California Environmental Protection Agency
Department of Toxic Substances Control

VARIANCE

Applicant Names:

Mr. Ken Nelson, Acting District Director
State of California
Department of Transportation, District 12
(Caltrans)
3347 Michelson Drive
Irvine, California 92612

Variance No. 00-H-VAR-07

Effective Date: September 22, 2000

Expiration Date: September 22, 2005

Modification History:

Pursuant to Section 25143 of the California Health and Safety Code, the Department of Toxic Substances Control hereby issues the attached Variance consisting of 8 pages to Department of Transportation District 12.

Frederick S. Moss
Chief, Permitting Division
Department of Toxic Substances
Control

Date: 9/22/00

VARIANCE

1. INTRODUCTION.

1.1 Pursuant to Section 25143, Chapter 6.5, Division 20 of the Health and Safety Code (HSC), the California Department of Toxic Substances Control (DTSC) grants a variance to the applicant below for waste considered hazardous solely because of its contaminant concentrations and as further specified herein.

1.2 DTSC hereby grants a variance only from the requirements specified herein and only in accordance with all terms and conditions specified herein.

2. IDENTIFYING INFORMATION.

APPLICANT/OWNER/OPERATOR

Mr. Ken Nelson, Acting District Director
State of California
Department of Transportation, District 12 (Caltrans)
3347 Michelson Drive
Irvine, California 92612

3. TYPE OF VARIANCE.

Generation, Manifest, Transportation, Storage and Disposal

4. ISSUANCE AND EXPIRATION DATES.

DATE ISSUED: September 22, 2000 EXPIRATION DATE: September 22, 2005.

5. APPLICABLE STATUTES AND REGULATIONS. The hazardous waste that is the subject of this variance is fully regulated under HSC, Section 25100, et seq. and Title 22 of the California Code of Regulations (CCR) Division 4.5 except as specifically identified in Section 8 of this variance.

6. DEFINITION. For the purposes of this variance, waste that meets the criteria in paragraphs a) and b) of section 9 below, shall be referred to as "lead-contaminated soil(s)".

7. FINDINGS/DETERMINATIONS. DTSC has determined that the variance applicant meets the requirements set forth in HSC Section 25143 for a variance from specific regulatory requirements as outlined in Section 8 of this variance. The specific determinations and findings made by DTSC are as follows:

a) Caltrans intends to excavate, stockpile, transport, bury and cover large volumes

of soil associated with highway construction projects throughout the State. In the more urbanized highway corridors this soil is contaminated with lead, primarily due to historic emissions from automobile exhausts. In situ testing has shown the uppermost two feet of soil have been found to contain concentrations of lead in excess of regulatory thresholds. However, DTSC has prepared a risk assessment that shows that soil contaminated with low concentrations of lead can be managed in a way that presents no significant risk to human health and the environment.

b) The lead-contaminated soil will be placed only in Caltrans rights of way. Based on concentration levels, the wastes will be covered with a minimum thickness of one (1) foot of non-hazardous soil or asphalt cover and will always be five (5) feet above the highest groundwater elevation. Caltrans will assure that proper health and safety procedures will be followed for workers. This includes any persons engaged in maintenance work in areas where the waste has been buried and covered.

c) DTSC finds and requires that the lead contaminated soil excavated, stockpiled, transported, buried and covered is a non-RCRA hazardous waste, and that the hazardous waste management activity is insignificant as a potential hazard to human health and safety and the environment, when managed in accordance with the conditions, limitations and other requirements specified in this variance.

8. PROVISIONS SUBJECT TO VARIANCE.

DTSC, subject to all terms and conditions herein, waives the hazardous waste management requirements of Title 22, CCR, sections 66264.250 through 66264.259, 22 CCR 66268.1 through 66268.9, 22 CCR 66262.10, 22 CCR 66262.12, 22 CCR 66262.20, 22 CCR 66262.30 through 66262.34, 22 CCR 66262.40 through 66262.42, 22 CCR 66263.10 through 66263.18 and 22 CCR 66263.20 through 66263.23 for the generation, transportation, manifesting, storage and land disposal of hazardous waste. These management requirements are waived only provided all other requirements of this variance are complied with at Caltrans construction projects in the Caltrans District specified in section 2 above.

