REMOVAL ACTION WORKPLAN FOR SOIL

ROBERTS TIRES FACILITY
OAKLAND, CALIFORNIA

June 2002

Prepared by

California Environmental Protection Agency

Department of Toxic Substances Control

700 Heinz Avenue

Berkeley, CA 94710

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REMOVAL ACTION WORKPLAN APPROVAL RECORD

Site Name: Roberts Tires Facility

Site Location: 4311 – 4333 MacArthur Boulevard, Oakland, California

Regional Office: Northern California, Coastal Cleanup Operations Branch, Berkeley Office

The undersigned have reviewed the attached Removal Action Workplan (RAW) and determined that it meets state and federal statutory, regulatory, policy and technical requirements. Therefore, the RAW shall be circulated for public comment and thereafter be revised as deemed appropriate.

Project Manager — Date: 6/19/02

Unit Chief — Date: 6/19/2002

Branch Chief — Date: 6/19/2002

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ARAR	Applicable or Relevant and Appropriate Requirement
BAAQMD	Bay Area Air Quality Management District
CCR	California Code of Regulations
DTSC	Department of Toxic Substances Control
EE/CA	Engineering Evaluation/Cost Analysis
HASP	Health and Safety Plan
H&SC	Health and Safety Code
LDR	Land Disposal Restriction
RAP	Remedial Action Plan
RAW	Removal Action Workplan
RCRA	Resource Conservation and Recovery Act
SRA	Streamlined Risk Assessment
TMV	Toxicity, Mobility, and Volume
USEPA	United States Environmental Protection Agency
bgs	below ground surface
mg/Kg	milligrams per kilogram
ppm	parts per million
µg/l	micrograms per liter
$\mu g/m^3$	micrograms per cubic meter

This report represents a Removal Action Workplan (RAW) for interim removal of soil prepared by the Department of Toxic Substances Control (DTSC) for Roberts Tires Facility (Site) located at 4311 – 4333 MacArthur Boulevard, Oakland, California. This RAW has been prepared in a manner consistent with the National Contingency Plan and in accordance with the California Health and Safety Code, Section 25356.1(h)(3). The purpose of this RAW is to implement an interim removal action for the Roberts Tires Facility (the Site) that is protective of public health and safety and the environment. The scope of the interim removal action is to remove hazardous concentrations of lead and motor oil in surface soil in unpaved areas of the Site.

The Site is an irregularly shaped 0.6-acre property consisting of a one-story building and a garage building. A Preliminary Assessment conducted by DTSC in March 2001 found lead in surface soil in an unpaved area behind buildings as high as 36,400 milligrams/kilogram (mg/Kg). A surface sample from the unpaved area in front of the buildings had lead concentration of 790 mg/Kg. Motor oil concentrations ranging from 690 to 6,900 mg/Kg were also found co-located with lead. There is also a small soil stockpile inside one of the buildings. Additional sampling of the contaminated areas and of the stockpile will be conducted before the excavation activities begin to determine the vertical extent of the contamination in unpaved areas and to characterize the stockpile for disposal. The source of the contamination at the Site is believed to be associated with the automotive repair operations conducted at the Site.

Potential risks to human health and the environment associated with the lead in the soil were evaluated using a biological uptake model called "Lead Risk Assessment Spreadsheet" (Leadspread). Leadspread is a tool that can be used to estimate blood lead concentrations resulting from exposure to lead via drinking water, soil and dust ingestion, inhalation, and dermal contact. The spreadsheet estimates risks to potentially exposed individuals. Assuming future residential exposure scenario, Leadspread generated a soil cleanup goal of 350 mg/Kg that is health protective for a typical child with a confidence level of ninety-nine percent (99%).

Appropriate removal action alternatives developed for the Roberts Tires Facility include:

- Alternative 1 No Action/Institutional Controls
- Alternative 2 Excavation and Offsite Disposal

The alternatives were analyzed based on the three criteria of effectiveness, implementability, and cost.

The recommended removal action is Alternative 2 - Excavation with Offsite Disposal. Alternative 2 would include excavation of lead-impacted soils in several areas that total about 2,100 square feet. The estimated depth of soil excavation ranges from 3 to 5 feet. The total volume of contaminated soil to be excavated is estimated to be 400 cubic yards. The excavated soil would be transported to and disposed at an appropriate landfill, depending on waste characterization. After excavation, confirmatory samples will be collected to demonstrate that the remaining soil lead

concentrations are below the cleanup goals. If needed, soil excavation and confirmatory samples will be continued until in-place lead concentrations are below cleanup goals. The removal action is anticipated to be completed in approximately one week.

Alternative 2 rated the most favorable in terms of long-term effectiveness. Potential short-term community or worker exposures are anticipated to be minimal. The alternative is expected to be readily implementable both technically and administratively. The estimated cost for this alternative is $250,000.

1.0
SITE CHARACTERIZATION

1.1 BACKGROUND

This Removal Action Workplan (RAW) was prepared by the California Department of Toxic Substances Control (DTSC) for the Roberts Tires Facility (Site), located at 4311-4333 MacArthur Boulevard, Oakland, Alameda County, California.

Mr. Charles E. Roberts, Sr. purchased the property in 1920 and opened Roberts Service Gas Station in the early 1940s. Mr. Clifford E. Roberts (son of Charles) purchased the Tire and Battery portion of the property in 1949. During the 1950s, a body and paint shop was also operated at the property. In 1961, a portion of the property was taken by the State of California (Caltrans) for the development of Interstate 580. In 1966, the remaining property was deeded to Clifford Roberts and his wife, Ruth C. Roberts. In 1968, a portion of the Caltrans property was deeded to the City of Oakland as part of MacArthur Boulevard. Upon the death of Clifford Roberts in 1976, Mrs. Ruth Roberts became the sole owner. Mrs. Roberts operated a tire and brake shop on the property until 1996. The property was transferred to the Ruth C. Roberts Trust. Mrs. Roberts passed away in 2000.

The Site is located in a mixed industrial and residential area in the southeast portion of Oakland and consists of a one-story building and a garage building. The front portion of the site adjoining the public street is covered with asphalt. The site is enclosed by a chain link fence on the front and sides, and by the existing buildings in the back.

In 1996, Pacific Gas and Electric Company (PG&E), owner of the property immediately east of the Roberts Tires Site, discovered hazardous substance during a Phase I Environmental Site Assessment being performed in preparation for sale of their property. They discovered old auto repair parts, including wheel bearing, brake springs, brake cylinders, lead tire weights, and oily rags. Results from a Phase II investigation, conducted at the PG&E's property in October 1999, showed elevated levels of total petroleum hydrocarbons as motor oil (TPHmo) and lead in soil. PG&E suspect that the waste originated from the Roberts Tires Facility. PG&E removed the contaminated soil and disposed it off site.

DTSC conducted a Site Screening on the Site approved by United States Environmental Protection Agency (US EPA) in November 2000. A Preliminary Assessment conducted by DTSC in March 2001 found lead in surface soil in unpaved areas at concentrations ranging from 790 to 36,400 milligrams/kilogram (mg/Kg). Motor oil concentrations ranging from 690 to 6,900 mg/Kg were also discovered co-located with lead. Lead compounds are listed as hazardous material (No. 406) in section 66261.126, Title 22, California Code of Regulations. Title 22 California Code of Regulations section 66261.24 defines waste containing 1,000 mg/Kg or more of lead as hazardous waste. The source of the contamination at the Site is believed to be associated with the automotive repair operations conducted at the Site.

Ruth C. Roberts Trust owns the Site. On December 11, 2001 the DTSC issued an Imminent and Substantial Endangerment Determination and Order and Remedial Action Order (Order) to the property owner. The DTSC determined the owner to be in non-compliance with the Order in January 2002. DTSC will expend state funds to conduct the interim removal action for lead contaminated soils to reduce the public health risk of the Site. The entire Site will be characterized at a later date when the funding is available.

1.2 PURPOSE AND SCOPE OF REPORT

This RAW was prepared in accordance with the California Health and Safety Code Section 25323.1. The purpose of this RAW is to identify and approve an interim removal action for the Site that is protective of public health and safety and the environment. This RAW includes:

- A description of the onsite contamination
- The goals to be achieved by the removal action
- A streamlined risk evaluation to assist in focusing the removal action goals on particular chemicals and exposure pathways of concern
- Development of appropriate removal action alternatives, and analysis of these alternatives
- Comparison of alternatives, selection of a preferred alternative and basis for the selection

The scope of this RAW only applies to the soil lead contamination at the Site. The Site will be fully characterized, as more funds become available.

1.3 SUMMARY OF EXISTING SITE CONDITIONS

1.3.1 Site Description

The Site is an irregularly shaped 0.6-acre property located in the southeast portion of Oakland and consists of a one-story building, addressed 4311 MacArthur Boulevard and a garage building, addressed 4317 MacArthur Boulevard. The front portion of the Site adjoining the public street is covered with asphalt. The site is enclosed by a chain link fence in the front and sides and by the existing buildings in the back.

The City of Oakland has issued a citation to the owner of the Site to remove all above ground structures and the owner is in the process of demolishing the buildings. The demolition of the building is estimated to start in June 2002. The foundations of the building and the existing asphalt paving will be left intact in order to control dust.

1.3.2 Site Vicinity

The property is located in a mixed commercial/residential area. DTSC considers schools, childcare centers, hospitals, clinics, senior centers, teen centers and places of worship to be sensitive receptors. The nearest school, childcare center and place of worship are

approximately 500 feet of the Site. The nearest residences are approximately 150 feet from the eastern boundary of the property. Nearest hospital is about 2 miles from the Site.

1.3.3 Site Hydrogeology

Oakland is located within the major ground-water producing area in east San Francisco Bay region, referred to as the East Bay Plain. The East Bay Plain is situated in the San Francisco Bay depression, which is in part an irregular downwarp complicated by faulting principally along northwest-trending faults, and modified by erosion and deposition. From the base of the Diablo Range, the East Bay Plain includes an alluvial area close to highlands, and a marshland area adjacent to the bay. East Bay Plain consists of seven sub-areas, including Oakland sub-area. Roberts Tries Facility is located in the Oakland sub-area that is bounded on the north by the Berkeley sub-area and on the south by the San Lorenzo and San Leandro sub-areas.

The Oakland sub-area consists of a sequence of recent to old alluvial fans on a west sloping bedrock surface. The thickness of the alluvial fill ranges from 300 to 700 feet.

The direction of groundwater flow is east to west, or from the Hayward Fault to San Francisco Bay. Groundwater flow direction generally correlates to topography. Flow direction and velocity are also influenced by buried stream channels that typically oriented in an east-west direction.

1.3.4 Local Climate

The Bay Area, including Oakland, is considered to have a "Mediterranean" climate. Winters are cool and wet, and summers are mild, with fog or wind. Summer fog comes in from the Pacific Ocean during the night, interposing a cooling and humidifying blanket between the sun and the earth, thus reducing the intensity of light and percentage of sunlight.

Large-scale winds over the San Francisco Bay Area are predominantly from the west-northwest. Given the location of the Site, east of the Golden Gate, wind data from the Oakland Airport would generally be representative of conditions at the Site. The average annual wind speed is 9 miles per hour. Lightest winds occur during the fall season (about 7 miles per hour) and the strongest winds occur during late spring (about 10 miles per hour). Since the Site is located in east Oakland, several miles inland (while the Oakland Airport is located at the Bay shore), winds are considerably lighter due to frictional effects of the ground and building structures.

Proximity to the Pacific Ocean and San Francisco Bay, as well as the local topography, are the greatest influences on temperature variability in the Bay Area. Temperatures in the Oakland area tend to be cool in the winter with daytime temperatures in the range of 45° to 60°F, and nighttime temperatures from 35° to 50°F. In summer, temperatures during the daytime are warm, ranging from 70° to 90°F, and mild during the nighttime with a range of 55° to 65°F. Precipitation occurs mainly in the months of November through April. Any rainfall that occurs during summer months is usually light and associated with isolated showers or thundershowers. The average annual precipitation in the Oakland area is about 20 inches.

1.4 SOURCE, NATURE, AND EXTENT OF CONTAMINATION

1.4.1 Soil Analytical Data

Limited soil sampling was conducted in March 2001 for the Preliminary Assessment and three samples were collected in the area behind buildings and one sample from an unpaved area near the fence adjacent to MacArthur Boulevard. All samples were analyzed for metals, diesel and motor oil. Lead and motor oil were present in all five samples collected (Table 1-1). Diesel was not detected in any of the samples. Lead concentrations in samples ranged from 790 mg/Kg to 36,400 mg/Kg. Motor oil concentration ranged from 690 mg/Kg to 5,100 mg/Kg.

