Memorandum

To: Orange County Health Care Agency (OCHCA),
Solid Waste Local Enforcement Agency (LEA)
Environmental Health Division
1241 Wast Dyer Road, Suite #120
Santa Ana, CA 92705

Date: June 21, 2024

Attention: Dan Weerasekera
Hazardous Materials Specialist III

Project No. CLA.000IR23328

From: Michael Priestaf, PG (CA 9979)
Robin Ferber, PG (CA 5756)

Subject: **Environmental Stockpile Workplan for Characterization of Stockpile I**
Addendum #4 to Final Revised Environmental Sampling
Workplan For Stockpiled Material Testing
6145 East Santiago Canyon Road
City of Orange, Orange County, California

Introduction

On behalf of Milan REI X, LLC (Milan), Leighton and Associates, Inc. (Leighton) has prepared this Addendum #4 to the December 27, 2023, Final Revised Environmental Sampling Workplan for Stockpiled Material Testing (Stockpile WP) to present an environmental sampling workplan for the characterization of, Stockpile I, which consists of concrete debris, and is located at the Milan Project Site (referred to herein as the "Site"), consisting of a portion of Milan's property located at 6145 East Santiago Canyon Road in Orange, California (Figure 1). This Addendum #4 to the Stockpile WP was prepared in general conformance with the June 16, 2022, Stipulated Notice and Order (Stipulated N&O) prepared by the Orange County Health Care Agency, Environmental Health acting as the Solid Waste Local Enforcement Agency for the County of Orange (the LEA).

The purpose of Addendum #4 is to characterize the stockpiled concrete debris in Stockpile I to evaluate whether it is suitable for unrestricted use in a residential setting.

Background

As described in the Stockpile WP, Stockpile I is estimated to be approximately 92,700 cubic yards (CYs) in volume and is predominantly composed of miscellaneous concrete debris with

minor amounts of soil. Based on the Department of Toxic Substances Control (DTSC) Information Advisory Clean Imported Fill Material[1], a total of 79 samples (not including field duplicates) are needed to adequately characterize the stockpile. The DTSC Information Advisory Clean Imported Fill Material guidance is provided as Appendix A. Per Leighton's approved Quality Assurance Project Plan (QAPP) for the project, an additional eight field duplicate Quality Assurance/Quality Control (QA/QC) samples will also be collected and analyzed.

To fulfill the sampling frequency requirement for Stockpile I, Leighton proposes to collect approximately 68 concrete/soil samples (not including field duplicates) from 14 vertical borings, distributed along the top of the stockpile on an approximate 60-foot grid, and approximately 11 concrete/soil samples (not including field duplicates) from 11 angled borings advanced along the sidewalls of the stockpile. Proposed sample locations may need to be moved and the number of concrete/soil samples collected from the vertical borings and/or the sidewalls may be changed based on field conditions and/or observations. The eight field duplicates will be collected at random from the vertical borings and/or sidewall sample locations.

The sample IDs will be determined based on a unique numeric sidewall location or boring ID, and the depth at which the sample was collected e.g., "SPI-SW-05-1.5." (for sidewall samples) or "SPI-05-10.0" (for boring samples). Duplicate samples will be designated with a "D" prefix e.g. "SPI-SW-05-1.5D".

Grid-Based and Random Grid-Based Sampling

The 14 proposed vertical boring locations were determined by superimposing an approximate 60-foot grid along the top of the stockpile. The locations of Leighton's proposed Stockpile I vertical borings are presented on Figure 2.

