OEHHA Publishes Health Goal for Arsenic in Drinking Water

SACRAMENTO – The California Environmental Protection Agency’s Office of Environmental Health Hazard Assessment (OEHHA) today announced the publication of a final Public Health Goal (PHG) for arsenic in drinking water.

The PHG identifies 4 parts per trillion as a level of arsenic in drinking water that would not be expected to pose a significant human health risk.

“Our public health goal establishes a long-term objective for the reduction of arsenic in California’s drinking water,” OEHHA Director Dr. Joan E. Denton said. “Arsenic is one of the most toxic substances commonly found in drinking water, and it occurs naturally in many parts of the world, including California.”

In developing the PHG, OEHHA conducted an exhaustive analysis of all available scientific studies on the health effects of arsenic. The PHG is based upon studies of hundreds of thousands of patients in Taiwan, Chile and Argentina with lung and bladder cancers associated with elevated levels of arsenic in drinking water. OEHHA estimates that a level of 4 parts per trillion of arsenic in drinking water would cause not more than one additional cancer case in a population of one million people drinking two liters of water daily for 70 years.

Arsenic is found naturally in air, water, soil, mineral deposits, and food. While arsenic in water typically is naturally occurring, the improper disposal of waste chemicals can also contaminate water supplies with arsenic. Long-term exposure to arsenic in drinking water can increase the risk of lung and bladder cancer and, to a lesser extent, increase the risk of skin, liver and kidney cancer.

State law requires OEHHA to develop PHGs for all regulated drinking water contaminants. A PHG is not a regulatory drinking water standard, and it is not a boundary between “safe” and “dangerous” levels of a chemical in drinking water. A PHG represents a health-protective level of a chemical in drinking water that can serve as a long-term goal for California’s drinking water providers and regulators. The Department of Health Services (DHS) will develop a new state drinking-water standard for arsenic that, by law, must be as close to the PHG as is economically and technically feasible.
The existing state and federal drinking water standards for arsenic have been set at 50 parts per billion for many years. A new federal arsenic standard of 10 parts per billion will take effect in 2006. States may adopt a new standard that is equal to or more stringent than the federal standard. The U.S. Environmental Protection Agency has established a long-term Maximum Contaminant Level Goal (the federal counterpart to OEHHA’s PHG) of no arsenic in drinking water.

A legislative bill authored by Senator Don Perata and enacted into law in 2001 specifically requires OEHHA to develop a PHG for arsenic. The same bill also requires DHS to revise its drinking water standard for arsenic after the PHG is finalized.

The arsenic PHG document and an accompanying fact sheet can be viewed or downloaded from OEHHA’s Web site, www.oehha.ca.gov.

The Office of Environmental Health Hazard Assessment is one of six entities within the California Environmental Protection Agency. OEHHA’s mission is to protect and enhance public health and the environment by objective scientific evaluation of risks posed by hazardous substances.

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