

State of California California Environmental Protection Agency Los Angeles Regional Water Quality Control Board

FACT SHEET: PERCHLORATE AND SURFACE/GROUND WATER POLLUTION in SIMI VALLEY

Updated: September, 2003

OVERVIEW

Perchlorate, in its purest form, is a white or colorless powder. It may be found naturally in the environment or as a manufactured product. Perchlorate is a component of solid fuel propellant for rockets and missiles and is used in the manufacturing of some fireworks. It is also used to make rubber, electronic tubes, lubricating oils, matches, fertilizers, paints and enamels. It is often a component in electroplating and aluminum refining.

Perchlorate readily dissolves in water and easily moves from surface to ground water. Once present in ground water, perchlorate can persist for many decades. Any property where perchlorate was produced, used, stored, transported or disposed may be a source of surface and ground water pollution. Federal, state and local agencies are working to identify potential sources and to control known sources of perchlorate pollution. At this time, perchlorate pollution has been found in ground water in over 20 states, notably Arizona, Arkansas, California, Maryland, Nevada, New York, Texas and Utah.

Perchlorate has not been linked to cancer in humans. Perchlorate is a human health concern because it interferes with the uptake of iodine in the thyroid gland. Human exposure is most likely through consuming water containing perchlorate. The California Department of Health Services has concluded that human health is mostly likely not affected by consuming water containing levels of perchlorate below 4 micrograms per liter (4 parts per billion). Local water providers test drinking water for perchlorate and other chemicals; results are reported to and monitored by the California Department of Health Services. Test results are summarized and mailed to consumers at least once each year by the water provider. They are also available by contacting the water provider.

REGIONAL BOARD AND SURFACE/GROUND WATER POLLUTION

- The mission of the Los Angeles Regional Water Quality Control Board is to preserve and enhance water quality in the Los Angeles Region for the benefit of present and future generations. The Los Angeles Region encompasses all coastal watersheds in Los Angeles and Ventura Counties and small portions of coastal watersheds in Kern and Santa Barbara Counties.
- The Regional Board works to protect and improve the quality of surface and ground waters through issuing guidelines and permits designed to eliminate or control potential pollution sources. Additionally, the Board engages in monitoring and enforcement actions to ensure compliance with federal and state environmental laws and regulations.
- The Department of Health Services regulates the quality of water pumped from the ground and used for drinking and other purposes.
- Because perchlorate is a threat to both surface and ground water quality, it is one of a number of pollutants regulated by the Regional Board, pursuant to Title 22, Section 64450 of the California Code of Regulations. Permit limitations and other control strategies have been adopted and are being monitored and enforced. These various strategies may be modified as more information becomes known about this newly identified pollutant.

REGIONAL BOARD'S INVOLVEMENT IN SIMI VALLEY

What is the Regional Board's involvement at the Santa Susana Field Laboratory (SSFL)?

- Santa Susana Field Laboratory's (SSFL) discharge of waste water to surface water--including storm water runoff--is regulated under a National Pollutant Discharge Elimination System (NPDES) permit issued to SSFL by the Regional Board. Two key provisions of SSFL's NPDES permit are: 1) limits and requirements for waste water discharge and 2) inspection and monitoring of waste water. The Regional Board reviews all data from inspection and monitoring activities. The Regional Board takes enforcement action when permit conditions have not been met. SSFL's NPDES permit, inspection reports and monitoring results are available for public review at the Regional Board's office (address provided below).
- The Regional Board provides surface and ground water expertise and technical assistance to the Department of Toxic Substances Control, which is the lead agency for all assessment and cleanup activities at SSFL, as well as to other regulatory agencies involved with SSFL.

How is the Regional Board addressing perchlorate pollution in Simi Valley?

- In conjunction with the Department of Toxic Substances Control, the Regional Board is collecting samples from ground water monitoring wells throughout Simi Valley. Data collected will be analyzed and used to determine the presence or absence of perchlorate pollution. If perchlorate pollution is present, data will be used to identify potential source(s), extent and degree of contamination and to develop an appropriate cleanup strategy. *Emergency action will be taken should perchlorate pollution pose an immediate threat to human health or the environment.*
- Under section 13267 of the California Water Code, the Regional Board has received site-specific information on the manufacture, use, storage, transport and disposal of perchlorate and surface and/or ground water monitoring data from Ahmanson Ranch and SSFL.
- The Regional Board has received monitoring data for perchlorate from wells at Simi Valley and Calabasas Landfills. Perchlorate was not detected at either landfill. The Regional Board has directed individuals who discharge ground water to surface water to monitor for perchlorate pollution. Monitoring results are to be reported to the Regional Board and will be used to develop a comprehensive response to perchlorate pollution.

What will the Regional Board do next?

- Review and evaluate technical information submitted by SSFL, Ahmanson Ranch, Simi Valley and Calabasas Landfills and other dischargers. Obtain additional water quality data as needed. Coordinate with regulatory agencies to develop a comprehensive understanding of surface and groundwater pollution and an integrated approach to pollution remediation.
- Provide federal, state, local representatives, regulatory agencies and community members with accurate and timely information on perchlorate pollution in Simi Valley surface and ground water.

CONTACT INFORMATION

Additional information about the Regional Board and its programs to protect water quality is available on the Regional Board's web site at: http://www.swrcb.ca.gov/~rwqcb4/html/perchlorate.html. For specific information about perchlorate pollution in Simi Valley or to make an appointment to review NPDES permits and other documents, please contact:

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