The locations of the 11 proposed sidewall sample were determined using a random grid-based sampling approach, in general conformance with Chapter Nine of the United States Environmental Protection Agency (USEPA) Hazardous Waste Test Methods / SW-846 guidance[2], in which a 60-foot square grid was superimposed over the stockpile, each grid cell superimposed over a sidewall was assigned a unique number (e.g., if 30 cells were superimposed over the sidewalls, a number between 1 and 30 was assigned to each cell), and a random number generator was used to randomly determine which grid cells would be assigned sample locations. In instances where the proposed sample location was determined to be inaccessible or unsafe for sampling, the location was moved to a nearby accessible

[1] California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) (2001) "Information Advisory Clean Imported Fill Material." October.
[2] United States Environmental Protection Agency (1986) "Hazardous Waste Test Methods / SW-846." Chapter Nine: Sampling Plan. September.

location. The locations of Leighton's proposed Stockpile I sidewall samples are presented on Figure 2.

Sampling Methodology for Vertical Borings

Based on the predominant concrete composition of Stockpile I, Leighton proposes to utilize a sonic drill rig to advance each proposed vertical boring. The rod, core barrel, and casing will be vibrated at sonic frequencies to advance each boring to each target sample depth.

Leighton proposes to generally collect samples at 5-foot depth intervals from each proposed boring, starting at a depth of 0.5 feet below stockpile surface (bss), targeting sampling depths within the interior of the stockpile. Leighton anticipates collecting two to seven samples per vertical boring (depending on the elevation of the surface relative to the underlying base of the stockpile). A California modified split-spoon sampler fitted with a pre-cleaned 6-inch stainless-steel tube will be inserted into the sonic casing and used to collect samples from the desired depths. The ends of each tube will be covered with Teflon sheeting and plastic endcaps, placed in a sealed Ziploc bag, and stored in an ice-chilled cooler. If refusal is encountered with the split-spoon sampler, the sample will be collected from a step-out boring advanced within approximately 3 feet of the original boring. If refusal is encountered with the split-spoon sampler a second time, the sample will be collected directly from the recovered sonic drill cuttings. The IDs of any samples collected from step-out borings will be designated with "A" following the original boring ID (e.g. SPI-05A-10.0). After completion of the sampling, each boring will be backfilled with hydrated bentonite, the remaining drill cuttings will be placed either in a plastic bag or on plastic sheeting and staged next to the boring, and a labeled stake, flag, and/or survey whisker will be placed in the top of the bentonite column for subsequent surveying by a California licensed land surveyor.

The split spoon sampler will be cleaned before and after each sample is collected using a three-stage wash of phosphate-free detergent and water, a rinse with potable water, and a final rinse with distilled water.

Sampling Methodology for Sidewall Borings

At each proposed sidewall boring location, a sonic drill rig will be utilized to advance a boring at an angle between 40 and 45 degrees relative to vertical (i.e., vertical is 0 degrees). Angled borings will be advanced either directly into the face of the sidewall (approximately normal to the sidewall surface) or from the top of the sidewall (approximately parallel to subparallel to the sidewall surface). The rod, core barrel, and casing will be vibrated at sonic frequencies to advance each boring to the target sample depth of 2 feet bss or approximately 2.8 feet along the length of the boring (based on an assumed drilling angle of 45 degrees).

A split spoon sampler fitted with a pre-cleaned 6-inch stainless-steel tube will be inserted into the sonic casing and used to collect samples from the desired depth. Upon sample collection, the ends of each tube will be covered with Teflon sheeting and plastic endcaps, placed in a sealed Ziploc bag, and stored in an ice-chilled cooler. If refusal is encountered with the split-spoon sampler, the sample will be collected from a step-out boring and designated in the manner previously described. If refusal with the split spoon sampler is encountered a second time, the sample will be collected directly from the recovered sonic drill cuttings After completion, each sidewall boring will be backfilled with hydrated bentonite, the remaining soil cuttings will be placed either in a plastic bag or on plastic sheeting and staged next to the boring, and a labeled stake, flag, and/or survey whisker will be placed in the top of the bentonite column for subsequent surveying by a California licensed land surveyor.

The split spoon sampler will be decontaminated before and after each sample is collected using a three-stage wash of phosphate-free detergent and water, a rinse with potable water, and a final rinse with distilled water.