There is also a small soil stockpile inside one of the buildings near a sump. Additional sampling in the contaminated areas and in the stockpile will be conducted before the excavation activities begin to determine the vertical extent of the contamination in unpaved areas and to characterize the stockpile for disposal.

1.4.2 Groundwater Monitoring Data

There is no groundwater data available for the Site. Groundwater sampling will be conducted as a part of site characterization for the entire site when the funding available.

1.5 STREAMLINED RISK ASSESSMENT EVALUATION

The chemical of concern at the Site is lead, detected in surface soil at concentrations as high as 36,400 mg/Kg. Lead compounds are listed as hazardous material (No. 406) in section 66261.126, Title 22, California Code of Regulations. Title 22 California Code of Regulations in section 66261.24 defines any waste containing 1,000 mg/Kg or more of lead as hazardous waste. The concentration of lead in blood (blood lead) is used as the criterion for evaluating lead toxicity in humans.

Short-term exposure to lead could cause reversible kidney damage, but prolonged exposure at high concentrations may result in progressive kidney damage and possibly kidney failure. Anemia, due to inhibition of hemoglobin synthesis and a reduction in the lifespan of circulating red blood cells, is an early manifestation of lead poisoning. The most serious effects associated with markedly elevated blood lead levels are severe neurotoxic effects that include irreversible brain damage, as indexed by the occurrence of acute or chronic encephalopatic symptoms. Lead poisoning in children is characterized by occasional vomiting, irritability, abdominal pain, convulsion, and coma. With chronic, low level exposure to lead, learning deficits in young children may be the only measurable effects of lead intoxication. In older children and adults the effects of lead may be more subtle and nonspecific with decreased fertility and fatigue as the only signs. Lead has been reported to cause birth defects in animals.

DTSC has developed a biological uptake model referred as the "Lead Risk Assessment Spreadsheet" (LeadSpread). Version 7 of Leadspread was used to evaluate the potential health effects for residents at the Site. The Leadspread spreadsheet is included in Appendix

A. Leadspread is a tool that can be used to estimate blood lead concentrations resulting from exposure to lead via drinking water, soil and dust ingestion, inhalation, and dermal contact. Each of these pathways is represented by an equation relating incremental blood lead increase to a concentration in an environmental medium, using contact rates and empirically determined ratios. The contributions are added to arrive at an estimate of median blood lead concentration resulting from the multi-pathway exposure. The spreadsheet estimates risks to potentially exposed individuals. Potential exposure pathways include residential and occupational exposure scenarios. The residential scenario assumes adults and children living at the Site will be exposed seven days a week to contamination at the Site. The occupational exposure scenario assumes adults working at the Site five workdays a week. Because the exposure assumptions for the residential scenario are more conservative than for the occupational scenario, using residential exposure assumptions will result in the lowest calculated soil cleanup goal. The acceptable blood lead concentration identified by the Centers for Disease Control is 10 microgram per deciliter (µg/dL).

While standard default values were used to quantify the majority of the exposure parameters, site-specific concentrations of lead in ambient air were used in Leadspread. Leadspread uses a default value of 0.028 micrograms per cubic meter ($\mu g/m^3$) for lead in ambient air. Site-specific air data is not available, but the background ambient air data at the Fremont air monitoring station is available. The 2000 annual mean ambient air concentration of lead is 5 nanograms per cubic meter (sheet A-2). This value was used in the Leadspread to calculate the soil cleanup goal for lead in soil.

Several options were considered in selecting a value for lead in drinking water for use in the Leadspread. The California Drinking Water Standard for lead is 15 microgram per liter (µg/L). East Bay Municipal Utility District (EBMUD) supplies drinking water for the City of Oakland and the EBMUD reported a lead concentration of less than the detection limit of 5 µg/L (sheet A-3). The EBMUD laboratory detection limit was used for lead in drinking water in the Leadspread to calculate the soil cleanup goal for lead in soil.

Assuming future residential exposure scenario, Leadspread generated a soil cleanup goal of 350 mg/Kg that is health protective for a typical child with a confidence level of ninety-nine percent (99%) (sheet A-1).

2.0
IDENTIFICATION OF REMOVAL ACTION OBJECTIVES

2.1 REMOVAL ACTION OBJECTIVES/GOALS

The Removal Action Objectives (RAOs) are goals developed for the protection of human health and the environment, and are based on chemical concentrations and potential exposure routes. Protection of human health can be achieved by reducing chemical concentration levels and/or eliminating potential exposure pathways.

The RAOs for this Site is to reduce the human health-based risks associated with on-site contamination in soils to a level that is acceptable for unrestricted residential land uses.

The soil cleanup goal was developed using Leadspread for the Site. The methodology used to develop the soil cleanup goal is explained in Section 1.5 – Streamlined Risk Assessment Evaluation.

2.2 STATUTORY LIMITS ON REMOVAL ACTIONS

Section 25323.1 of the California Health and Safety Code (H&SC) relating to hazardous substances states that a site is exempted from the requirement for a remedial action plan if DTSC takes a non-emergency removal action at a site and the estimated cost of the removal action is less than $1,000,000. The interim removal action alternatives discussed in Section 3.0 are estimated to cost less than this limit. Therefore, in lieu of a Remedial Action Plan (RAP) this Removal Action Workplan (RAW) has been prepared.

2.3 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARs)

ARARs are categorized as chemical-, action- or location specific. Chemical-specific requirements are typically health or risk-based values that establish the acceptable amount or concentration of a chemical that may be found in or discharged to the ambient environment. Action-specific requirements generally set performance, design or other similar action-specific controls related to the management of hazardous substances. Location-specific requirements address restrictions on the conduct of activities or the concentrations of hazardous substances solely because they occur in a particular location.

In addition to ARARs, which are regulatory requirements, to-be-considered (TBC) material should also be identified. TBC are non-binding criteria, advisories, guidance, and proposed standards that might provide useful information or recommended procedures for developing standards that protect human health and the environment.

ARARs have been developed for the Roberts Tire Site removal action using federal, state and local statutes, regulations and guidance and are listed in Table 2-1.

2.4 CLEANUP LEVELS

Because there are no federal or state promulgated regulations that prescribe applicable remediation levels in soils, site-specific remediation standards are developed to achieve a level of remediation that is protective of human health and the environment. The chemical of concern in the soil is lead. Since motor oil is co-located with lead in the soil, a cleanup goal for motor oil was not developed. As discussed in Section 1.5, Leadspread shows that leaving the existing lead contamination in the soil would result in a risk to public health. The soil cleanup level for the Site is determined to be 350 mg/Kg.

3.0 IDENTIFICATION AND ANALYSIS OF REMOVAL ACTION ALTERNATIVES

3.1 REMEDIAL TECHNOLOGIES EVALUATION CRITERIA

Remedial alternatives are screened on the evaluation of three criteria: effectiveness, implementability, and cost.

3.1.1 Effectiveness

Effectiveness is the ability of each alternative to provide protection of public health and the environment. The evaluation of each alternative is based on the effectiveness of the alternative to handle the estimated volume of media and to meet the remedial action objectives; the potential impacts to human health and the environment during and following implementation; and the reliability and proven history of the alternative with respect to the chemicals and conditions found at the site.

3.1.2 Implementability

Implementability of an alternative is based upon the technical and institutional feasibility of implementing a particular alternative. Technical feasibility includes the availability of treatment, storage, and disposal services, and the availability of necessary equipment and skilled workers to implement the particular process. Institutional feasibility includes obtaining the necessary permits or regulatory concurrence.

3.1.3 Cost

Costs used during the analysis are the estimated amount to implement each alternative. The focus should be to make comparative estimates for alternatives with relative accuracy so that cost decisions among alternatives will be sustained.

3.2 IDENTIFICATION AND PRELIMINARY SCREENING OF REMOVAL ACTION ALTERNATIVES

Remedial action technologies are identified and described in the following paragraphs. The presumptive remedy concept is employed to address lead and motor oil in soil. Two alternatives were developed for further evaluation: 1) No Action and 2) Excavation with Off-Site Disposal.

3.2.1 Alternative 1: No Action/Institutional Controls

The no action alternative consists of leaving on-site soils in place without treatment.

Institutional controls, such as deed restrictions that require development of soil management plan/health and safety procedures for construction workers, could be placed for the Site to restrict land development and minimize exposure. Evaluation of the no action alternative is consistent with the National Contingency Plan (40 CFR Part 300). The no action alternative is not health-protective and does not meet the remedial action objectives (RAOs) for the Site.

3.2.2 Alternative 2: Excavation with Off-Site Disposal

Excavation with off-site disposal involves the removal of approximately 400 cubic yards of lead and motor oil contaminated soil by excavating the affected areas and transporting the soil by a licensed hauler to an approved landfill. The need to dispose of the soil in a Class I or other appropriate landfill would depend on its waste characterization. In addition, the contaminated soil would also have to be characterized to determine the applicability of Land Disposal Restrictions (LDRs) requirements. These requirements include meeting the treatment standards of Title 22, California Code of Regulations, Section 66268.49 (22 CCR 66268.49) and the waste analysis, notification, and record keeping requirements in 22 CCR 66268.7. Class I landfills can accept a Resource Conservation and Recovery Act (RCRA) listed waste if it meets the EPA alternative treatment standards. If excavated soil meets the statutory definition of hazardous waste as defined in California Code of Regulations, Title 22, the excavated soil will be disposed at a Class I landfill. Some of the excavated soils, which meet the statutory definition of hazardous waste, may have to be treated if they do not meet the Resource Conservation Act (RCRA) land-disposal restriction treatment standards.

3.3 DEVELOPMENT AND ANALYSIS OF ALTERNATIVES

The remedial action technologies to address contaminated soil for alternative development and analysis are:

Alternative 1: No Action/Institutional Controls
Alternative 2: Excavation/Offsite Disposal

In this section, the technologies that have been retained are assembled into alternatives that address the soil contamination at the site. The analysis of alternatives was conducted following U.S. EPA guidance for removal actions [USEPA 1993]. The guidance suggests that the alternatives be evaluated against the short and long-term aspects of three broad criteria: effectiveness, implementability, and cost. A cost summary is presented in Table 3-1. Assumptions and cost details for each alternative are presented in Appendix B.

3.3.1 Alternative 1: No Action/Institutional Controls

3.3.1.1 Effectiveness

This alternative does not meet the effectiveness criteria since it does not reduce the risk or meet the remedial action objectives. The contaminated soil at the Site would continue to be exposed to the nearby residents. It is not anticipated to effectively control excess risk to future residents

nor future commercial/industrial worker exposures. Since no attempts are made to remove or treat the soil, this alternative will not achieve a reduction in toxicity, mobility, or volume (TMV) through treatment.

3.3.1.2 Implementability

Except for the deed restrictions that would have to be recorded, no technical implementability considerations are anticipated for this alternative since no action is involved. A long-term implementability consideration may be associated with soil disposal options available during potential future site development.

3.3.1.3 Cost

The cost associated with Alternative 1 will include preparation and implementation of deed restriction and soil management plan/health and safety plans for construction workers that may encounter contamination. The anticipated administrative cost for this alternative is approximately $15,000. Estimated costs for this alternative are summarized in Table 3-1 and in Appendix B.

3.3.2 Alternative 2: Excavation and Offsite Disposal

Alternative 2 would include excavation of contaminated soils at the Site in unpaved areas. All soil above clean up levels established for lead (350 mg/Kg) will be excavated for offsite disposal. The total volume to be excavated and disposed in this alternative is estimated to be 400 cubic yards. The excavated soil would be transported to and disposed at an appropriate landfill, depending on waste characterization. No groundwater is expected at the excavation depth. However, in the event that groundwater is encountered, it would be pumped out and collected in tanks, analyzed for hazardous constituents and disposed appropriately. The excavated area will be backfilled with clean imported soil.

Samples will be collected up to 5 feet deep at several locations to determine the vertical extent of the contamination before the excavation activities begin. All samples will be analyzed for lead. Once the excavation is completed, the excavation would be backfilled with compacted clean imported fill. Implementation of this alternative is expected to require approximately 1 week.

3.3.2.1 Effectiveness

Excavation and offsite disposal is anticipated to be effective in minimizing human exposures to lead by preventing direct contact with soil. The excavation operations would have the potential for creation of fugitive dust emissions. However, these short-term impacts are anticipated to be minimized by requiring appropriate measures for dust suppression, air monitoring, and use of personal protective equipment. Therefore, this alternative would achieve long-term effectiveness, short-term effectiveness (including protection of public health during implementation), comply with ARARs and would accommodate any potential future development plans.

3.3.2.2 Implementability

The techniques, materials and labor used to excavate contaminated soil and suppress dust are well established and locally available. No major underground utilities should be encountered. To ensure that no underground utilities are damaged, excavation may be slower in areas where utilities have been identified via the underground utility survey. An air permit is not anticipated due to the low emissions expected, however, notification requirements will still apply.

