



DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION, NAVAL FACILITIES ENGINEERING COMMAND
OFFICER IN CHARGE, CARETAKER SITE OFFICE
LONG BEACH NAVAL COMPLEX
821 REEVES AVENUE
TERMINAL ISLAND, CA 90731

N60258.000990
NSY LONG BEACH
SSIC # 5090.3

5090
Ser CSO LB/0011
03 April 1998

Chief Facility Permitting Branch
California Environmental Protection Agency
Department of Toxic Substances Control
1011 N. Grandview Ave.
Glendale, CA 91201

Dear Mr. Jose Kou, P.E:

CLOSURE - CONTAINER STORAGE AREA, BUILDING 118,
FORMER LONG BEACH NAVAL SHIPYARD (EPA ID NO. CA 6170023109)

Reference: J. Kou, DTSC Letter dated November 7, 1996

Long Beach Naval Shipyard closed on 30 September 1997. All industrial operations have ceased, all buildings and facilities are locked and have been placed in a caretaker status until they are leased or conveyed to the City of Long Beach.

Navy requests DTSC to reconsider their request for the performance of a leachability study at this site, and approve closure for Building 118, Container Storage Area, former Long Beach Naval Shipyard.

The health risk assessment data associated with Building 118 closure is based upon extremely health-conservative risk screening calculations of the PEA Guidance Manual. The data indicates that carcinogenic and non-carcinogenic risk levels for the soil under Building 118 are within acceptable ranges.

The possibility of leachate from the Building 118 site reaching either ground or surface waters is extremely low. Moreover, EPA Region 9 PRG tables state that for the low contaminant levels as found at the Building 118 site, consideration of soil contaminant migration to a groundwater pathway can be eliminated.

Technical details supporting the conclusion, that an insignificant risk for ground and surface water contamination exists, are detailed in the attached technical summary (enclosure (1)).

If you have any questions please do not hesitate to contact me at (310) 732-6184 or the Long Beach Remedial Project Manager, Ed Dienzo at (619) 532-4714.

Sincerely,

A. DiDomenico
LCDR, CEC, USN

Encl:

(1) Technical Summary: Closure Container Storage Area, Building 118, former Long Beach Naval Shipyard

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Copy to:

Mr. Alvaro Gutierrez
California Environmental Protection Agency
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630

Mr. Hugh Marley
California Environmental Protection Agency
Regional Water Quality Control Board - Los Angeles Region
101 Centre Plaza Drive
Monterey Park, CA 91754-2156

Mr. Martin Hausladen
United States Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mr. Alan Lee
Long Beach BRAC Environmental Coordinator
BRAC Operations Office
1220 Pacific Highway
San Diego, CA 92132-5190

TECHNICAL SUMMARY:

03 Apr 98

**Closure - Container Storage Area, Building 118, former Long Beach Naval Shipyard
(EPA ID No. CA 6170023109)**

1) RISK TO HUMAN HEALTH:

As requested in a February 15, 1995 letter from the California Environmental Protection Agency, Department of Toxic Substances Control, the Long Beach Naval Shipyard prepared a screening health risk assessment in support of the closure for Building 118, a former Resource Conservation and Recovery Act container storage area.

This study entitled "Screening Human Health and Ecological Risk Assessment, Building 118, Long Beach Naval Shipyard" was submitted to Mr. Doug Bautista on December 7, 1995.

The residential scenario human health risk assessment was conducted by SCS Engineers in accordance with the DTSC's Preliminary Endangerment Assessment (PEA) Guidance Manual. The PEA screening Health risk assessment findings for Building 118 for carcinogenic and non-carcinogenic risk levels are $1.03E-06$ and $3.14E-01$, respectively. These values are within acceptable ranges for hazardous waste sites and/or permitted facilities. (Appendix 1, Table 4.-Screening Human Health and Ecological Risk Assessment, Building 118, Long Beach Naval Shipyard, Long Beach, California (U.S. EPA Identification No. CA 6170023109)). Even though the long term usage for this property is for industrial applications, the more conservative residential scenario based risk assessment was performed in evaluating potential health risks.

2) RISK OF LEACHATE PRODUCTION AND TRANSPORT TO GROUNDWATER:

The August 1, 1996 Region 9 Preliminary Remediation Goals, (PRGs) document, page 5, paragraph 2.3, Soil Screening Levels (SSLs) states:

"The SSLs were developed using a default dilution-attenuation factor (DAF) of 20 to account for natural processes that reduce contaminant concentrations in the subsurface. Also included are generic SSLs that assume no dilution or attenuation between the source and the receptor well (i.e. a DAF of 1). These values can be used at sites where little or no dilution or attenuation of soil leachate concentration is expected at the site (e.g., sites with shallow water tables, fractured media, karst topography, or source size greater than 30 acres).

Generally, if an SSL is not exceeded for the migration to groundwater pathway, the user may eliminate this pathway from further investigation."

At the Container Storage Area, Building 118, eighteen soil samples were taken at 0.5 foot depths, and six were taken at a 5.0 foot depths for the closure certification program. Two samples, B-16-5A and B-17-5A, at the depth of five feet, indicated the presence of PCE in the concentrations of 0.005 and 0.024 mg/kg, respectively.

