you see most often.

**Q. Why switch to compressed natural gas now?**

A. Ryan Erickson, an OCTA manager, said CNG buses are more common in the industry. So it's easier to find qualified mechanics and parts.

**Q. Are the emissions from liquefied natural gas and CNG about the same?**

A. Yes.

**Q. Which is more expensive, diesel or CNG?**

A. A CNG 40-footer, at about \$400,000, costs about \$40,000 more initially. But at current prices, it costs about 65 cents per mile to cover diesel costs compared with 41 cents for compressed natural gas.

**Q. Is CNG the future for public buses?**

A. Perhaps. Agencies could decide at some point that another alternative to diesel makes more sense.

**Q. What kind of mileage do these buses get per gallon?**

A. Nearly four miles per gallon for diesel and about 25 percent less for CNG.

**Q. How does CNG work?**

A. It will arrive via pipeline into the OCTA's base on MacArthur Boulevard in Santa Ana near Harbor Boulevard; the neighbors are commercial properties. The CNG will run through a compressor that converts it from 100 to 3,600 pounds per square inch so more of it can be dispensed into the bus.

The bus will have seven tanks on its roof so it can carry 22,000 cubic feet.

**Q. Is it safe?**

A. Erickson says it is as safe as diesel as long as qualified workers are handling it.

**Q. Is this the same fuel that is causing the big controversy in Long Beach?**

A. No. A proposal for the Port of Long Beach calls for an 80 million-gallon storage facility for liquefied natural gas. Backers say it is safe; opponents fear it could be a terrorist target.

In 1998, there was concern that the OCTA's LNG tanks near the Garden Grove (22) Freeway in Garden Grove were vulnerable to such things as gunshots, so the tanks were buried. At the Santa Ana facility, there might be enough CNG onsite at one time to fill one bus.

No one opposed the OCTA's plans at Monday's meeting.

## **EPA AND AQMD ADDRESS AIR POLLUTION IMPACT ON CHILDREN BY RETROFITTING AND REPLACING HUNDREDS OF DIESEL SCHOOL BUSES**

Nov. 30, 2004

### *Fifth Grade Science Students Tour Air Quality Lab and Learn Importance of Clean Air School Buses*

DIAMOND BAR – Addressing recent health studies showing that children likely suffer permanent health damage from air pollution, representatives of the U.S. Environmental Protection Agency and the South Coast Air Quality Management District detailed plans today to replace and retrofit hundreds of dirty diesel school buses across Southern California.

Plans were shared with a class of fifth-grade students from Placentia Math/Science Magnet School in Echo Park. Students traveled from their school to AQMD headquarters on a compressed natural gas (CNG) bus to tour the agency's state-of-the-art laboratory and hydrogen fueling station. During the tour, students learned about the magnitude of the region's air quality problem and explored forward-thinking solutions to air pollution control.

Angelica Roque, the 17-year old president of El Segundo-based Tree Musketeers, encouraged the students to take a leadership role in environmental issues. "Children should be seen and heard," she said.

Eight-year-old Jonah Ramirez of San Bernardino – representing the American Lung Association of the Inland Counties – spoke of the effects of air pollution on his asthma.

"Diesel particulate pollution from school buses has serious health impacts, especially for children," said Bea LaPisto-Kirtley, an AQMD Governing Board member and school administrator. "We are determined to replace each and every one of these dirty diesel school buses with cleaner technology."

"EPA studies show that diesel exhaust can cause lung damage, respiratory problems, worsen asthma, and may even cause cancer. By working together to reduce children's exposure to diesel pollution now, the EPA and the AQMD are ensuring that future generations become healthier adults," said Wayne Natri, Regional Administrator for the U.S. Environmental Protection Agency in San Francisco.

The AQMD's Multiple Air Toxics Exposure Study (MATES II), completed in 2000, showed that approximately 70 percent of the cancer risk from air toxics in the South Coast Air Basin is due to diesel particulate.

CNG-powered buses have less smog-forming nitrogen oxide emissions than new diesel buses and equivalent or lower toxic emissions.

AQMD's Governing Board awarded funding this month for 70 new CNG school buses, 830 retrofit devices that will reduce particulate emissions from existing diesel school buses and CNG fueling infrastructure. The awards were funded with \$11.5 million from the AQMD Chairman's School Bus Initiative and \$2 million from the state's Lower Emission School Bus program.

The EPA contributed \$495,000 for the purchase of new CNG school buses as well as retrofit devices for existing school buses through its Clean School Bus USA program, which seeks to reduce both children's exposure to diesel exhaust and the amount of air pollution created by diesel school buses. Clean School Bus USA brings together partners from business, education, transportation, and public health organizations to work toward these goals.

"Thanks to the AQMD Board's long-standing commitment to clean up diesel-powered school buses, Southern California now has the largest fleet of clean school buses in the state," LaPisto-Kirtley said.

Since 2000, the AQMD has approved more than \$55 million for 271 new CNG buses, 86 new lower-emitting diesel buses, 2,102 particulate retrofit traps and 49 diesel oxidation catalysts.

Particulate traps reduce particulate emissions by about 85 percent, but are only available for post-1994 model year buses. Diesel oxidation catalysts are available for 1991-1993 model year buses and can reduce about 25 percent of particulate emissions and hydrocarbon emissions.

AQMD is the air pollution control agency for Orange County and major portions of Los Angeles, San Bernardino and Riverside counties.