3.3.2.3 Cost

The estimated cost for Alternative 2 is $250,000. A cost summary is presented on Table 3-1. The cost breakdown is presented in Appendix B.

4.0
COMPARATIVE ANALYSIS

In this section, the two alternatives are compared to one another and quantitatively rated for each of the three analysis criteria. A matrix showing the alternatives rating is provided in Table 4-1. Alternatives are rated from 1 to 5 with 5 being the most effective, most implementable, and least costly. The preferred alternative is the one that has the highest total rating.

4.1 EFFECTIVENESS

Alternative 1 (No Action/Institutional Controls) requires no construction. Since there will be no potential for risk to human health through inhalation, this alternative offers short-term effectiveness. This alternative, however, will not provide long-term effectiveness because it will not provide protection of human and environmental health.

Alternative 2 (Excavation and Offsite Disposal) involves excavation of soil. Although this alternative involves the greater risk to human health during implementation, the risk is not expected to be significant since the work will not be conducted in a confined area and the excavation areas are not extensive. Long-term effectiveness of this alternative is expected to rate more favorable than Alternative 1 since the contaminant will no longer exist at the site.

4.2 IMPLEMENTABILITY

Alternative 1 (No Action/Institutional Controls) is technically feasible since it does not require any construction and is the simplest to implement of the two alternatives. Administrative implementability of this alternative is poor because leaving the source of contamination in place would not protect immediate and long-term public health. The deed restriction can be easily implemented.

Alternative 2 (Excavation and Offsite Disposal) is technically and administratively feasible. Precautionary measures will be taken to minimize contaminant exposure during excavation activities to improve short-term and long-term benefits.

4.3 COST

The cost summary for the alternatives is provided in Table 3-1. The cost for these alternatives range from $15,000 for Alternative 1 (No Action) to $250,000 for Alternative 2 (Excavation and Offsite disposal).

4.4 RATING SUMMARY

The alternatives are quantitatively rated in Table 4-1 on a scale of 1 to 5 with a rating of 5 being the most favorable. Ranking for each alternative gives equal weight to the criteria of short-term and long-term effectiveness and administrative and technical implementability. Based on this evaluation, Alternative 2 (Excavation and Offsite Disposal) is the preferred alternative.

5.0
RECOMMENDED REMOVAL ACTION ALTERNATIVE

The recommended removal action is Alternative 2 - Excavation and Offsite Disposal. This remedy will minimize human exposures to lead. Potential short-term community or worker exposures are anticipated to be minimal. The alternative is expected to be readily implementable both technically and administratively. The estimated cost for this alternative is $250,000. It is ranked before the No Action alternative. A permanent reduction of lead contaminated soil through removal will be achieved and no land use restrictions will be required.

6.0
IMPLEMENTATION PLAN FOR RECOMMENDED ALTERNATIVE

The selected alternative entails excavation and offsite disposal of lead contaminated soil followed by backfilling the excavation. DTSC has determined that removal of soil containing lead concentrations exceeding 350 mg/kg will protect human and environmental health. This section describes activities and procedures for the recommended alternative.

6.1 PREPARATION OF WORKPLANS

Prior to performing on-site work, the contractor will submit an Excavation Workplan and a site-specific Health and Safety Plan (HASP) to DTSC for approval.

The excavation will be conducted according to the Excavation Workplan. Water sprays will be used for dust control as necessary. Dust monitoring will be conducted to ensure no exceedance of standards. Excavated contaminated soil will be placed directly in roll-off bins or dump trucks to be transported to the appropriate disposal facility since the waste characterization will be performed prior to starting the excavation. Storm drains in the immediate vicinity of the excavations will be covered to prevent runoff or loose debris from entering the system. The Workplan will also include a detailed schedule of activities to be conducted at the Site.

The Health and Safety Plan will include information that addresses the health risks and hazards for each site task, employee training assignments to assure compliance with Title 8 of the California Code of Regulations, personal protective equipment, frequency and types of air monitoring, personnel monitoring and environmental sampling techniques and instrumentation to be used, site control measures, decontamination procedures, an emergency response plan, a spill containment program, procedures for providing potable water and a sanitary facility to site personnel, safe drum and container handling procedures and procedures to verify that adequate illumination is provided to site personnel.

6.2 WASTE PROFILING

The selected alternative assumes that the excavated soil will be sent to a Class I landfill. For disposal at Class I landfill, waste profiling will be required before acceptance. The closest Class I landfill to the site is the Chemical Waste Management facility located at Kettleman Hills, California.

If the waste is sent to a Class 1 disposal facility, a determination must also be made as to the applicability of Land Disposal Restrictions (LDRs). Although not considered a listed waste, the excavated soil may still be subject to LDRs if determined to be a RCRA characteristic waste. Kettleman can accept the waste as a RCRA listed waste if it meets the EPA alternative treatment standards.

6.3 UNDERGROUND CLEARANCE

The contractor will notify Underground Service Alert for a utility check. Affected utility companies will be consulted to evaluate conflicts with the proposed excavation activities. If necessary, an underground utility locating service will be called to the site to more accurately identify location and depth of the utilities of concern.

6.4 PERMITTING

The excavation activities will be performed within the property boundary and appropriate permits will be obtained from the City of Oakland.

Notification to the Bay Area Air Quality Management District (BAAQMD) and Alameda County Environmental Health is required. Permits are not anticipated from either agency.

6.5 EXCAVATION AND BACKFILL ACTIVITIES

Minimal site clearing will be required. Soil excavation is anticipated in three areas (see Figure 3). One area is approximately 60 x 30 feet and will be excavated to maximum depth of 5 feet below ground surface (bgs). Another area is approximately 20 x 15 feet and will be excavated to maximum depth of 3 feet below ground surface. The third area is the stockpile inside the building. It is estimated that total of 400 cubic yards of contaminated soil is be excavated from these areas.

Samples will be collected up to 5 feet deep at several locations to determine the vertical extent of the contamination before the excavation activities begin. The stockpile inside the building also will be sampled. Waste profiling will also be done with the samples collected prior to the excavation activities using a State certified laboratory. The excavated contaminated soil will be transported to a Class I disposal facility. Trucks will be weighed before and after loading. Documentation required will include weight tickets, manifests, and disposal facility waste forms. Trucks will be covered with tarps to prevent contaminated materials from being blown out of the trucks during transport.

Confirmation soil samples will be collected and analyzed for lead. Confirmation soil samples will be collected from the walls and at the bottom of the excavation.

Backfill of the excavation will begin once confirmation samples indicate that the cleanup goal of 350 mg/Kg has been achieved for lead at the base of the excavation. Clean import will be delivered to the site and placed into the excavation as needed to make up the backfill volume.

Dust control measures during excavation and backfilling and handling of contaminated soil will consist of spraying water onto the soil and work area. The dust-monitoring plan will be detailed in the HASP. Dust Monitoring will be conducted to ensure no exceedance of State and Bay Area Air Quality Management District (BAAQMD) standards. BAAQMD Regulation 11, Rule 1 is intended for continuous sources of lead emissions and is not

applicable for one time cleanup project. Regulation 6, Particulate Matter and Visible Emissions, and Regulation 1-301, Public Nuisance are applicable to the project. The California standard for the respirable particulate matter concentration for 24-hour period is 50 micrograms per cubic meter ($\mu g/m^3$) and for lead is 1.5 $\mu g/m^3$ for 30-day period.

The backhoes and any other equipment used during site activities will be decontaminated by removing all soil from the equipment. This will likely be conducted by brushing and scraping the dirt from the equipment or by rinsing with a high-pressure water spray to remove potential contamination. Trucks exiting the Site will be inspected for compliance with site decontamination requirements.

Water and power are not expected to be readily available at the site and must be provided by the contractor. The contractor will also be responsible for proper disposal of plastic sheeting and other debris generated by the site activities.

6.6 SITE RESTORATION ACTIVITIES

The contractor will be responsible for restoring the site to its original state. All equipment, contaminated soil, clean soil, signs, debris, and construction debris will be removed from the site.

7.0
REFERENCES

Department of Toxic Substances Control, 2001, Preliminary Assessment, Roberts Tires Facility, 4333 MacArthur Boulevard, Oakland, California, May

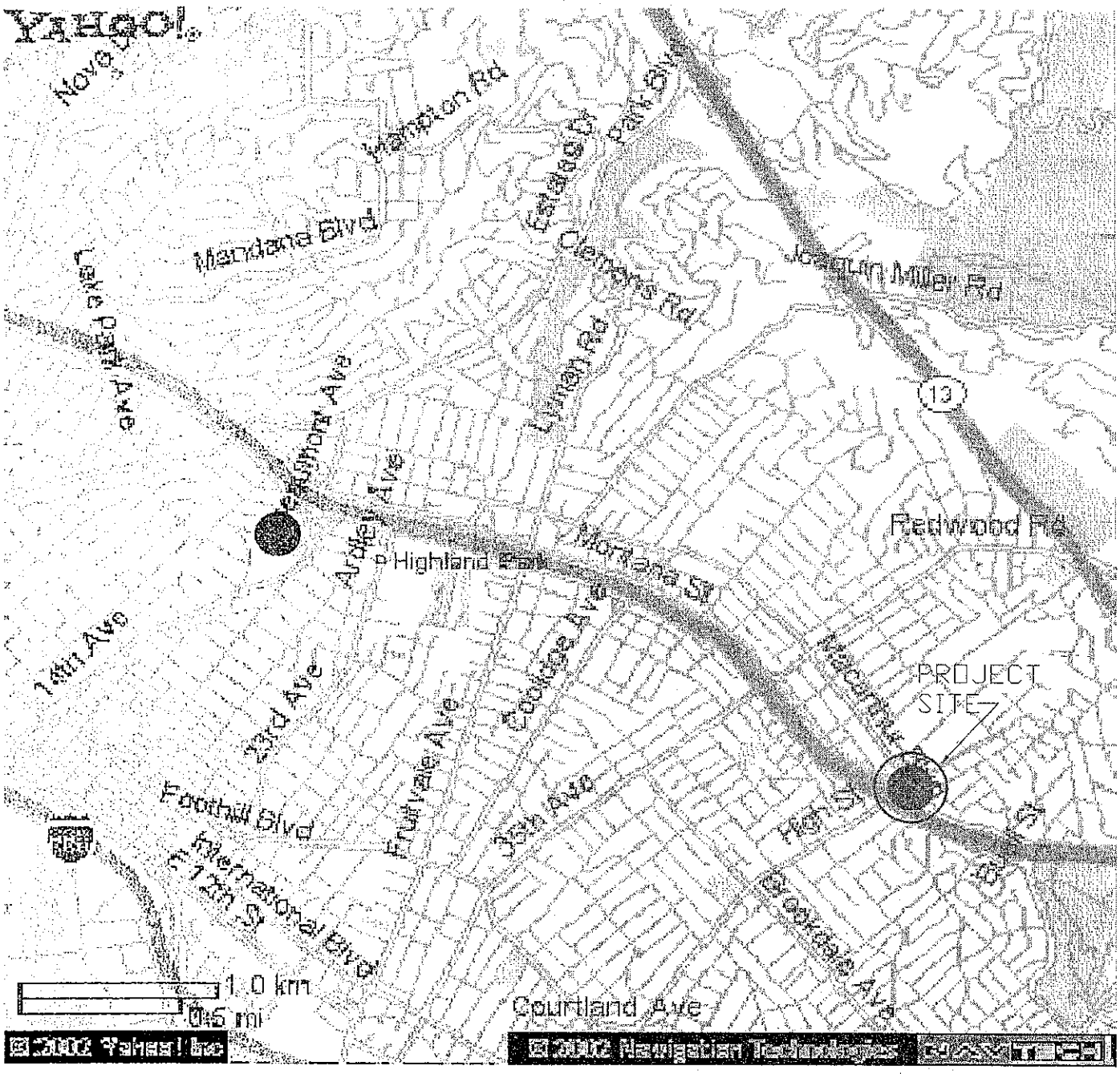
Department of Toxic Substance Control, 1999. Lead Risk Assessment Spreadsheet (LEADSPREAD) version 7.

Geomatrix Consultants, 2000, Soil Removal Report, Former High Street Substation, Oakland, California, September.