Analytical Testing of Samples

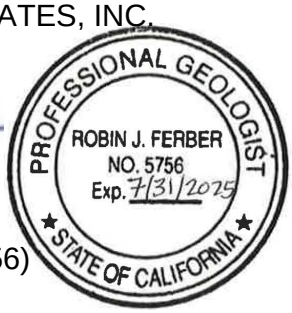
The concrete/soil samples will be delivered under standard chain-of-custody protocols to the analytical laboratory. Each concrete/soil sample will be analyzed within the appropriate holding times by the following analytical methods:

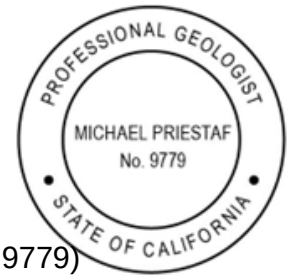
- Total Petroleum Hydrocarbons (TPH) as Diesel (TPH-D) and Motor Oil (TPH-MO) by United States Environmental Protection Agency (USEPA) Method 8015,
- Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270C SIM,
- Volatile Organic Compounds (VOCs) and TPH as Gasoline (TPH-G) by USEPA Method 8260 full scan analysis,
- Semi-Volatile Organic Compounds (SVOCs) by USEPA Method 8270 full scan analysis,
- Title 22 Metals by USEPA Methods 6010B/7471A,
- Organochlorine Pesticides (OCPs) by USEPA Method 8081,
- Organophosphorus Pesticides (OPPs) by USEPA Method 8141,
- Chlorinated Herbicides by USEPA Method 8151A,
- Polychlorinated Biphenyls (PCBs) by USEPA Method 8082,
- Asbestos by USEPA Method 600/R93-116, and
- pH by USEPA Method 9045.

Should you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

LEIGHTON AND ASSOCIATES, INC.





Robin Ferber, PG (CA 5756)
Senior Principal Geologist

Michael J. Priestaf, MS, PG (CA 9779)
Project Geologist

Attachments: Figure 1 – Stockpile and Soil Mound Locations
Figure 2 – Stockpile I Boring Location Map

Appendix A – DTSC Information Advisory Clean Imported Fill Material

Copies: Chris Nichelson (Milan)
Bret Bernard (Milan)
Diane Scioli (Milan)
Pete Duchesneau, Esq., (Manatt)
David McGrath, Esq. (Manatt)

