



California Regional Water Quality Control Board

Los Angeles Region



Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Linda S. Adams
Agency Secretary

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Arnold Schwarzenegger
Governor

August 8, 2006

Bill Teller
Trimark Pacific – Mandalay Bay, LLC
3111 Agoura Road, Suite 210
Westlake Village, CA 91361

Dear Mr. Teller:

GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER REMEDIATION AT PETROLEUM HYDROCARBON FUEL AND/OR VOLATILE ORGANIC COMPOUND IMPACTED SITES AT NORTH SHORE OF MANDALAY BAY, NE CORNER OF HARBOR BLVD. AND W. FIFTH ST., OXNARD, CALIFORNIA (FILE No. 06-147, CI-9140)

We have completed our review of your application for Waste Discharge Requirements (WDRs) to use treated wastewater for dust suppression during remediation activities at the 90-acre site located on the northeast corner of Harbor Boulevard and W. 5th Street (between the Pacific Ocean and the Mandalay Canal). The Site is the former JNJ Disposal Landfill or Carney and Son Landfill which operated from 1954 until 1981 under the Ventura County Special Use Permit No. 306, dated November 16, 1954, and Regional Board Order No. 54-162, adopted October 21, 1954, and Regional Board Order No. 79-49, adopted March 26, 1979, that was primarily used for oil waste disposal generated by oil drilling operations during the 1950s, through 1970's. The Landfill ceased operations in February 1982 and closure consisted of removing berms and grading the Site with undocumented fill material.

The Site is located within the Upper Oxnard Plain Groundwater Pressure Basin. The uppermost portion of the basin consists of a Holocene alluvium water-bearing formation to an approximate depth of 75 feet below ground surface (bgs) in a semi-perched, discontinuous (unconfined) aquifer. The semi-perched aquifer is seawater intruded and is subject to daily tidal fluctuations. Based on numerous investigations and extensive soil and groundwater sampling and analyses, a sludge layer approximately 1 to 10 feet thick is present within the silty sand/clayey sand zones across most of the Site, beginning at a depth of approximately 1 foot bgs. The sludge layer is present primarily at a depth of 1 to 15 feet bgs. Chemicals of concern found at the site include total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), metals, limited semi-volatile organic compounds (SVOCs), and dioxins. Groundwater samples collected from monitoring wells at the Site have historically detected VOCs (BTEX, 1,1-DCA, cis-1,2-DCE, PCE, TCE, and vinyl chloride). The overall data trend generally appears to show decreasing concentrations.

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Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

The proposed North Shore at Mandalay Bay project integrates ecological restoration and preservation, remediation of an oil waste disposal facility, and residential development. The broad remedial basis for consideration of the project, including remedial excavation and grading of the abandoned landfarming operations is a Remedial Action Plan (RAP) approved by the Regional Board in 1996. By mutual agreement, the lead agency for the project has shifted from the Regional Board to the California Department of Toxic Substances Control, with the Remedial Investigation, Feasibility Study, and updated RAP prepared in accordance with the National Contingency Plan (NCP) including detailed risk assessment and other analyses required by this mandated process. The selected Remedial Action excavates all affected soils, treats soils to remove or destroy chemicals which could be mobilized to affect water quality, and consolidates all affected and treated soils at depth within a Soil Consolidation Area (SCA). The small volume of hazardous level PCB affected soils will be excavated and disposed of off-site. The treatment of soils includes biological treatment and soil vapor extraction to be implemented over time within the SCA. The remaining chemicals, which are essentially insoluble in water and will not leach, and are not bio-available to plants or microbes, will be buried beneath a permeable geotextile which is covered with a 6-foot soil cap on which vegetation (dune scrub habitat with generally shallower roots) will be established and maintained. Consolidation of all treated and affected materials will eliminate concern for unanticipated human activities which could cause future exposure.

Two separate groundwater pumping operations are planned for the Site, one that handles groundwater within the VOC contamination plume, and one that handles groundwater outside the plume. The groundwater pumping for the area within the VOC contamination plume will occur at several well locations which will blend and dilute affected groundwater having an anticipated overall lowering effect on the concentration of observed VOCs. The blended VOCs-contaminated groundwater will be treated by granular activated carbon (GAC) or an equivalent technology. Vinyl chloride will be removed with an additional oxidizing stage.

Due to the site's unconsolidated soils, geotechnical considerations of the development require that the entire site to be used for residential purposes be over-excavated and placed as an engineered fill. The total estimated volume of soil to be excavated, treated, handled, and placed is approximately 3.5 million cubic yards of material. All soil movements will have ample dust control, emission controls, and erosion controls with extensive monitoring to ensure the protection of the public. The grading operations are expected to last 12 to 14 months. The Site currently has a Storm Water Pollution Prevention Plan on file with the City of Oxnard and best management practices outlined in the Plan will be used to prevent surface water runoff.

Groundwater to be used as dust suppressant will be a mixture of water from the pumping operation outside the VOC contamination plume and water from within the plume that has been treated to a higher quality than existing groundwater. Because dust suppression activities will



overlap the areas of groundwater extraction and remediation, there will be no negative impact to groundwater because any percolation associated with dust suppression activities will return un-impacted or remediated groundwater. Not all water generated by groundwater extraction operations will be used for dust suppression. The Discharger has separately received NPDES permits (Regional Board Order No. R4-2003-0111, Series No. 111) for discharge of treated groundwater to the Mandalay Canal. The Site currently has a Storm Water Pollution Prevention Plan on file with the City of Oxnard and best management practices outlined in the Plan that are intended to prevent any water runoff from dust suppression or stormwater. Nonetheless, any groundwater extracted as part of the remediation project will meet the maximum contaminant level based VOC effluent limits of Regional Board Order No. R4-2003-0111, Series No. 111 to assure that there is no impact to groundwater or surface water quality in the area associated with dust suppression activities.

Regional Board staff has reviewed the information provided and has determined that the proposed discharge of treated groundwater for dust suppression during remedial excavation and grading operations meets the conditions specified in Order No. R4-2002-0030, “*General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel and/or Volatile Organic Compound Impacted Sites,*” adopted by this Regional Board on January 24, 2002.

Enclosed are WDRs, consisting of Regional Board Order No. R4-2002-0030 (Series No. 062) and Monitoring and Reporting Program (MRP) No. CI-9140. You are required to implement the monitoring program on the effective date of this enrollment (August 8, 2006) under Regional Board Order No. R4-2002-0030. All monitoring reports should be sent to the Regional Board, ATTN: Information Technology Unit.

When submitting monitoring or technical reports to the Regional Board per these requirements, include a reference to “Compliance File No. CI-9140”, which will assure that the reports are directed to the appropriate file and staff. Do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

We are sending a copy of Order No. R4-2002-0030 to the applicant only. A copy of the Order will be furnished to interested parties upon request. If you have any questions please contact Enrique Casas at (213) 620-2299.

Sincerely,

Jonathan S. Bishop
Executive Officer

California Environmental Protection Agency



Enclosures:

1. Board Order No. R4-2002-0030 (addressee only)
2. Monitoring and Reporting Program No. CI-9140
3. Standard Provisions applicable to Waste Discharge Requirements (addressee only)

cc: Namiraj Jain, Los Angeles Regional Water Quality Control Board, Permitting Unit
Poonam Acharya, Department of Toxic Substances Control
Doug Beach, Ventura County Environmental Health Division
Charles Robinson, LFR