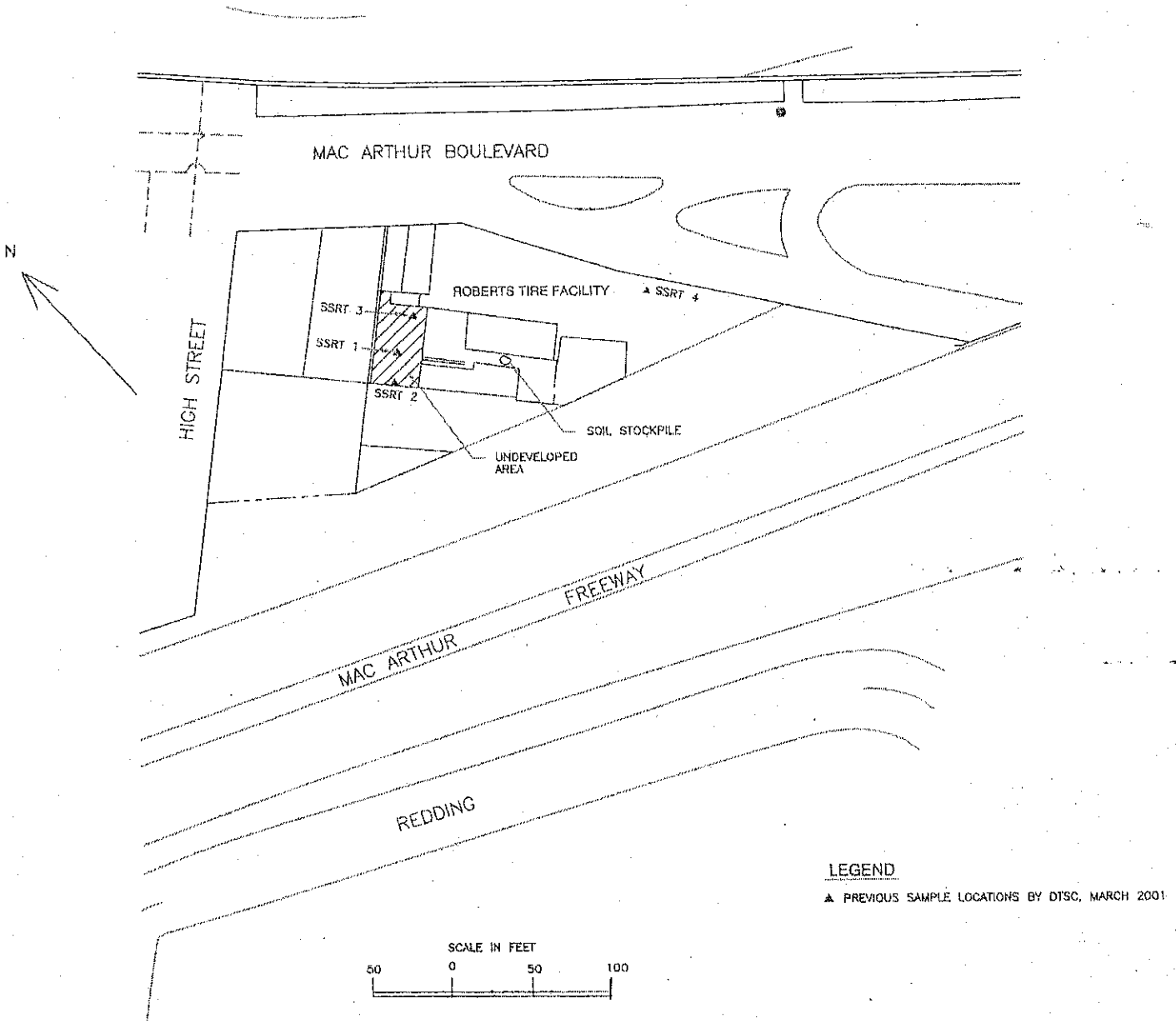
U.S. Environmental Protection Agency (USEPA), 1993, Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA, EPA/540-R-93-057, August.

Document Date	Document Type	Title/Subject	Author/Affiliation	Recipient/ Affiliation	Document Location
	Regulations	California Code of Regulations, Title 22, Divisions 4 and 4.5, Volume 29A	-----	-----	Readily Available
	Regulations	California Health and Safety Code, Division 20, Chapters 6.5, 6.6, and 6.8	-----	-----	Readily Available
Jun-94	Guidance	Governor's Office of Planning and Research, California Environmental Quality Act, Statutes and Guidelines	-----	-----	Readily Available
1999	Spreadsheet	Lead Assessment Spreadsheet (Leadspread), Version 7	DTSC	-----	http://www.dtsc.ca.gov/ ScienceTechnology/ ledspred.html
Sep-00	Report	Soil Removal Report	Geomatrix Consultants	Pacific Gas and Electric Company	DTSC file room under Roberts Tires
Oct-00	Checklist	EPA Region IX Site Screening/Prioritization Checklist	DTSC	-----	DTSC file room under Roberts Tires
May-01	Report	Preliminary Assessment	DTSC	-----	DTSC file room under Roberts Tires
Dec-01	Report	Imminent and Substantial Endangerment Order	DTSC	Property Owner	DTSC file room under Roberts Tires
Jan-02	Letter	Final Notice of Non-Compliance	DTSC	Property Owner	DTSC file room under Roberts Tires

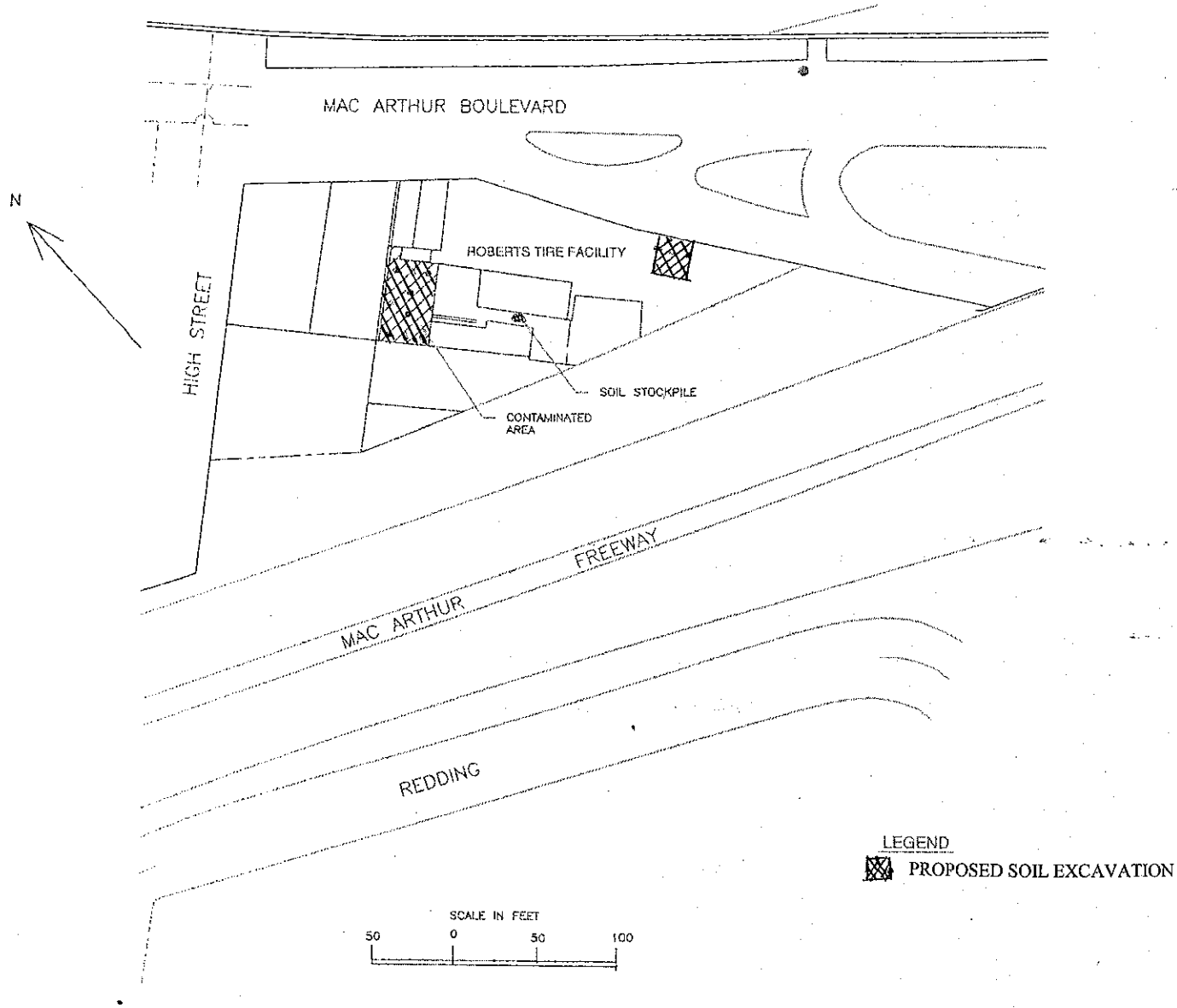
FIGURES



ERRG Engineering/Remediation Resources Group, Inc. 4070 Nelson Ave., Suite 8 Concord, CA 94520 (925) 969-0750	SITE VICINITY MAP				
	CLIENT: ROBERTS TIRES FACILITY				
SCALE:	DRAWING/FILE NO.: 22-016	LOCATION: 4311-4333 MAC ARTHUR BOULEVARD OAKLAND, CALIFORNIA			
REFERENCE: DEPARTMENT OF TOXIC SUBSTANCES CONTROL		DESIGNED BY: RSY 4/29/02	DRAWN BY: REC 4/29/02	RG/PE:	FIGURE: 1



ERRG	Engineering/Remediation Resources Group, Inc. 4070 Nelson Ave., Suite B Concord, CA 94520 (925) 969-0750	SAMPLE LOCATION PLAN			
		CLIENT: ROBERTS TIRES FACILITY			
SCALE:	DRAWING/FILE NO.: 22-016	LOCATION: 4311-4333 MAC ARTHUR BOULEVARD OAKLAND, CALIFORNIA			
ERENCE:	DEPARTMENT OF TOXIC SUBSTANCES CONTROL	DESIGNED BY: RSY 4/29/02	DRAWN BY: REC 4/29/02	RG/PE:	FIGURE: 2



ERRG	Engineering/Remediation Resources Group, Inc. 4070 Nelson Ave., Suite 8 Concord, CA 94520 (925) 969-0750	EXCAVATION PLAN			
		CLIENT: ROBERTS TIRES FACILITY			
SCALE:	DRAWING/FILE NO.: 22-016	LOCATION: 4311-4333 MAC ARTHUR BOULEVARD OAKLAND, CALIFORNIA			
'ERENCE: DEPARTMENT OF TOXIC SUBSTANCES CONTROL		DESIGNED BY: RSY 4/29/02	DRAWN BY: REC 4/29/02	RG/PE:	FIGURE: 3

TABLES

TABLE 1-1

Results of Soil Sampling Conducted in March 2001

Sample	Lead	TPH-Gasoline	TPH-Diesel	TPH-Motor Oil
	mg/Kg	mg/Kg	mg/Kg	mg/Kg
SSRT1	36,400	ND	ND	6,900
SSRT2	1,760	ND	ND	690
SSRT3	1,180	ND	ND	960
SSRT4	790	ND	ND	1,400
SSRT10 *	31,600	ND	ND	5,100

Notes:
ND - Non Detect
* - Duplicate sample at SSRT1

Table 2-1

Potentially Applicable or Relevant and Appropriate Requirements (ARARs)

Standard, Requirement, Criteria, Limitation	Citation	Description	Type of ARARs
FEDERAL			
Classification and regulation of hazardous waste	40 CFR 260	Establishes criteria for the determination of hazardous waste and its regulation	Chemical/Action
Hazardous Waste Identification	40 CFR 261.24	Establishes criteria to determine whether solid waste exhibits hazard characteristics of toxicity	Chemical
Transport of Hazardous Waste	40 CFR 263	Standards applicable to transporters of hazardous waste	Action
Clean Air Act	42 USC 7401-7642	Emission Standards from stationary and mobile sources	Chemical
Occupational Health and Safety	29 CFR 1910.120	Establishes requirements for health and safety training	Action
Health Risk Assessment	US EPA, Risk Assessment Guidance for Superfund, 1989	Guidance and framework to assess health risk	TBC

Table 2-1

Potentially Applicable or Relevant and Appropriate Requirements (ARARs)

Standard, Requirement, Criteria, Limitation	Citation	Description	Type of ARARs
STATE AND LOCAL			
Determination of Hazardous Waste	22 CCR 66260.1 et seq.	Establishes criteria for determining waste classification for the purposes of transportation and disposal of wastes .	Chemical/Action
Hazardous Waste Generator Requirements	22 CCR 66262.1 et seq.	Establishes standards applicable to generators of hazardous waste	Action
Land Disposal Restrictions	22 CCR Chapter 18	Identifies hazardous waste restricted from land disposal unless specific treatment standards are met	Chemical/Action
Ambient Air Quality Standards	H&S Sec. 39000-44071	Establishes standards for emissions of chemical vapors and dust	Chemical
Transportation of Hazardous Waste	22 CCR Chapter 13	Governs transportation of hazardous materials	Action
Hazardous Waste Control	Health and Safety Code, Chapter 6.5, Sec. 25100-25250.26	Establishes hazardous waste control measures	Action
Hazardous Substances Account Act	Health and Safety Code, Chapter 6.8, Sec 25300-25395.15	Establishes site mitigation and cost recovery programs	Action
Environmental Impact Review	Public Resources Code Section 21000-21177	Mandates environmental impact review of projects approved by governmental agencies	Action
Emission Standard	BAAQMD Regulation 6	Regulation 6 establishes emission standards for particulate matter; and notification requirements.	Chemical/Action

Table 2-1

Potentially Applicable or Relevant and Appropriate Requirements (ARARs)

Standard, Requirement, Criteria, Limitation	Citation	Description	Type of ARARs
STATE AND LOCAL			
Stockpiling Requirements of Contaminated Soil	H&S Sec. 25123.3(a)(20)	Establishes standards for stockpiling of non-RCRA contaminated soil	Location
Occupational Health and Safety	8 CCR Sect. 1500, 2300, and 3200 et seq.	Establishes standards for working conditions and employees	Action

Notes:

BAAQMD – Bay Area Air Quality Management District
CCR – California Code of Regulation
CFR – Code of Federal Regulation
H&S – California Health and Safety Code
SWRCB – State Water Resources Control Board
USC – United States Code

TABLE 3-1
Summary of Capital and Operations and Maintenance Costs

Cost Category	Alternative 1 No Action	Alternative 3 Excavation / Disposal
Capital Cost	$0	$147,000
Project Management & Administration	$15,000	$37,000
Oversight	$0	$29,000
Contingency	$0	$37,000
Operation & Maintenance/ Closure	$0	$0
Total Cost for Alternative	$15,000	$250,000

All values rounded off to the nearest thousand dollar.

