

## **Engineering Sciences Section – 2011**

## C18 The Difficult Task of an Independent Expert in an Environmental Justice Project

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After attending this presentation, attendees will understand how difficult it can be when acting as an independent technical advisor in an environmental justice situation.

This presentation will impact the forensic science community by increasing the general knowledge of how the expert technical advisory process works in environmental justice cases.

Hunters Point in San Francisco, California was formerly a U.S. Naval Shipyard from 1941 to 1974. The major activities included ship building and repair and research on exposure to radioactive fallout. In the mid 1950s the shipyard employed 8,500 civilians. The Navy deactivated the shipyard in 1974. In 1989, following the Navy's environmental investigations, the U.S. Environmental Protection Agency (EPA) placed the shipyard on its National Priorities List, thus, designating it a federal "Superfund" site. The shipyard was divided into six parcels with Parcel A containing the housing structures on 88 acres of hillside overlooking the Bay. The Parcel was ultimately transferred to the City of San Francisco for development. The City contracted with Lennar to oversee the development. Immediately adjacent to the Hunters Point redevelopment property are homes in the community known as Bayview/Hunters Point. The community consists of almost 90 percent minority populations. According to the Agency for Toxic Substances and Disease Registry (ATSDR), the Bayview/Hunters Point community is similar to many urban, industrial, minority communities across the United States and has higher than the national average rates of asthma, respiratory disease, breast cancer, and diabetes. Therefore, they are considered a vulnerable population and may be more sensitive to the effects of exposure to hazardous substances. It was determined that the rocks in the redevelopment property had natural occurrences of asbestos fibers. A number of areas in the State of California have natural occurrences of asbestos and special precautions are required to prevent raising high levels of asbestos-containing dusts during any work that disturbs the rock. For the Hunters Point project, a Dust Mitigation Plan including community air monitoring stations was prepared and approved.

Because of environmental exposure concerns over the redevelopment of the property that is being done in several phases, community residents formed 'SLAM' – Stop Lennar Action Movement. Under an EPA program that provides the services of technical experts to community groups in Environmental Justice situations, a contractor to EPA was tasked to "Identify a technical expert to assist SLAM with the results of EPA's asbestos-related updates, including improvements to the monitoring plan, mitigation measures, and EPA's conclusions with regard to risk." This task was to provide independent technical assistance to SLAM and eventually other community members. In addition to providing general technical assistance in asbestos-related matters, there was a specific request to review one particular EPA draft document: Draft Technical Summary of EPA's Analysis of Hunters Point Air Monitoring Filters for Asbestos, December 22, 2009. The EPA technical summary and the documents that formed its basis were reviewed. These included the Dust Mitigation Plan, reports by the US EPA, the Department of Health of San Francisco, and the Department of Health of the State of California. The results of approximately 5,000 ambient air samples collected in and around the redevelopment property that had been analyzed for asbestos were also reviewed. A site visit was

made to the neighborhood around the site and members of SLAM and other residents were interviewed. The findings at a public meeting held in San Francisco were presented. The meeting was attended by about 100 people: residents, activists and local clergy. It was a difficult setting to attempt to present technical conclusions. Although there was evidence that the local residents had not been treated fairly at all times by Lennar, the redevelopment contractor, my review of the data concerning asbestos exposure did not show evidence of increased risk of asbestos-related disease from the redevelopment activities. This paper reviews the project and highlights the difficulties in presenting scientific environmental forensic information to a largely emotional audience concerned about health risks to themselves and their children.

**Hunters Point, Asbestos, Community Exposure**