9. SPECIFICATIONS OF THE CONDITIONS, LIMITATIONS, OR OTHER REQUIREMENTS. The owner/operator shall be subject to the following conditions:

a) Caltrans shall manage all soil contaminated with lead at concentrations such that it is considered a hazardous waste pursuant to HSC 25117 and 22 CCR, Div 4.5, Chapter 11, unless the contaminant concentrations and management practices meet the following conditions:

1. Soil containing 500 ug/l extractible lead or less (based on a modified waste extraction test using deionized water as the extractant) and 350 ppm or less total lead may be used as fill provided that the lead-contaminated soil is placed a minimum of five (5) feet above the maximum water table elevation and covered with at least one (1) foot of nonhazardous soil. The limit on total lead within shall be the

following: Total parts per million (ppm) lead shall be at or below the statutory limits in effect when the soil is used as fill or the risk based limit of 1496 mg/kg, whichever is less. On the effective date of this variance, HSC section 25157.8 limits total lead concentrations to 350 ppm. That section may be amended and/or expire in the future. Additionally, other parts of relevant statutes may be added or amended in the future to include lead limits applicable to this variance.

2. Soil containing more than 500 ug/l and less than 50 mg/l extractible lead (based on a modified waste extraction test using deionized water as the extractant) and 350 or less ppm total lead may be used as fill provided that the lead-contaminated soils are placed a minimum of five (5) feet above the maximum water table elevation and protected from infiltration by a pavement structure which will be maintained by Caltrans. Caltrans shall comply with the lead limits discussed in paragraph a) 1 above.

3. Contaminated soil with a pH < 5.0 shall only be used as fill material only under the paved portion of the roadway.

b) Caltrans will implement appropriate health and safety procedures to protect its employees and the public, and to prevent or minimize exposure to potentially hazardous substances. A project-specific health and safety plan must be prepared and implemented. The monitoring and exposure standards shall be based on Construction Standards in Title 22, CCR section 1532.1.

c) All lead-contaminated soil that cannot be buried and covered within the same Caltrans corridor from where it originated shall be managed as a hazardous waste.

d) Lead-contaminated soil will not be moved outside the designated corridor boundaries (see paragraph q) below).

e) Lead-contaminated soil shall not be buried in areas where it will be in contact with groundwater or surface water.

f) Lead-contaminated soil shall be buried and covered only in locations that are protected from erosion resulting from storm water run-on and run-off.

g) The lead-contaminated soil shall be buried and covered in a manner that will prevent accidental or deliberate breach of the asphalt, concrete, and/or cover soil.

h) The presence of lead-contaminated soil will be incorporated into the projects' as-built drawings. The as-built drawings shall be annotated with the location, representative analytical data, and volume of lead-contaminated soil. The as-built drawings shall also state the depth of the cover. These as-built drawings shall be retained by Caltrans until its rights-of-way or property ownership are relinquished.

I) Caltrans shall ensure that no other hazardous wastes, other than the lead-contaminated

soil, are placed in the burial areas.

j) Lead-contaminated soil shall not be buried within ten (10) feet of culverts or locations subject to frequent worker exposure.

k) Excavated lead-contaminated soil not placed into the designated area (fill area, roadbed area) by the end of the working day shall be stockpiled and covered with sheets of polyethylene or at least one foot of non-hazardous soil. The lead contaminated soil, while stockpiled or under transport, shall be protected from contacting surface water and being dislodged or transported by wind or storm water. The stockpile covers shall be inspected at least once a week and within 24 hours after rainstorms.

l) Caltrans shall ensure that all stockpiling of lead contaminated soil remains within the specified corridor. Stockpiling of lead-contaminated soil outside the area of contamination is in direct violation of land disposal restrictions and is prohibited.

m) Caltrans shall conduct confirmatory sampling, if appropriate, of any stockpile area after removal of the lead- contaminated soil to ensure that contamination has not been left behind or has not migrated from the stockpiled material to the surrounding soils. Caltrans shall ensure that test results are kept with Caltrans project records located at the District office or a subsequent permanent location and are available to DTSC upon request.

n) Caltrans shall stockpile lead-contaminated soil only on high ground (i.e. no sump areas or low points) which will not be affected by surface water run-on or run-off.

o) Caltrans shall not stockpile soil in an environmentally sensitive area.

p) Caltrans shall ensure that run-off which has come into contact with stockpiled lead-contaminated soil will not flow to storm drains, inlets, or waters of the state.

q) Caltrans may move lead-contaminated soil from one Caltrans project to another Caltrans project so long as the lead-contaminated soil remains within the same designated Caltrans corridor. Caltrans shall record this movement of lead- contaminated soil by using a bill of lading. The bill of lading must contain: 1) US DOT description including shipping name, hazard class and ID number; 2) handling codes; 3) quantity of material; 4) volume of material; and 5) any specific handling instructions. The bill of lading shall be referenced in and kept on file with the project's as-built drawings. Lead-contaminated soil must be kept covered during transportation.

r) For each specific corridor where this variance is to be implemented, all of the following information will be submitted in writing to DTSC at least five (5) days before construction of any project begins:

1. a plan drawing designating the boundaries of the corridor where lead-contaminated soils will be excavated, stockpiled, buried and covered;