Table 4-1 RATING MATRIX FOR COMPARATIVE ANALYSIS OF REMOVAL ACTION ALTERNATIVES

Alternative	Effectiveness[a]	Implementability[b]	Cost	Total Rating
1 No Action/Institutional Controls	1	4	5	10
2 Excavation/Offsite Disposal	5	5	3	13

Note: Alternatives are rated from 1 to 5 with 5 being the most effective, most implementable and least costly. The preferred alternative has the highest total rating. The rationale for each assigned rating is contained in the text.

[a] Effectiveness: Equal weight is given to short-term and long-term effectiveness.

[b] Implementability: Equal weight is given to administrative and technical implementability.

APPENDIX A

LEAD RISK ASSESSMENT SPREADSHEET (LEADSHEET)

Sheet A-1

LEAD RISK ASSESSMENT SPREADSHEET
CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

USER'S GUIDE to version 7

INPUT	
MEDIUM	LEVEL
Lead in Air (ug/m^3)	0.005
Lead in Soil/Dust (ug/g)	36000.0
Lead in Water (ug/l)	5
% Home-grown Produce	0%
Respirable Dust (ug/m^3)	1.5

OUTPUT							
	Percentile Estimate of Blood Pb (ug/dl)					PRG-99	PRG-95
	50th	90th	95th	98th	99th	(ug/g)	(ug/g)
BLOOD Pb, ADULT	33.7	61.5	72.8	88.4	100.7	3066	4458
BLOOD Pb, CHILD	256.4	468.3	554.2	673.5	766.5	349	530
BLOOD Pb, PICA CHILD	509.8	931.3	1102.0	1339.3	1524.1	175	266
BLOOD Pb, OCCUPATION	23.7	43.3	51.3	62.3	70.9	4386	6375

EXPOSURE PARAMETERS			
	units	adults	children
Days per week	days/wk	7	
Days per week, occupational		5	
Geometric Standard Deviation		1.6	
Blood lead level of concern (ug/dl)		10	
Skin area, residential	cm^2	5700	2900
Skin area occupational	cm^2	2900	
Soil adherence	ug/cm^2	70	200
Dermal uptake constant	(ug/dl)/(ug/	0.0001	
Soil ingestion	mg/day	50	100
Soil ingestion, pica	mg/day		200
Ingestion constant	(ug/dl)/(ug/	0.04	0.16
Bioavailability	unitless	0.44	
Breathing rate	m^3/day	20	6.8
Inhalation constant	(ug/dl)/(ug/	0.082	0.19
Water ingestion	l/day	1.4	0.4
Food ingestion	kg/day	1.9	1.1
Lead in market basket	ug/kg	3.1	
Lead in home-grown produce	ug/kg	16200.0	

Click here for REFERENCES

PATHWAYS

ADULTS	Residential			Occupational		
	Pathway contribution			Pathway contribution		
Pathway	PEF	ug/dl	percent	PEF	ug/dl	percent
Soil Contact	3.8E-5	1.38	4%	1.4E-5	0.50	2%
Soil Ingestion	8.8E-4	31.68	94%	6.3E-4	22.63	95%
Inhalation, bkgrnd		0.01	0%		0.01	0%
Inhalation	2.5E-6	0.09	0%	1.8E-6	0.06	0%
Water Ingestion		0.28	1%		0.28	1%
Food Ingestion, bkgrnd		0.23	1%		0.23	1%
Food Ingestion	0.0E+0	0.00	0%			0%

CHILDREN	typical			with pica		
	Pathway contribution			Pathway contribution		
Pathway	PEF	ug/dl	percent	PEF	ug/dl	percent
Soil Contact	5.6E-5	2.00	1%		2.00	0%
Soil Ingestion	7.0E-3	253.44	99%	1.4E-2	506.88	99%
Inhalation	2.0E-6	0.07	0%		0.07	0%
Inhalation, bkgrnd		0.01	0%		0.01	0%
Water Ingestion		0.32	0%		0.32	0%
Food Ingestion, bkgrnd		0.54	0%		0.54	0%
Food Ingestion	0.0E+0	0.00	0%		0.00	0%

Sheet A-2

East Bay Municipal Utility District Lead in Drinking Water

Water Quality Report 2000

Tables below list all drinking water contaminants detected at the source, the treat

The Water System

The East Bay Municipal Utility District water system serves more than 1.3 million people in a 325-square-mile service area on the East side of San Francisco Bay. EBMUD's tradition since its founding 78 years ago is to provide the highest quality water possible at reasonable cost.

Where Your Water Comes From

The most important factor in water quality is its source: the purer the source, the better the water. Most of EBMUD's water comes from the 577-square-mile protected watershed of the Mokelumne River, which collects Sierra Nevada snowmelt and flows into Pardee Reservoir in the Sierra foothills near the town of Valley Springs. The watershed on the west slope of the Sierra Nevada mountains is mostly undeveloped land little affected by human activity.

The water comes 90 miles to the East Bay in three steel pipelines—the Mokelumne Aqueducts—and is protected from pesticides, agricultural and urban runoff, municipal sewage discharges and industrial toxins. Local watershed runoff accounts for about 10 percent of water added to three East Bay reservoirs.

The Mokelumne River water goes to three East Bay direct-filtration water treatment plants, Lafayette, Orinda and Walnut Creek; water from the East Bay reservoirs goes to two conventional treatment plants with ozone, Sobrante and Upper San Leandro (USL).

(continued on page 4)

CONTAMINANT	MCL	PHG (MCLG)	AVERAGE	LAFAYETTE	ORINDA	SOBRANTE	USL	WALNUT CREEK
Turbidity (NTU), maximum levels, except for Average	TAT = 5 NTU	NS	0.05	0.05	0.08	0.1	0.06	0.06
	TAT=0.5 NTU 95% of the time	NS	NR	100%	100%	100%	100%	100%
Inorganic Contaminants								
Aluminum (mg/l)	1	NS	<0.05	<0.05-0.10	<0.05-0.05	<0.05-0.06	<0.05-0.07	<0.05
Fluoride (mg/l) *	2	1	<0.1	<0.1	<0.1-0.11	0.12	0.14-0.17	<0.1
* Fluoride reported above reflect levels in the source waters. Fluoride was added in the range of 0.9 to 1.0 mg/l, to help prevent dental caries in consumers.								
Radioactive Contaminants: Sampled last in 1999. Required every four years.								
Alpha activity (pCi/l)	15	zero	<1	<1 - 2	<1 - 2	<1 - 1	<1 - 2	<1 - 2
Beta activity (pCi/l)	50	zero	<4	6	<4 - 6	<4	<4	6
Organic Contaminants								
Trihalomethanes - (ug/l)	100	NS	51	36-72	32-73	23-58	31-87	38-64
Acrylamide in treatment chemical (one hundredth of one percent)	TAT = 5 Max. Dose allowed	zero	<5	0	<5	<5	<5	0
Contaminants which have Secondary MCLs								
Aluminum (ug/l)	200	NS	<50	<50-100	<50-50	<50-60	<50-70	<50
Chloride (mg/l)	500	NS	8.8	3.9	4.7	15	16	4.6
Odor--Threshold (TON)	3	NS	2.1	1.6	2.8	2.5	2.5	1
Specific Conductance (umho/cm)	1600	NS	194	57	92	331	354	58
Sulfate (mg/l)	500	NS	14.7	1	4.6	35	32	1
Total Dissolved Solids (mg/l)	1000	NS	91	30	55	120	200	51
Turbidity (NTU)	5	NS	0.05	0.05	0.08	0.1	0.06	0.06
Zinc (mg/l)	5000	NS	<50	<50	<50-130	<50	<50	<50-50
Unregulated Contaminants - Volatile Organic Chemicals								
Chloroform (ug/l)	NS	NS	46	34-70	30-71	11-53	27-71	36-62
Bromodichloromethane (ug/l)	NS	zero	4.7	1.5-2.3	1.7-2.5	1.8-9.2	1.8-18.0	1.5-2.3
Dibromochloromethane (ug/l)	NS	NS	1	<0.5	<0.5-0.7	<0.5-5.4	<0.5-3.2	<0.5-0.7
Bromoform (ug/L)	NS	zero	<0.5	<0.5	<0.5-0.7	<0.5-0.9	<0.5-0.7	<0.5

LEAD AND COPPER: Sampled last in 1999. Required every three years.

	AL	PHG	90th percentile Level Found	# of Sites found above the AL
Copper (ug/l)	1300	170	74	No sites out of 51 sites
Lead (ug/l)	15	2	<5	One site out of 51 sites

TERMS USED

AL = regulatory Action level. The concentration which, if exceeded, triggers treatment or other requirements that a water system must follow.

NTU = nephelometric turbidity units

PHG = public health goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

pCi/l = pico Curies per liter, a measure of radioactivity

MCL = maximum contaminant level. The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Primary Drinking Water Standard or **PDWS.** MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

NR = not required for meeting regulations

Sheet A-3

California Air Resources Board

CA Home | ARB Home | AQD Home | Search | Site Map | Software | Contact Us

View a Different Site
View a Different Substance
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Annual Toxics Summary

Fremont-Chapel Way

Lead

nanograms per cubic meter

Year	Months Present	Minimum	Median	Mean	90th Percentile	Maximum	Standard Deviation	Number of Observations	Detection Limit	Estimated Risk
2000	----------	2	2	5.0	11	25	5.6	28	4	0.06
1999	----------	2	5	5.4	9	15	3.0	28	4	0.07
1998	----------	2	6		21	71	15.0	23	4	
1997	----------	2	2		7	13	2.8	28	4	
1996	----------	2	5	6.2	13	18	4.6	30	4	0.07
1995	----------	2	5	6.8	17	27	6.6	30	4	0.08
1994	----------	2	7	8.0	14	25	5.6	29	4	0.1
1993	----------	2	8	10.0	22	29	7.4	29	4	0.1
1992	----------	2	8	8.5	14	17	4.5	31	4	0.1
1991	----------	2	18	24.2	49	66	18.0	29	4	0.3
1990	----------	2	14	20.4	44	80	17.7	29	1	0.2
1989	----------	3	23	24.8	43	69	14.9	60	1	0.3

Toxics Statistics Home

Notes: Values below the Limit of Detection (LoD) assumed to be ½ LoD.
Means and risks shown only for years with data in all 12 months.
Risks shown only for those substances with unit risk factors.

Data Descriptions Page

Lead in Air

APPENDIX B

ASSUMPTIONS AND COST ESTIMATE WORKSHEETS

Alternative 1 - No Action
Assumptions

1 Deed restriction will be adminstrated by DTSC. It will limit future uses of the entire site and require construction workers to develop and follow a soil management plan/health and safety procedures related to hazardous substances.
2 Development of soil management plan/health and safety procedures for construction workers that perform subsurface work in the vicinity of the site. The procedures will limit exposure to lead contaminated soil.

