



HETCH HETCHY
WATER SYSTEM
IMPROVEMENT
PROGRAM

Calaveras Dam Replacement Project

Naturally Occurring Asbestos Site Visitor Information



Services of San Francisco
Public Utilities Commission

www.sfwater.org/sunolvalley

Phone: 866-973-1476



Above: Rock and soil that contain NOA. Disturbing the material can release asbestos fibers to the air.

Naturally Occurring Asbestos at the Project Site

Portions of the approximately 7 million cubic yards of material being disturbed for the project contain varying levels of Naturally Occurring Asbestos (NOA). On site, NOA is found in rock and soil derived from the Franciscan Complex. The primary NOA rocks are Franciscan mélange, serpentinite (California state rock), and blueschist.

What are the health risks from NOA?

Asbestos fibers can become airborne when disturbed by construction activities. Disease from asbestos is associated with cumulative, long-term inhalation exposure to airborne asbestos. The risk of disease increases with increasing exposure concentration, exposure duration and elapse time since first exposure.

Asbestos Exposure Prevention

Protecting the health of our workers, visitors, and the general public is our top priority. A robust prevention and monitoring program reduces the potential for exposure to airborne asbestos. This includes dust control, restricting access to NOA containing areas, and use of appropriate personal protection equipment (PPE).



Left: Personnel wet down excavation in a NOA area to prevent dust generation during construction activities.

Reducing dust is crucial to NOA efforts. Crews continually wet down the project area with hoses and sprinklers.



Above: Water truck provides dust mitigation by wetting road surface.

Below: Restricted area danger sign displays the required PPE with orange flagging to restrict entry.



Left: Personnel wearing appropriate PPE in restricted areas.

Restricted Areas

Areas that contain NOA are cordoned off by danger signs with bright orange flagging. Only authorized personnel in appropriate PPE may enter these restricted areas. All others must stay away from these areas. Pay attention to the signs.



Air Monitoring

The team regularly monitors air quality to ensure that asbestos-containing dust does not leave the site at concentrations sufficient to pose unacceptable risks to workers or the public. Air quality monitoring stations have been strategically placed in and around the interior, perimeter, and outlying areas around the project site, and throughout the valley, in concentric rings.



Above: A perimeter air quality monitoring station.

Decontamination

All visitors to the site, regardless of whether they visited NOA containing areas, must thoroughly wash off their boots and vacuum their clothing prior to exiting the site. In addition, vehicle wheels and undercarriages must be washed prior to exiting the site as well. These practices reduce the potential for NOA to be tracked off the site and impact the public.



Above: The vehicle wheel-wash decontamination station, required prior to exiting the site.



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Rock Identification



Hetch Hetchy
Regional
Water
System

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**Temblor Sandstone with fossil
(non-NOA)**



Blueschist



Greenstone in blueschist



Eclogite



Actinolite



Serpentinite



Siliceous Shale



Siliceous Schist



Greywacke