FIGURES

Legend

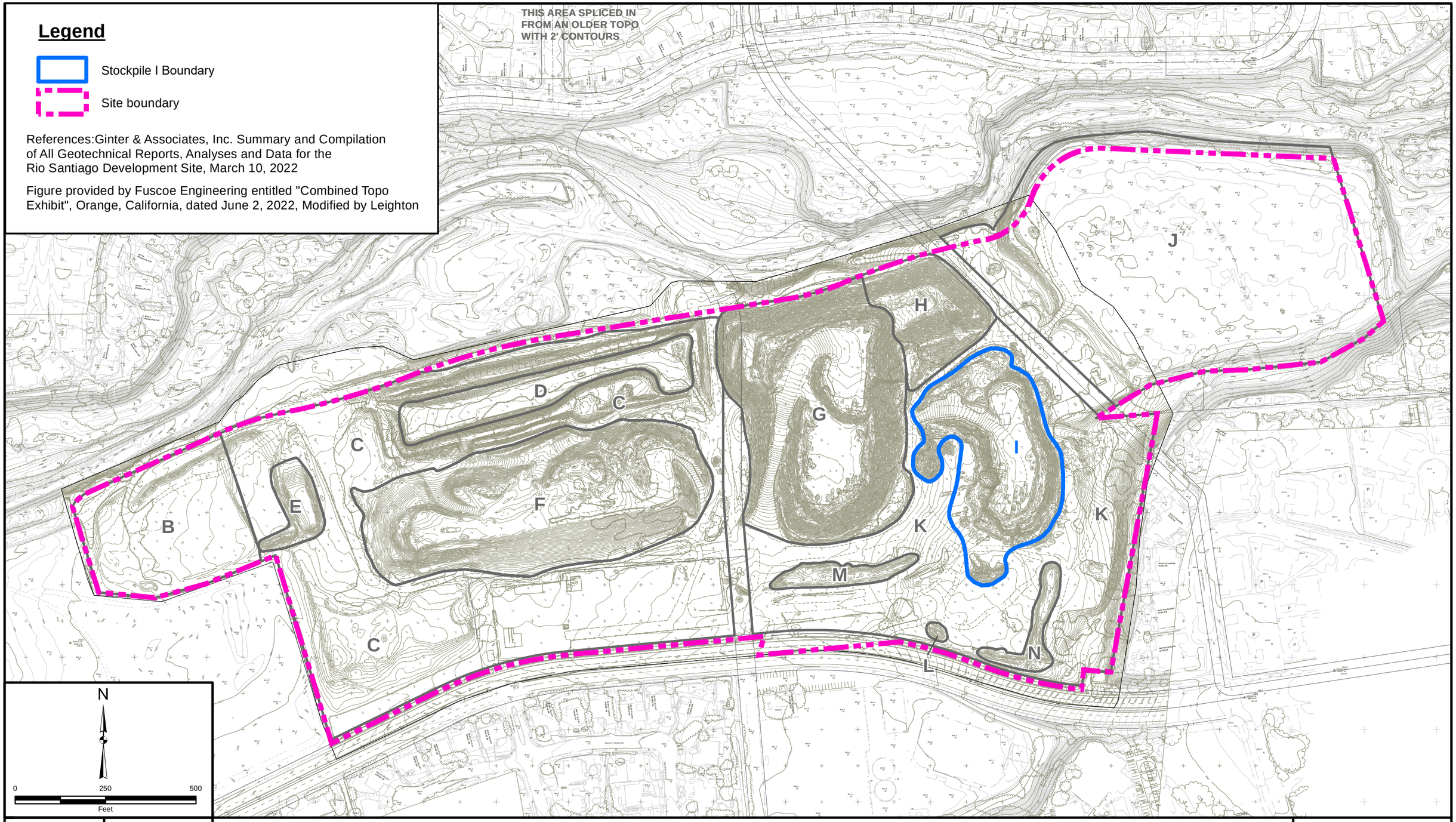
Stockpile I Boundary

Site boundary

References:Ginter & Associates, Inc. Summary and Compilation of All Geotechnical Reports, Analyses and Data for the Rio Santiago Development Site, March 10, 2022

Figure provided by Fuscoe Engineering entitled "Combined Topo Exhibit", Orange, California, dated June 2, 2022, Modified by Leighton

THIS AREA SPLICED IN FROM AN OLDER TOPO WITH 2' CONTOURS



N

0 250 500

Feet

Project: 23328	Eng/Geol: RF/MJP
Scale: 1 " = 250 '	Date: June 2024
Author: (mmurphy)	

STOCKPILE **AND SOIL MOUND LOCATIONS**

6145 East Santiago Canyon Road
City of Orange, Orange County, California

FIGURE 1

Leighton

Map Saved as P:\INFOCUS PROJECTS\CLA\CLA.000\IR23328 Milan REI\GIS\Stockpile I\23328_F02_SPILM_2024-06-21.mxd on 6/21/2024 11:32:17 AM

Legend

- Proposed Stockpile I Boring Location
- Proposed Sidewall Sample Location
- Stockpile I Boundary

References:Ginter & Associates, Inc. Summary and Compilation of All Geotechnical Reports, Analyses and Data for the Rio Santiago Development Site, March 10, 2022

Figure provided by Fuscoe Engineering entitled "Combined Topo Exhibit", Orange, California, dated June 2, 2022, Modified by Leighton

