Fact Sheet California Environmental Protection Agency

Dioxins

What are dioxins?

Dioxins are highly toxic chemicals that are formed during the combustion (burning) of materials and the manufacture of certain chlorinated chemicals. Dioxins can be emitted from a variety of sources including cars and trucks, waste incineration, chemical manufacturing plants, and other industrial sources that burn fuel. These toxic chemicals can be inhaled directly or can contaminate vegetation and be eaten by animals and humans. Dioxins then accumulate in the body. The Air Resources Board (ARB) has identified dioxins as a toxic air contaminant (TAC) and they are listed as hazardous air pollutants by the United States Environmental Protection Agency (U.S. EPA). Many studies have shown that dioxins can cause cancer and other health problems including birth defects and liver damage.

What is ARB doing about dioxins?

The ARB has taken aggressive steps to reduce the public's exposure to known sources of dioxins and other air toxics. In 1990, the ARB adopted a control measure to reduce emissions of dioxins from medical waste incinerators by 99 percent. At that time, medical waste incinerators were one of the largest known air sources of dioxins in California. As a result of the control measure, the number of medical waste incinerators in the state dropped sharply from about 150 to less than 15.

Currently, the ARB is developing a comprehensive air quality monitoring and testing program to collect ambient data for dioxins, furans, and dioxin-like polychlorinated biphenyls (PCBs) in California. Under this program, the ARB will evaluate potential health impacts, assess the need for additional risk management strategies, and identify areas where additional study may be required. The program's components include: the development of the California Ambient Dioxin Air Monitoring Program (CADAMP) at a total of nine locations in the state (five in the San Francisco Bay Area and four in the South Coast Air Basin); the testing of potential dioxin-emitting facilities; and the testing of motor vehicles.

Where will dioxins be monitored?

In cooperation with U.S. EPA and the Bay Area Air Quality Management District, the ARB has selected five air monitoring sites in the Bay Area. All of the ARB sites are located in densely populated areas where emissions of dioxins could occur. Air monitoring locations in the Bay Area will be in Fruitvale, Crockett, Livermore, San Jose, and Richmond. Monitoring will begin during December 2001 and operate at each site for two years. Additionally, U.S. EPA and the Bay Area Air Quality Management District installed a background dioxin monitoring site on the Marin headlands at Fort Cronkhite to investigate ambient dioxins, furans, and dioxin-like PCBs coming into the Bay Area.

In cooperation with the South Coast Air Quality Management District, four sites have been selected in the South Coast Air Basin. Air monitoring locations in the South Coast Air Basin will be in Wilmington, Boyle Heights, Reseda, and Rubidoux. Monitoring will begin in early 2002 and operate at each site for two years.

For more information

Visit our web site at http://www.arb.ca.gov/toxics/dioxins/dioxins.htm. You may also call the ARB's Public Information Office at (916) 322-2990. You may also obtain this document in an alternative format by contacting ARB's ADA Coordinator at (916) 322-4505 (voice); (916) 324-9531 (TDD, Sacramento area only); or (800) 700-8326 (TDD, outside Sacramento).

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 web site: www.arb.ca.gov.