



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Lennar BVHP, LLC
Asbestos Dust Mitigation Plan
Bay View Hunters Point Shipyard – Parcel A'
San Francisco, CA

LENNAR ASBESTOS DUST MITIGATION PLAN FACT SHEET

PROJECT DESCRIPTION

In 2005, the Board of Supervisors of the City and County of San Francisco and the San Francisco Redevelopment Agency approved the transfer of Parcel A' of the Bay View Hunters Point Shipyard to Lennar BVHP, LLC ("Lennar") for a redevelopment project in which Lennar plans to construct approximately 1,600 attached single family homes.

Parcel A' is located in an area that contains naturally occurring asbestos.

AIRBORNE TOXIC CONTROL MEASURE FOR NATURALLY OCCURRING ASBESTOS

The California Air Resources Board developed the Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations, California Code of Regulations title 17, section 93105 (the "ATCM") in order to limit the public's exposure to naturally occurring asbestos released during construction, grading, quarrying, and surface mining activities. Naturally occurring asbestos (NOA) is a term used for several types of fibrous minerals found in ultramafic and serpentine rock.

In certain circumstances, the ATCM requires that construction and grading operations be conducted in accordance with an asbestos dust mitigation plan that has been approved by an air district. Asbestos dust mitigation plans must contain dust mitigation measures addressing topics such as the control of dust tracked out from the construction site and the limitation of dust emissions from the offsite transportation of excavated soil. The ATCM also allows air districts to require that an asbestos dust mitigation plan provide for ambient air monitoring for asbestos.

LENNAR'S ASBESTOS DUST MITIGATION PLAN

On October 7, 2005, the Air District approved Lennar's Asbestos Dust Mitigation Plan (the "ADMP" or the "Plan"), which Lennar submitted pursuant to the ATCM. The ADMP includes all the dust mitigation measures the ATCM mandates and further requires Lennar to conduct air monitoring for asbestos and establishes specific action levels based on air monitoring results, as explained in greater detail under the next heading. The Plan includes, among other mitigation measures, measures to suppress dust during earth moving activities; prevent track-out of dust onto public roads; limit the emission of dust from soil storage piles and during offsite soil transport; and stabilize the ground after construction. Each mitigation measure required under the ADMP is at least as stringent as the ATCM requires.

AIR MONITORING AND HEALTH RISK

In approving the ADMP, the Air District required Lennar to conduct ambient air monitoring for asbestos at Parcel A' in order to determine the effectiveness of the plan in limiting the exposure of the surrounding community to dust containing naturally occurring asbestos disturbed during construction activities on Parcel A'. The ATCM does not require such monitoring, but permits air districts to require

it. The results of the asbestos air monitoring conducted in accordance with the ADMP indicate that the redevelopment of Parcel A' has not caused a significant health risk.

In order to protect public health, the Air District incorporated into the ADMP requirements that Lennar take action to reduce the concentration of asbestos in the air around Parcel A' when the ADMP-required monitors indicate asbestos concentrations have reached either of two action levels. The Air District based the action levels on health risk assessment protocols established by the State Office of Environmental Health Hazard Assessment (OEHHA). The first action level in the ADMP is set at 1,600 asbestos structures per cubic meter and requires that Lennar notify the Air District and implement more stringent dust control measures. The second action level in the ADMP is set at 16,000 asbestos structures per cubic meter and requires Lennar is to stop work until asbestos levels decline. When air monitors at Parcel A' indicate 16,000 asbestos structures per cubic meter or greater, Lennar is required to take the actions described above. *However, the monitoring results in themselves do not mean that any violation of the ADMP, or of any state or Air District standard, has occurred.*

The Air District considers the action levels set forth in the approved ADMP to be conservative and health protective because they are based on annual average concentrations and assume continuous exposure over a 70 year lifetime. Exceeding the action levels set by the Air District on an occasional basis will not cause any significant increase in health risk. The action levels in the ADMP ensure that the emissions of dust containing naturally-occurring asbestos from the project remain at safe levels and do not pose any significant health risk to the public.

Based on ambient asbestos monitoring and using risk assessment protocols established by OEHHA, the Air District has estimated the cancer health risk associated with naturally occurring asbestos released by construction and grading activity at Parcel A' for the following monitoring locations:

Station HV1 – 1.7 in a million
Station HV2 – 1.3 in a million
Station HV4 – 2.6 in a million
Station HV5 – 0.9 in a million
Station HV6 – 0.6 in a million
(cancer health risk estimates updated July 28, 2008)

These estimates must be considered in light of the average lifetime cancer risk of nearly 500,000 in a million¹ and indicate that there is no significant health risk from naturally occurring asbestos from this project.

NOTICE OF VIOLATION SUMMARY

The Air District issued the following two Notices of Violation (NOVs) alleging violations of the ADMP:

NOV#A46068, issued 9/9/06, alleges a failure to conduct air monitoring and a failure to provide a gravel truck wheel wash bed at an exit road.

NOV#A46075, issued 10/26/07, alleges the overfilling of trucks with material and a failure to maintain wheel wash beds free of accumulated material.

Lennar has completed major grading at Parcel A', though other work subject to the ATCM continues. Throughout the duration of this work, the Air District will continue to conduct regular inspections and to follow the health protective approach it has taken from the outset to regulating the Lennar Parcel A' redevelopment project under the ATCM.

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¹ Hofer BM, Kwong SL, Allen M, Bates JH, McCusker ME, Snipes KP. Cancer in California, 2008, Special Highlight on Cancer by Race and Ethnicity. Sacramento, CA: California Department of Public Health, Cancer Surveillance Section, April 2008.