Alternative 1- No Action
Cost Estimate

Item No.	Description	Amount	Units	Price per Unit	Total Cost
1	Develop/issue deed restriction	1	ls	$5,000.00	$5,000.00
2	H&S Procedure and Soil Management Plan	1	ls	$15,000.00	$10,000.00

PM & Admin =	$15,000.00
Contingency =	$0.00
Design =	$0.00
Construction Oversight =	$0.00
GRAND TOTAL =	$15,000.00

Alternative 2. Excavation and Offsite Disposal
Assumptions

1. Depth of contamination is 3-5 ft bgs.
2. Contaminants of concern is lead.
3. Cleanup goal is 350 mg/Kg of lead in soil.
4. All soil is assumed to go to Class I disposal facility.
5. Utility clearance will be obtained, however, no utilities are assumed in the excavation area.
6. 300 cy of soil will be transported to a Class I Landfill for disposal
7. Confirmation soil samples will be collected upon completion of excavation work.
8. All site activities require dust control.
9. Perimeter air monitoring is required.
10. Worker safety air monitoring is required.
11. All personnel shall be 40-hour trained.
12. Worker Personel Protective Equipment is required.

Alternative 2. Excavation and Offsite Disposal
Cost Estimate

Item No.	Description	Amount	Units	Price per Unit	Total Cost
1	Pre Investigation	1	ea	$20,000.00	$20,000.00
	Prepare Work Plan	1	ea	$20,000.00	$20,000.00
2	Excavation	300	CY	$25.00	$7,500.00
3	Disposal of Class 1 waste	300	cy	$220.00	$66,000.00
18	Backfill, compact, grade the excavation area	350	CY	$24.00	$8,400.00
23	Final Report Preparation	1	ls	$25,000.00	$25,000.00

Subtotal =	$146,900.00
Contingency (25% Subtotal) =	$36,725.00
PM & Admin (20% Subtotal) =	$36,725.00
Oversight (20% Subtotal) =	$29,380.00
GRAND TOTAL =	$249,730.00

NOTICE OF EXEMPTION (NOE)
TRACKING FORM

Project Title:	Removal Action Workplan for Roberts Tires Facility
Project Location:	4311- 4333 MacArthur Boulevard, Oakland, California
Project Codes	Site Code:201357 PCA:17060 WP:00
Lead Staff Person: **Unit or Section:**	Jayantha Randeni Northern California, Coastal Cleanup Operations Branch
Region or HQ?	Berkeley Office **Telephone:** (510) 540-3806
Unit Supervisor:	Karen Toth
Branch Chief:	Barbara J. Cook

STEP #1. **Lead Staff Person** prepares NOE, attaches supporting documentation for internal review, initials and dates this form to the right, and sends this package to Eric Maher of the Planning and Environmental Analysis Section (PEAS).

J Randeni 5/14/02
Jayantha Randeni

Step #2 After PEAS review, **Eric Maher** initials and dates this form and sends this package to lead staff person's branch chief.

Eric M. Maher 5/14/02
Eric Maher

Step #3 If the **Branch Chief** approves, the Branch chief signs in the space at the bottom of the NOE and returns the entire package to the **CEQA Tracking Center (CTC) in the Planning and Environmental Analysis Section.**

Barbara J. Cook 6/19/2002
Barbara J. Cook

Step #4 CTC photocopies the NOE for the file, mails the original to the State Clearing House, and sends a copy of this form to the lead staff person for verification.

Date mailed by
CTC to OPR

APPENDIX C

NOTICE OF EXEMPTION

NOTICE OF EXEMPTION (NOE)
TRACKING FORM

Project Title: Removal Action Workplan for Roberts Tires Facility

Project Location: 4311- 4333 MacArthur Boulevard, Oakland, California

Project Codes Site Code:201357 PCA:17060 WP:00

Lead Staff Person: Jayantha Randeni
Unit or Section: Northern California, Coastal Cleanup Operations Branch

Region or HQ? Berkeley Office **Telephone:** (510) 540-3806

Unit Supervisor: Karen Toth

Branch Chief: Barbara J. Cook

STEP #1. **Lead Staff Person** prepares NOE, attaches supporting documentation for internal review, initials and dates this form to the right, and sends this package to Eric Maher of the Planning and Environmental Analysis Section (PEAS).

J Ranelani 5/14/02
Jayantha Randeni

Step #2 After PEAS review, **Eric Maher** initials and dates this form and sends this package to lead staff person's branch chief.

Eric M. Maher 5/14/02
Eric Maher

Step #3 If the **Branch Chief** approves, the Branch chief signs in the space at the bottom of the NOE and returns the entire package to the **CEQA Tracking Center (CTC) in the Planning and Environmental Analysis Section.**

Barbara J. Cook 6/19/2002
Barbara J. Cook

Step #4 CTC photocopies the NOE for the file, mails the original to the State Clearing House, and sends a copy of this form to the lead staff person for verification.

Date mailed by CTC to OPR

Department of Toxic Substances Control

Edwin F. Lowry, Director
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Gray Davis
Governor

NOTICE OF EXEMPTION

To: Office of Planning and Research
1400 Tenth Street, Room 212
Sacramento, CA 95814

From: Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

Project Title: Removal Action Workplan for Roberts Tires Facility

Project Location - Specific: 4311 – 4333 MacArthur Boulevard
City: Oakland **County:** Alameda

Description of Project: The project is approval of a Removal Action Workplan (RAW) for the Roberts Tires Facility. The project involves the excavation and offsite disposal of soils contaminated with lead and motor oil. The elevated soil concentrations that will be addressed include up to 36,400 parts per million (ppm) of lead and up to 6,900 ppm of motor oil. Soil excavation is planned in two unpaved areas and one stockpile inside a building. One area is 60 x 30 feet and will be excavated down to a maximum depth of five (5) feet below ground surface (bgs). Another area measuring 20 x 15 feet will also be excavated down to a maximum depth of three (3) feet bgs. A small stockpile of soil inside a building will also be excavated. A total of approximately 400 cubic yards of contaminated soil will be excavated from both areas. The contaminated soil will be characterized and be disposed of at a Class I disposal facility. This removal action will reduce or eliminate a contaminated source that poses a threat to human health.

The Roberts Tire Facility is located in a mixed industrial and residential area in the southeast portion of Oakland and consists of an abandoned one-story building and an abandoned garage building. The City of Oakland has condemned the buildings and owner is the process of demolition of all the above ground structures in the property. The excavation is expected to start after the completion of the demolition of buildings.

After excavation, confirmatory samples will be collected to demonstrate that the remaining soil concentrations are below the cleanup goal of 350 parts per million (ppm) for lead. Since motor oil is co-located with lead in the soil, a cleanup goal for motor oil was not developed. If needed, soil excavation and confirmatory sampling would be continued until in-place concentrations are below the cleanup goal. Following confirmation sampling, the excavated areas will be backfilled with clean fill and compacted and restored to their original state. Implementation of this action is expected to require less than a week.

Paved area on the property will be used as the staging area for the earth moving equipment, the bin holding contaminated soil and the stockpiled clean soil. Prior to digging, a utility survey will be conducted to confirm the absence or presence of any utility lines within the excavation footprint.

Impact to traffic congestion is expected to be minimal because a maximum of 25 trucks will be added to the existing traffic on the MacArthur Boulevard, for transport of the contaminated soil for offsite disposal.

The RAW requires that all excavation activities be conducted under an Excavation Workplan. Excavated contaminated soil will be placed directly in roll-off bins or dump trucks to be transported to the appropriated disposal facility since waste characterization will be performed prior to starting the excavation. Haul trucks will be kept out of the contaminated areas to prevent contamination. Storm drains in the immediate vicinity of the stockpiled material will be covered to prevent runoff or loose debris from entering the system.

Water spray will be used for dust control as necessary. Dust Monitoring will be conducted to ensure no exceedance of State and Bay Area Air Quality Management District (BAAQMD) standards. BAAQMD Regulation 11, Rule 1 is intended for continuous sources of lead emissions and is not applicable for one time cleanup project. Regulation 6, Particulate Matter and Visible Emissions, and Regulation 1-301, Public Nuisance are applicable to the project. No air permit is required but notification to the Air District will be made. Distance to the nearest residence is approximately 150 feet east of the excavation area on MacArthur Boulevard.

Fieldwork is expected to last approximately 5 days. Registered hazardous waste haulers will be used to transport any hazardous waste offsite under a manifest. Access to the Site will be from Interstate 580 exiting at High Street heading northeast. Vehicles and trucks will travel only about 500 feet along High Street to arrive at the project location since the Site is located adjacent to the freeway. This route passes through a mixed commercial area. There are no sensitive uses such as day care centers, schools or residences along the haul route to the freeway. Transportation of hazardous waste offsite is required to occur during non-commute hours.

A California-state licensed construction contractor will conduct the excavation activities. Fieldwork will be conducted following the safety guidelines provided in a Health and Safety Plan (HASP) prepared specifically for the project. The RAW requires that the HASP include information that addresses: 1) Health risks and hazard for each site task; 2) Employee training assignments to assure compliance with Title 8 of the California Code of Regulations; 3) Personal protective equipment; 4) Frequency and types of air monitoring, personnel monitoring and environmental sampling techniques and instrumentation to be used; 5) Site control measures; 6) Decontamination procedures; 7) An emergency response plan,

8) A spill containment program; 9) Procedures for providing potable water and sanitary facilities to site personnel; 10) Safe drum and container handling procedures; and 11) Procedures to verify that adequate illumination is provided to site personnel. DTSC will conduct oversight activities to ensure that the removal action activities are implemented in accordance with the approved Workplan.

Name of Public Agency Approving Project: Cal/EPA, Department of Toxic Substances Control

Name of Person or Agency Carrying Out Project: Engineering/Remediation Resources Group, Inc. (ERRG) on behalf of DTSC

Exempt Status: Title 14, California Code of Regulations (CCR), Section 15061(b)(3) With Certainty, No possibility of Significant Effect on the Environment

Reasons Why Project is Exempt:

1. The removal will be limited to approximately 400 cubic yards of soil.

2. Actual excavation activities will be of short duration, lasting only about two to three days. The total time from contractor mobilization to site restoration will be about one week. Dust control measures will be in place.

3. Excavation will be conducted in the already fenced area and no pedestrians or vehicles can enter the Site accidentally.

4. All fieldwork will be conducted according to a site-specific Health and Safety Plan and only properly trained personnel will be employed. Licensed contractors and transporters will also be used.

5. Excavation activities will be conducted according to an Excavation Workplan approved by DTSC.

6. A maximum of 25 truckloads of contaminated soil will be generated. All trucks transporting hazardous material will be covered and be driven by registered hazardous waste haulers. All vehicles will follow a designated route to the interstate freeway and will travel during non-commute hours.

7. The site is in a previously developed area. There is no evidence of sensitive habitat nearby. No areas of cultural significance have been identified in the project area.

Based on the short duration of the project, the controls that will be implemented for worker safety and the proper management of the wastes generated, there is no possibility that a significant effect on the environment will occur.

Lead Agency Contact Person: Jayantha S. Randeni **Telephone**: (510) 540-3806

Signature: Barbara J Cook **Date:** 6/19/2002

Barbara J. Cook, P.E. Chief
Northern California
Coastal Cleanup Operations Branch

Date received for filing at OPR:

APPENDIX D

RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY

PUBLIC COMMENTS RECEIVED ON
THE DRAFT REMOVAL ACTION WORKPLAN
ROBERTS TIRES FACILITY
JUNE 2002

I. Introduction

The purpose of this document is to respond to comments received regarding the Draft Removal Action Workplan (Draft RAW), and the proposed Notice of Exemption, for the Roberts Tires Facility, located at 4311 – 4333 MacArthur Boulevard, Oakland, California, (see Attachment B, location map). These comments were received during a 30-day public comment period that ran from May 15, 2002 through June 14, 2002.

The draft RAW, the proposed Notice of Exemption and the fact sheet were placed in the information repository located at the Melrose Public Library, Reference Desk, 4805 Foothill Boulevard, Oakland, and in the Oakland Tribune. A fact sheet and community survey, dated May 2002, which discusses the Draft RAW and proposed Notice of Exemption, was mailed to local residents, adjacent property owners, businesses, selected city staff and elected officials on May 15, 2002. The fact sheet and community survey, were mailed simultaneously in both English and Spanish and the English fact sheet had a Chinese Contact box. DTSC received one call that required Chinese translation. Nine community surveys were returned. These will be used to update the mailing list and comments received in this format will be responded to in this document. DTSC will consider all comments before final approval of the RAW. All Commentors will receive a copy of the Responsiveness Summary. The Responsiveness Summary will be incorporated into the final RAW. Work Notices in both English and Spanish will be distributed to the updated mailing list prior to implementation of any work at the Site and will include a Chinese Contact Box. Copies of the fact sheet and display advertisement are included in Attachment A. Copies of the written comments received are located in Attachment B.