SPI-SW-01
SWI-SW-02
SPI-15
SPI-13
SPI-SW-03
SPI-01
SPI-SW-17
SPI-14
SPI-12
SPI-02
SPI-11
SPI-03
SPI-SW-04
SPI-SW-16
SPI-SW-14
SPI-10
SPI-04
SPI-SW-15
SPI-09
SPI-05
SPI-SW-04
SPI-08
SPI-06
SPI-SW-13
RIP RAP
SPI-07
SPI-SW-06
SPI-SW-12
SPI-SW-11
SPI-SW-10
SPI-SW-07
SPI-SW-08
POLE
RIP RAP
SPI-SW-09

N

0 50 100

Feet

Project: 23328	Eng/Geol: RF/MJP
Scale: 1 " = 50 '	Date: June 2024
Author: (mmurphy)	

STOCKPILE I BORING LOCATION MAP

6145 East Santiago County Road
City of Orange, Orange County, California

FIGURE 2

Leighton

Map Saved as V:\INFOCUS PROJECTS\CLA\CLA.000IR23328 Milan REI\GIS\Stockpile I\23328_F02_SPI_2024-06-13.mxd on 6/13/2024 2:16:58 PM

APPENDIX A

DTSC Information Advisory Clean Imported Fill Material

Leighton
a verdantas company

Information Advisory
Clean Imported Fill Material

October 2001

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

It is DTSC's mission 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

Executive Summary

This fact sheet has been prepared to ensure that inappropriate fill material is not introduced onto sensitive land use properties under the oversight of the DTSC or applicable regulatory authorities. Sensitive land use properties include those that contain facilities such as hospitals, homes, day care centers, and schools. This document only focuses on human health concerns and ecological issues are not addressed. It identifies those types of land use activities that may be appropriate when determining whether a site may be used as a fill material source area. It also provides guidelines for the appropriate types of analyses that should be performed relative to the former land use, and for the number of samples that should be collected and analyzed based on the estimated volume of fill material that will need to be used. The information provided in this fact sheet is not regulatory in nature, rather is to be used as a guide, and in most situations the final decision as to the acceptability of fill material for a sensitive land use property is made on a case-by-case basis by the appropriate regulatory agency.

Introduction

The use of imported fill material has recently come under scrutiny because of the instances where contaminated soil has been brought onto an otherwise clean site. However, there are currently no established standards in the statutes or regulations that address environmental requirements for imported fill material. Therefore, the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) has prepared this fact sheet to identify procedures that can be used to minimize the possibility of introducing contaminated soil onto a site that requires imported fill material. Such sites include those that are undergoing site remediation, corrective action, and closure activities overseen by DTSC or the appropriate regulatory agency. These procedures may also apply to construction projects that will result in sensitive land uses. The intent of this fact sheet is to protect people who live on or otherwise use a sensitive land use property. By using this fact sheet as a guide, the reader will minimize the chance of introducing fill material that may result in potential risk to human health or the environment at some future time.

Overview

Both natural and manmade fill materials are used for a variety of purposes. Fill material properties are commonly controlled to meet the necessary site specific engineering specifications. Because most sites requiring fill material are located in or near urban areas, the fill materials are often obtained from construction projects that generate an excess of soil, and from demolition debris (asphalt, broken concrete, etc.). However, materials from those types of sites may or may not be appropriate, depending on the proposed use of the fill, and the quality of the assessment and/or mitigation measures, if necessary. Therefore, unless material from construction projects can be demonstrated to be free of contamination and/or appropriate for the proposed use, the use of that material as fill should be avoided.

Selecting Fill Material

In general, the fill source area should be located in nonindustrial areas, and not from sites undergoing an environmental cleanup. Nonindustrial sites include those that were previously undeveloped, or used solely for residential or agricultural purposes. If the source is from an agricultural area, care should be taken to insure that the fill does not include former agricultural waste process byproducts such as manure or other decomposed organic material. Undesirable sources of fill material include industrial and/or commercial sites where hazardous ma-