These findings are below the 1996 Soil Screening Levels for migration to groundwater for PCE of 0.060 mg/kg. All other PCE measurements at the depth of five feet were "non-detect." The DAF of 20 is used because potable groundwater is not shallow, the media is fractured, and the source size is significantly below 30 acres. Current literature; California Leaking Underground Fuel Tank (LUFT) Historical Case Analyses prepared by the University of California, although specific to petroleum hydrocarbons released in the soil, establishes that groundwater moves slowly, and naturally occurring bioremediation is as effective as active remediation, once the contaminant source has been removed. All contaminant sources have been removed from the Building 118 site.

TECHNICAL SUMMARY:

03 Apr 98

**Closure - Container Storage Area, Building 118, former Long Beach Naval Shipyard
(EPA ID No. CA 6170023109)**

3) RISK TO SURFACE WATER:

Groundwater flow for shallow water at the Long Beach Naval Shipyard is in the north-north-easterly direction, away from the ocean. Saline groundwater occurs at shallow depths throughout the Long Beach Naval Shipyard. Groundwater elevations gradually decrease toward the north edge of the Long Beach Naval Shipyard where elevations are approximately 10 feet below mean high tide (Southwest Division, 1992). Therefore, any leachate produced at the Building 118 Container Storage Area would flow away from the ocean.

4) RISK TO POTABLE WATER:

The nearest potable groundwater wells are more than 3 miles away from Building 118. The Dominguez Gap injection barrier wells are located between Building 118 and the nearest potable water wells. The barrier is approximately 3.5 miles long, situated approximately 1.5 miles north to northwest of Long Beach Naval Shipyard, and since 1971, has injected fresh water into the Gaspar, Gage, and Lynwood aquifers to mitigate saltwater intrusion.

CONCLUSION:

The potential for leachate from the Building 118 Site to reach either ground or surface waters is extremely low. The possibility for the leachate to reach ground or surface waters, and represent a health risk from soil contaminants at the Building 118 Site, is not demonstrable with information available in U.S. EPA guidance documents. Moreover, EPA Region 9 PRG tables state that for the low contaminant levels found at the Building 118 site, consideration of soil contaminant migration to a groundwater pathway can be eliminated.

The residential scenario human health risk assessment conducted for Building 118 in accordance with the DTSC's Preliminary Endangerment Assessment (PEA) Guidance Manual found the carcinogenic and non-carcinogenic risk levels to be $1.03E-06$ and $3.14E-01$, respectively. These values are within acceptable ranges.

Solvent levels at the Building 118 site preclude consideration of soil as a pathway for ground water contamination. Future usage of this site is destined for industrial purposes. The Navy concludes from the review of the foregoing health risk assessment data for Building 118, that the health risks associated with pollutants in the soil are acceptable and closure certification should be granted.



Cal/EPA

Department of
Toxic Substances
Control

245 West Broadway,
Suite 425
Long Beach, CA
90802-4444

November 7, 1996

Pete Wilson
Governor

James M. Strock
Secretary for
Environmental
Protection

Ms. Yi Hwa Kim
Long Beach Naval Shipyard
Code 1171
300 Skipjack Road
Long Beach, California 90822-5099

Dear Ms. Kim:

**INCOMPLETE CLOSURE: CONTAINER STORAGE AREA, BUILDING
118, LONG BEACH NAVAL SHIPYARD (EPA ID NO.CA6170023109)**

The California Department of Toxic Substances Control (DTSC) has reviewed the certification report on closure activities for the above unit, dated August 1996.

Based on the report, closure has not been implemented in accordance with the closure plan approved by DTSC in May 1993. A leachability study to determine potential impact to groundwater of residual contamination in the soil needs to be performed. Based on the results of the Health Risk Assessment (Residential Scenario) approved by DTSC on January 28, 1996, the amount of residual contaminants in the soil are within health risk based limits. However, although contaminants left in the soil are within health risk based limits, there is a potential for these contaminants to impact the groundwater. Therefore, a leachability study and, if needed, groundwater investigation is required.

DTSC won't approve the closure certification for the storage area at Building 118 until it is demonstrated that the remaining contaminants in the soil beneath the unit do not pose a threat to the groundwater nor is a source of groundwater contamination.



Ms. Yi Hwa Kim
November 7, 1996
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The leachability Study and, if needed, groundwater investigation, will be carried out under the oversight of DTSC Office of Military Facilities, Base Closure Unit.

If you have any questions, please call
Mr. D. (Anand) R. Rege of my staff at (310) 590-4880.

Sincerely,



Jose Kou, P.E., Chief
Facility Permitting Branch

cc: Ms. Florence Gharibian, Chief
Statewide Compliance Branch
Department of Toxic Substances Control
245 West Broadway, Suite 350
Long Beach, California 90802

Ms. Carmen Santos
Permits Section
Hazardous Waste Management Division (H-3-2)
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105

Mr. John Scandura, Chief
Office of Military Facilities
Southern California Operations
Department of Toxic Substances Control
245 West Broadway, Suite 350
Long Beach, California 90802