The Draft RAW proposed excavation and off-site disposal of soils containing lead and motor oil. The proposal included the removal of soil to a maximum depth of 5 feet below ground surface in a 2,100 square foot area, to achieve established cleanup levels. It is estimated that approximately 400 cubic yards of soil would be excavated, and a similar quantity of clean fill would be used to refill the excavations.

This Responsiveness Summary is organized as follows:

* Section I is the introduction.

* Section II lists the comments received and provides responses to those comments.

* Attachment A provides copies of the fact sheet and display advertisements.

* Attachment B provides copies of the written comments received.

A copy of the Final RAW and other site-related documents are available for review at:

Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2737
(510) 540-3800
Hours: By appointment, Monday through Friday (excluding State holidays)
8:00 AM to 5:00 PM

Melrose Public Library
Reference Desk
4805 Foothill Boulevard
Oakland, California 94601
(510) 535-5623
Monday, Tuesday: 10 AM –5:30 PM
Wednesday: 2:30 to 8 PM
Thursday, Saturday 10 AM –5:30 PM

II. Comments and Responses

This section provides responses to written comments received during the public comment period. The public comment period began March 15, 2002 and ended on June 14, 2002.

Comment 1

Please advise me on the site belonging to PG&E (in the same area). I was told that this was also toxic and is the reason "Everetts Barbeque" could not build and improve this site. **(1)**

Response 1

In 1996, Pacific Gas and Electric Company (PG&E), owner of the property immediately east of the Roberts Tires Site, discovered hazardous substances during a Phase I Environmental Site Assessment being performed in preparation for sale of their property. They discovered old auto repair parts, including wheel bearing, brake springs, brake cylinders, lead tire weights, and oily rags. Results from a Phase II investigation, conducted at the PG&E's property in October 1999, showed elevated levels of total petroleum hydrocarbons as motor oil (TPHmo) and lead in soil. PG&E removed the contaminated soil and disposed it off-site in May 2000. DTSC has no information as to why "Everett & Jones Barbeque" didn't purchase the property.

Comment 2

I am very concerned with airborne lead particles. **(2)**

Response 2

Currently the area with lead contaminated soil is covered with weeds and not exposed to the elements. This prevents the soil from becoming airborne. During excavation activities, dust control measures will be implemented when handling contaminated soils. Water spray will be used for dust control. Dust monitoring will be conducted at the property boundary to ensure no exceedance of State and Bay Area Air Quality Management District (BAAQMD) standards. For general air quality questions, BAAQMD could be reached at 415-771-6000. Also see response to Comment 3.

Comment 3

Since Roberts Tires is so close to the freeway and exhaust is also a potential source of lead, it may be wise to check lead levels in the soils of homes that are right next to Interstate 580. Example: Maybelle Street ends at the freeway and there are numerous homes whose yards are right up against the freeway. **(3)**

Response 3

At this time, DTSC is overseeing the remediation activities at the Roberts Tires Site. The source of lead contamination at the Roberts Tires Site is believed to be associated with the automotive repair operations conducted at the site. The lead levels found at the Roberts Tires Site are consistent with those found at other similar sites.

DTSC is not aware of any contamination related to the Roberts Tires Site at any of the residences nearby. If residents have concerns regarding lead exposure, the Alameda County Community Development Agency Lead Poisoning Prevention Program has a program that conducts residential lead testing. Each individual homeowner should contact them if they are interested at 510-567-8287.

LIST OF COMMENTERS

1. Mimi Dygeit (May 20, 2002, See Attachment B, Sheet B-1)
2. Mary Brett (May 21, 2002, See Attachment B, Sheet B-2)
3. Kelly Jennette (June 1, 2002, See Attachment B, Sheet B-3)

ATTACHMENT A

Fact Sheet and Display Advertisement

Fact Sheet
May 2002

DTSC is one of six Boards and Departments within the California Environmental Protection Agency. The Department's mission is to restore, protect and enhance the environment to ensure public health, environmental quality and economic vitality by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California

California Environmental Protection Agency

Roberts Tires Facility

4311-4333 MacArthur Boulevard, Oakland
Removal Action Workplan

State Announces the Availability of Removal Action Workplan

INTRODUCTION

The California Environmental Protection Agency, **Department of Toxic Substance Control** (DTSC) has prepared this fact sheet to inform the community about the proposed **interim removal action** on a portion of the Roberts Tires Facility (Site). The Site is located at 4311 – 4333 MacArthur Boulevard, Oakland, Alameda County, California. DTSC is the lead agency overseeing the investigation and cleanup at the site.

DTSC is currently accepting comments on the draft RAW and proposed NOE.

This fact sheet describes the **Draft Removal Action Workplan (RAW)** and the **proposed Notice of Exemption (NOE)** prepared pursuant to the **California Environmental Quality Act. (CEQA).** The Draft RAW recommends that contaminated soils above the cleanup levels be excavated and disposed offsite at an approved disposal facility. Copies of the draft RAW and other site related documents are available in the Information Repositories (See last page).

Terms in bold are defined in the glossary.

Public Comment Period

DTSC invites the public to review and comment on the draft Removal Action Workplan and proposed Notice of Exemption for the Roberts Tires Facility during a formal 30-day public comment period being held from:

May 15 to June 14, 2002

Mail written comments no later than June 14, 2002, to:
Jayantha Randeni,
Project Manager DTSC
700 Heinz Avenue, Suite 200,
Berkeley, California 94710-2710
(510) 540-3806
E Mail: JRandeni@dtsc.ca.gov

All comments received will be considered and responded to prior to finalization of the draft RAW. A responsiveness summary will be prepared.

You may also contact Rachelle Maricq, Public Participation Specialist, at (510) 540-3910
E Mail: rmaricq@dtsc.ca.gov

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demands and cut your energy costs, see our website at www.dtsc.ca.gov.

SITE HISTORY AND DESCRIPTION

The Site is a 0.6-acre property, located at 4311–4333 MacArthur Boulevard, Oakland, California (See Figure 1). Limited soil sampling conducted in March 2001 revealed hazardous concentrations of lead in an unpaved area behind existing buildings and significant concentrations in another unpaved area.

The main chemical of concern identified is **lead**. Investigations in the area revealed lead concentrations up to 36,400 ppm (**parts per million**). Lead is a heavy metal present in small amounts everywhere in the human environment. Lead and its compounds are a reproductive toxin.

DTSC plans to conduct additional sampling for site characterization for the entire site in the future. If the sampling results reveals that further cleanup are required at the site, appropriate cleanup will be conducted. This RAW only addresses the interim removal action for the lead-contaminated soil.

REMEDIAL GOALS

DTSC evaluated the potential risks to human health and the environment associated with the lead. The evaluation revealed that the lead concentration is above health–based cleanup levels. Therefore, removal of the lead-contaminated soil at the site was warranted.

In order to determine cleanup levels for lead that would be protective of human health, modeling equations were used to calculate the acceptable concentrations of the lead compounds that could be left in place. Based on the results of the calculations, a residential cleanup level of 350 ppm for lead in soil is recommended.

Achievement of the cleanup goal is expected to reduce soil concentrations to a level that is protective of public health and the environment.

ALTERNATIVES CONSIDERED

The draft RAW includes an evaluation of the two alternatives described below:

Alternative 1 - No Action. Under this alternative, no remedial actions would be conducted at the Roberts Tires Facility. This alternative is a baseline against which other alternative is evaluated. Future property use would be restricted.

Alternative 2 - Soil Excavation with off-site disposal: Under this alternative, contaminated soils above the cleanup goals would be excavated and disposed of at an approved landfill.

The alternatives were evaluated based on effectiveness, ease of implementation, and cost.

Alternative 2 is the most efficient, cost-effective, and implementable alternative. Therefore, Alternative 2 is the recommended alternative.

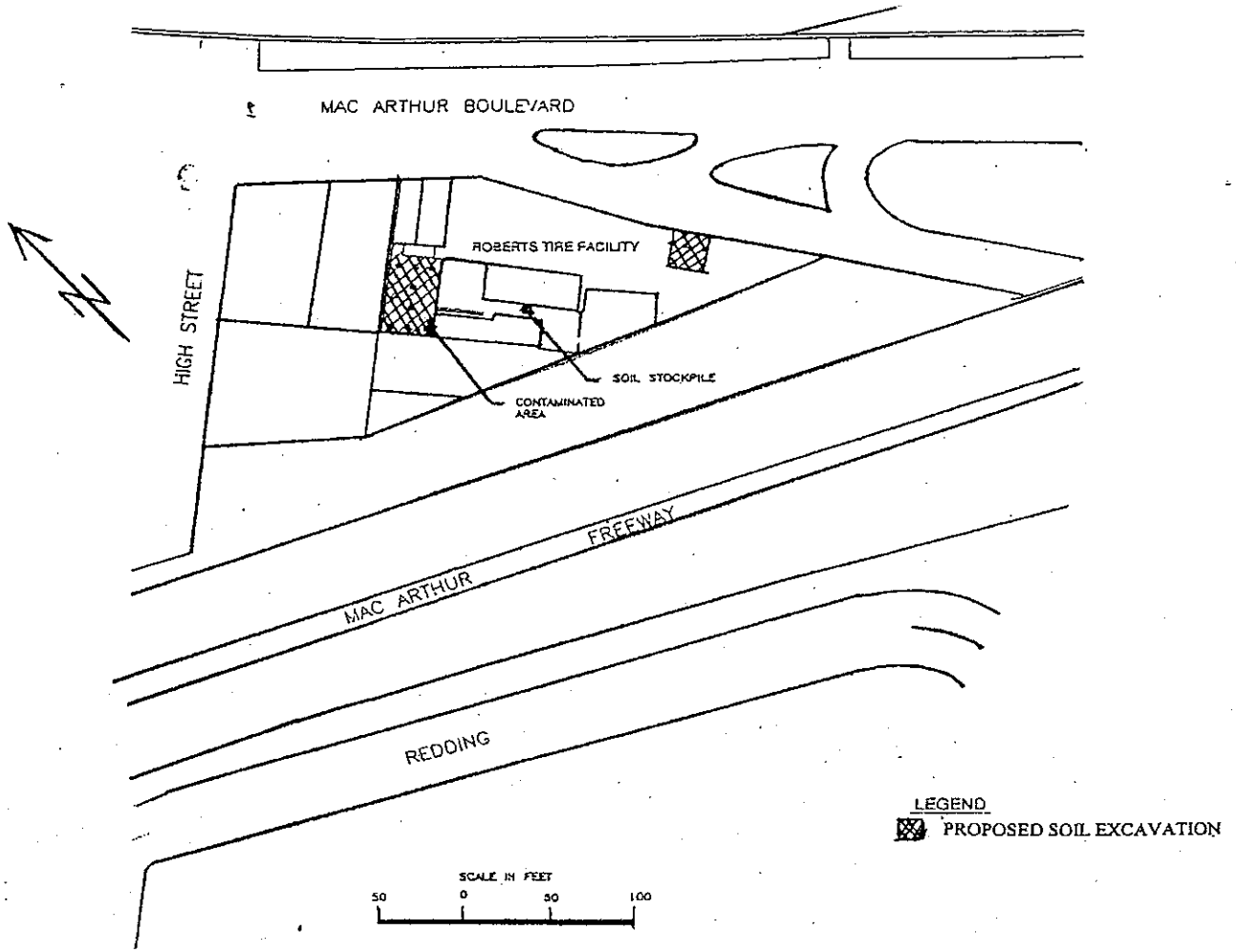

FIGURE 1 – EXCAVATION PLAN

GLOSSARY OF TERMS

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

A law mandating environmental impact review of governmental actions in California. The Act applies generally to all activities undertaken by state and local agencies, and to private activities financed, regulated, or approved by state and local agencies.

CUBIC YARD

A term of measurement. Fifteen cubic yards equals approximately one dump truck load.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC)

A department within the California Environmental Protection Agency charged with the responsibility for overseeing the investigation and clean up of hazardous waste sites. DTSC was formerly the California Department of Health Services, Toxic Substances Control.

NOTICE OF EXEMPTION (NOE):

A document prepared in compliance with the California Environmental Quality Act. An NOE is filed when the lead regulatory agency decides that the project falls under the "general rule" exemption. This exemption is applied to activities where it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment.

PARTS PER MILLION (ppm)

A unit of measure commonly used to describe levels or concentrations of chemicals in soil and groundwater. A concentration of 1 ppm is equal to 1 part chemical in 1 million parts of water or soil.