2. a list of the Caltrans projects that the corridor encompasses;

3. a list of Caltrans contractors that will be conducting any phase of work on any project affected by this variance;

4. duration of corridor construction;

5. location where sampling and analytical data used to make lead concentration level determinations are kept (e.g. a particular Caltrans project file);

6. name and phone number (please include area code) of project resident engineer and project manager;

7. location where Caltrans and contractor health and safety records are kept;

8. location of project special provisions (including page or section number) for soil excavation, transportation, stockpile, burial and placement of cover material;

9. location of project drawings (including drawing page number) for soil excavation, burial and placement of cover in plan and cross section (For example, "The project plans are located at the resident engineer's office located at 5th and Main Streets, City of Fresno,. See pages xxxxx of contract xxxx");

10. If a Caltrans project within the corridor is added, changed or deleted, Caltrans must update the information provided to DTSC five (5) days before construction begins; and

11. The type of environmental document for each project, date of adoption, document title, Clearing House number and where the document is available for review. A copy of the Notice of Exemption for any project shall be submitted to the DTSC Headquarters Project Manager within five (5) days of signing.

s) Changes in location of lead-contaminated soil placement, quantities or protection measures (field changes) will be noted in the resident engineer's project log within five (5) days of the field change.

t) Caltrans shall ensure that field changes are in compliance with the requirements of this variance.

u) If areas subject to the terms of this variance are sold, relinquished or abandoned (including roadways), all future property owners shall be notified in writing in advance by Caltrans of the requirements of this variance, and Caltrans shall provide the owner with a copy of the variance. A copy of such a notice shall be sent to and contain the corridor location and project. Caltrans shall also disclose to the new owner the location of areas where lead contaminated soil has been buried. Future property owners will be subject to the same requirements as Caltrans retains the right to modify or revoke this variance

pursuant to HSC 25143 upon a change of ownership or at any other time.

v) For the purposes of informing the public about instances where the variance is implemented, Caltrans shall:

1. Maintain current fact sheets at all Caltrans resident engineer offices and the Caltrans District office. Caltrans shall make the fact sheets available to anyone expressing an interest in variance-related work.

2. Maintain a binder(s) containing copies of all reports submitted to DTSC at the District office. Caltrans shall ensure that the binders are readily accessible to the public.

3. Carry out the following actions when it identifies additional projects:

(A) Notify the public via a display advertisement in a newspaper of general circulation in that area.

(B) Update and distribute the fact sheet to the mailing list and repository locations.

w) Caltrans implementation of this variance shall comply with all applicable state policies for water quality control, water quality control plans, waste discharge requirements (including storm water permits), and others issued by the State Water Resources Control Board or a California Regional Water Quality Control Board.

x) This variance is applicable only to soil considered hazardous because of aerially-deposited lead contamination. The variance is not applicable to any other hazardous waste.

y) Lead-contaminated soil may be buried only in areas where access is limited or where lead-contaminated soil is covered and contained by a pavement structure.

1) Dust containing lead-contaminated soil must be controlled. Water or dust palliative may be applied to control dust. If visible dust migration occurs, all excavation, stockpiling and truck loading and burying must be stopped. The granting of this variance confers no relief on Caltrans from compliance with the laws, regulations and requirements enforced by any local air district or the California Air Resources Board.

2) Sampling and analysis is required to show the lead contaminated soil meets the variance criteria specified in a). All sampling and analysis must be done according to U.S. EPA subsection SW-846.

z) All correspondence shall be directed to the following office:

Frederick S. Moss, Chief
Permitting Division
Department of Toxic Substances Control
400 P Street, 4th Floor
P.O. Box 806
Sacramento, CA 95812-0806

Attn: Caltrans Lead Variance Notification Unit

10. DISCLAIMER.

10.1 The issuance of this variance does not relieve Caltrans of the responsibility for compliance with Division 20, Chapter 6.5, HSC, or the regulations adopted thereunder, and any other laws and regulations other than those specifically identified in Section 8 of this variance. Caltrans is subject to all terms and conditions herein. The granting of this variance confers no relief from compliance with any federal, state or local requirements other than those specifically provided herein.

10.2 The issuance of this variance does not release Caltrans from any liability associated with the handling of hazardous waste, except as specifically provided herein and subject to all terms and conditions of this variance.

11. VARIANCE MODIFICATION OR REVOCATION. This variance is subject to review at the discretion of DTSC and may be modified or revoked at any time pursuant to Health and Safety Code section 25143.

12. CEQA DETERMINATION. DTSC adopted a Negative Declaration on September 22, 2000.

Approved:

9/22/00
Date

Frederick S. Moss
Frederick S. Moss, Chief
Permitting Division
Hazardous Waste Management Program
Department of Toxic Substances Control