REMOVAL ACTION WORKPLAN (RAW):

A workplan prepared or approved by DTSC that is developed to carry out a removal action, in an effective manner, which is protective of public health and safety and the environment. The removal action workplan includes a plan for conducting the removal action, a description of the onsite contamination, the goals to be achieved by the removal action, and any alternative removal options that were considered and rejected and the basis for that rejection.

LEAD

A heavy metal present in small amounts everywhere in the human environment. Lead can get into the body from drinking contaminated water, eating vegetables grown in contaminated soil, or breathing dust when children play or adults work in lead-contaminated areas or eating lead-based paint. It can cause damage to the nervous system or blood cells. Children are at highest risk because their bodies are still developing. Lead and its compounds are listed as a reproductive toxic substance for women and men.

INTERIM REMOVAL ACTION

Cleanup actions taken to protect public health and the environment while long-term solutions are being developed.

PROPOSED INTERIM REMOVAL ACTION

The proposed removal action consists of excavating contaminated soils with lead concentrations above established cleanup goals. The excavated soil would be loaded into trucks and removed from the site. The activities would involve the use of heavy equipment that would be operated by licensed California contractors.

The proposed excavation would occur in three areas (Figure 1). Area 1 is approximately 60 x 30 feet and would be excavated to a maximum depth of 5 feet below ground surface (bgs). Area 2 is 20 x 15 feet and would be excavated to a depth of 3 feet bgs. Area 3 is a small stockpile located inside a building. Confirmation samples would be taken at the bottom and sides of the excavation to confirm that the cleanup goal for the contaminant has been met.

Excavation and loading of soil would be conducted in less than a week. It is estimated that 400 **cubic yards** (approximately 25 truckloads) of contaminated soil would be removed.

Following loading, the soil in the trucks would be covered before the trucks leave the site. Registered hazardous waste haulers would be used to transport the excavated soil to an approved disposal facility. The Site would then be restored to its original state.

All work would be performed in accordance with a site-specific health and safety plan. The plan will comply with both state and federal regulations designed to protect the health and safety of onsite workers and the public.

Contractors will take steps to control dust so that neither workers nor nearby persons will be exposed to dust containing contaminants. Water spray will be used for dust control as necessary.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

DTSC has determined that the proposed cleanup plan is exempt from CEQA, and would have no negative impact on the environment, due to the small volume of soil, the limited area, and the short duration of the removal. Therefore, a proposed Notice of Exemption has been prepared.

SENSITIVE RECEPTORS NEAR THE SITE

DTSC considers schools, daycare centers, hospitals, clinics, senior centers, teen centers, and places of worship to be sensitive receptors. The nearest school, childcare center and place of worship are approximately 500 feet from the Site. The nearest residences are approximately 150 feet from the eastern boundary of the property. Nearest hospital is about 2 miles from the Site. There are no sensitive uses such as day care centers, schools or residences along the haul route from the Site to the freeway.

DTSC doesn't believe that the proposed removal action will impact any of the nearby sensitive receptors.

若閣下對 **Roberts Tire Facility** 的泥土清理有問題，需要用廣東話
向 **DTSC** 洽詢時，請電黃先生：**Henry Wong (510) 540-3770**

FOR MORE INFORMATION

If you would like more information about the Site, please call Jayantha Randeni, Project Manager, at (510) 540-3806 or Rachelle Maricq, Public Participation Specialist, at (510) 540-3910. For media questions, please contact Angela Blanchette at (510) 540-3732.

INFORMATION REPOSITORIES

The Draft Removal Action Workplan and proposed CEQA Notice of Exemption, which are part of the Administrative Record for the site, are available for public review at the following locations:

Melrose Public Library
4805 Foothill Boulevard
Oakland, California 94601
(510) 535-5623

Department of Toxic Substances Control
File Room
700 Heinz A venue, Suite 200
Berkeley, California 94710-2710
(510) 540-3800 ***(Call for Appointment)***

The full administrative record is available at the DTSC file room location.

Notice to Hearing Impaired Individuals

TDD users can obtain additional information about the Site by using the California State Relay Service (1-888-877-5378) to reach Rachelle Maricq at (510) 540-3910.

Rachelle Maricq
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2710

Roberts Tires Facility

The Oakland Tribune
c/o ANG Newspapers
401 13th Street, Oakland, CA 94612
Legal Advertising
(510) 293-2601

Legal No. 613583

PROOF OF PUBLICATION

In the matter of:

DRAFT REMOVAL ACTION WORKPLAN FOR ROBERTS TIRES FACILITY

The undersigned below, deposes and says that he/she was the public Notice Advertising Clerk of the OAKLAND TRIBUNE a newspaper of general circulation as defined by Government Code Section 6000 adjudged as such by the Superior Court of the State of California, County of Alameda (Order Nos. 237798, December 4, 1951) which is published and circulated in Oakland Township in said county and state seven days a week.

That the

PUBLIC NOTICE

of which the annexed is a printed copy, was published in every issue of the OAKLAND TRIBUNE, on the following dates:

MAY 15, 2002

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Hamera Sebla

Public Notice Advertising Clerk

NOTICE OF PUBLIC COMMENT PERIOD
Draft Removal Action Workplan
For
ROBERTS TIRES FACILITY

The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) announces the availability of the Draft Removal Action Workplan (RAW) for public review and comment from May 17, 2002 through June 17, 2002 for the Roberts Tires Facility.

The Site is located at 4311-4333 MacArthur Boulevard, Oakland, Alameda County, California 94619. DTSC is the agency overseeing the investigation and cleanup activities at the site. The contaminant of concern is lead in the soil. The Draft Removal Action Workplan recommends that the soil be cleaned up to a level that allows unrestricted use of the property. To achieve the cleanup goal, soil will be excavated until confirmation samples show concentrations below 250 parts per million. The impacted soil will be disposed of at an approved landfill.

comply with the California Environmental Quality Act, DTSC has evaluated the project to determine initial environmental impacts of the proposed cleanup plan. DTSC has determined that the proposed cleanup plan is exempt from CEQA and would have no negative impact on the environment due to the small volume of soil, the limited area, and the short duration of the removal impacts. Therefore, DTSC is proposing to issue a Notice of Exemption for the project.

DTSC invites comments on the Draft RAW for the site during the 30-day public comment period beginning May 15, 2002 and ending June 14, 2002. DTSC will make the final decision based in part on comments received. Written comments must be postmarked no later than June 14, 2002 and should be mailed to Jayantha Randeni, Project Manager, at the DTSC address below. Questions about this project can be directed to either Jayantha Randeni at (510) 540-3806, JRandeni@dtsc.ca.gov, or Rachelle Marlow, DTSC Public Participation Coordinator at (510) 540-3910, rmarlow@dtsc.ca.gov. For media questions, please call Angela Bianchelle, DTSC Public Information Officer at (510) 540-3732, abianchelle@dtsc.ca.gov.

You can review the draft RAW along with other associated documents at the following locations:

Department of Toxic Substances Control
Berkeley Office
700 Heinz Avenue, Suite 200
Berkeley, CA 94710
By appointment: call (510) 540-3800

Melrose Public Library
4805 Foothill Boulevard
Oakland, California 94601
(510) 535-5623

The full administrative record is available at the above DTSC offices.

ATTACHMENT B

Written Comments

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
COMMUNITY SURVEY
Roberts Tires Facility
4311-4333 MacArthur Boulevard
Oakland, CA 94619
May 2002

The Department of Toxic Substances Control (DTSC) is involved in the investigation of hazardous substance contamination and site cleanup activities at the Roberts Tires Facility, located at 4311-4333 MacArthur Boulevard, Oakland, Alameda County (See Figure 1). As part of the ongoing site activities, DTSC is undertaking a review of public outreach activities. Please forward your comments at your earliest convenience by mailing to the address provided on the reverse side.

1. What is your current level of interest or concern regarding this Site?
____ No interest ____ Low ____ Moderate ____ High X Very High

2. What is the best way to provide you with information? X Fact sheets ___ Public Meetings ___ *Other (please specify):* through the Mail

3. Do fact sheets and public notices need translation into other languages? *(please specify what language(s):* yes - Hispanic for sure.

4. Can you suggest any interested officials, groups, organizations, or individuals that DTSC should contact regarding this Site? the current and new people who were just elected to represent this district - Delsey Brooks

5. If you are interested in being considered for a follow-up interview. please check X Yes ___ No

6. If you wish to receive additional information regarding this project, please complete the contact information below and mail back to the address provided on the reverse side. For further information contact Rachelle Maricq at 510-540-3910 or rmaricq@dtsc.ca.gov

BY COMPLETING THIS SURVEY, DTSC WILL ENSURE THAT YOU ARE ADDED TO THE DTSC MAILING LIST

Name: Mimi Dygert Address: 3687 Madrone Ave.
City/State/Zip: Oakland CA 94619
Tel: 1-510-530-5672 Fax: _____ E-mail: _____
Please note: While mailing lists are solely for DTSC use, they are considered a public record and may be subject to release upon request.

Please advise me on the site belonging to P.G.E. (in the same area) I was told this was also toxic - and is the reason "Everetts BarB Q" could not build and [illegible] this site to

B-2

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
COMMUNITY SURVEY
Roberts Tires Facility
4311-4333 MacArthur Boulevard
Oakland, CA 94619
May 2002

The Department of Toxic Substances Control (DTSC) is involved in the investigation of hazardous substance contamination and site cleanup activities at the Roberts Tires Facility, located at 4311-4333 MacArthur Boulevard, Oakland, Alameda County (See Figure 1). As part of the ongoing site activities, DTSC is undertaking a review of public outreach activities. Please forward your comments at your earliest convenience by mailing to the address provided on the reverse side.

1. What is your current level of interest or concern regarding this Site?
____ No interest ____ Low ____ Moderate ✓ High ____ Very High

2. What is the best way to provide you with information? ✓ Fact sheets ___ Public Meetings ___ *Other (please specify):* _____

3. Do fact sheets and public notices need translation into other languages? *(please specify what language(s)*: _____

4. Can you suggest any interested officials, groups, organizations, or individuals that DTSC should contact regarding this Site? _____

5. If you are interested in being considered for a follow-up interview. please check ✓ Yes ____ No

6. If you wish to receive additional information regarding this project, please complete the contact information below and mail back to the address provided on the reverse side. For further information contact Rachelle Maricq at 510-540-3910 or rmaricq@dtsc.ca.gov

BY COMPLETING THIS SURVEY, DTSC WILL ENSURE THAT YOU ARE ADDED TO THE DTSC MAILING LIST

Name: MaryBrett Address: 4455 Masterson St

City/State/Zip: Oakland CA 94619

Tel: Unlisted Fax: _____ E-mail: marybrett@yahoo.com

Please note: While mailing lists are solely for DTSC use, they are considered a public record and may be subject to release upon request.

I am very concerned with airborn lead particles

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
COMMUNITY SURVEY
Roberts Tires Facility
4311-4333 MacArthur Boulevard
Oakland, CA 94619
May 2002

The Department of Toxic Substances Control (DTSC) is involved in the investigation of hazardous substance contamination and site cleanup activities at the Roberts Tires Facility, located at 4311-4333 MacArthur Boulevard, Oakland, Alameda County (See Figure 1). As part of the ongoing site activities, DTSC is undertaking a review of public outreach activities. Please forward your comments at your earliest convenience by mailing to the address provided on the reverse side.

1. What is your current level of interest or concern regarding this Site?
____ No interest ____ Low ____ Moderate ✓ High ____ Very High

2. What is the best way to provide you with information? ___ Fact sheets ___ Public Meetings ___ *Other (please specify):* E-MAIL - KellyJennette@AOL.com OR MAIL

3. Do fact sheets and public notices need translation into other languages? *(please specify what language(s)*: _____

4. Can you suggest any interested officials, groups, organizations, or individuals that DTSC should contact regarding this Site? LAUREL COMMUNITY ACTION GROUP

5. If you are interested in being considered for a follow-up interview. please check ✓ Yes ____ No

6. If you wish to receive additional information regarding this project, please complete the contact information below and mail back to the address provided on the reverse side. For further information contact Rachelle Maricq at 510-540-3910 or rmaricq@dtsc.ca.gov

BY COMPLETING THIS SURVEY, DTSC WILL ENSURE THAT YOU ARE ADDED TO THE DTSC MAILING LIST

Name: Kelly Jennette Address: 4426 TULIP AVE

City/State/Zip: OAKLAND, CA 94619

Tel: (510) 530-8614 Fax: _____ E-mail: _____

Please note: While mailing lists are solely for DTSC use, they are considered a public record and may be subject to release upon request.

Since Roberts Tires is so close to the freeway and exhaust is also a potential source of lead, it may be wise to check lead levels in the soils of homes that are right next to 580. Ex: ~~the~~ maybelle ends @ the freeway and there are numerous homes whose yards are right up against the freeway.