Potential Contaminants Based on the Fill Source Area

Fill Source:	Target Compounds
Land near to an existing freeway	Lead (EPA methods 6010B or 7471A), PAHs (EPA method 8310)
Land near a mining area or rock quarry	Heavy Metals (EPA methods 6010B and 7471A), asbestos (polarized light microscopy), pH
Agricultural land	Pesticides (Organochlorine Pesticides: EPA method 8081A or 8080A; Organophosphorus Pesticides: EPA method 8141A; Chlorinated Herbicides: EPA method 8151A), heavy metals (EPA methods 6010B and 7471A)
Residential/acceptable commercial land	VOCs (EPA method 8021 or 8260B, as appropriate and combined with collection by EPA Method 5035), semi-VOCs (EPA method 8270C), TPH (modified EPA method 8015), PCBs (EPA method 8082 or 8080A), heavy metals including lead (EPA methods 6010B and 7471A), asbestos (OSHA Method ID-191)

**The recommended analyses should be performed in accordance with USEPA SW-846 methods (1996). Other possible analyses include Hexavalent Chromium: EPA method 7199*

Recommended Fill Material Sampling Schedule

Area of Individual Borrow Area	Sampling Requirements
2 acres or less	Minimum of 4 samples
2 to 4 acres	Minimum of 1 sample every 1/2 acre
4 to 10 acres	Minimum of 8 samples
Greater than 10 acres	Minimum of 8 locations with 4 subsamples per location
Volume of Borrow Area Stockpile	**Samples per Volume**
Up to 1,000 cubic yards	1 sample per 250 cubic yards
1,000 to 5,000 cubic yards	4 samples for first 1000 cubic yards +1 sample per each additional 500 cubic yards
Greater than 5,000 cubic yards	12 samples for first 5,000 cubic yards + 1 sample per each additional 1,000 cubic yards

terials were used, handled or stored as part of the business operations, or unpaved parking areas where petroleum hydrocarbons could have been spilled or leaked into the soil. Undesirable commercial sites include former gasoline service stations, retail strip malls that contained dry cleaners or photographic processing facilities, paint stores, auto repair and/or painting facilities. Undesirable industrial facilities include metal processing shops, manufacturing facilities, aerospace facilities, oil refineries, waste treatment plants, etc. Alternatives to using fill from construction sites include the use of fill material obtained from a commercial supplier of fill material or from soil pits in rural or suburban areas. However, care should be taken to ensure that those materials are also uncontaminated.

Documentation and Analysis

In order to minimize the potential of introducing contaminated fill material onto a site, it is necessary to verify through documentation that the fill source is appropriate and/or to have the fill material analyzed for potential contaminants based on the location and history of the source area. Fill documentation should include detailed information on the previous use of the land from where the fill is taken, whether an environmental site assessment was performed and its findings, and the results of any testing performed. It is recommended that any such documentation should be signed by an appropriately licensed (CA-registered) individual. If such documentation is not available or is inadequate, samples of the fill material should be chemically analyzed. Analysis of the fill material should be based on the source of the fill and knowledge of the prior land use.

Detectable amounts of compounds of concern within the fill material should be evaluated for risk in accordance with the DTSC Preliminary Endangerment Assessment (PEA) Guidance Manual. If

metal analyses are performed, only those metals (CAM 17 / Title 22) to which risk levels have been assigned need to be evaluated. At present, the DTSC is working to establish California Screening Levels (CSL) to determine whether some compounds of concern pose a risk. Until such time as these CSL values are established, DTSC recommends that the DTSC PEA Guidance Manual or an equivalent process be referenced. This guidance may include the Regional Water Quality Control Board's (RWQCB) guidelines for reuse of non-hazardous petroleum hydrocarbon contaminated soil as applied to Total Petroleum Hydrocarbons (TPH) only. The RWQCB guidelines should not be used for volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCS). In addition, a standard laboratory data package, including a summary of the QA/QC (Quality Assurance/Quality Control) sample results should also accompany all analytical reports.

When possible, representative samples should be collected at the borrow area while the potential fill material is still in place, and analyzed prior to removal from the borrow area. In addition to performing the appropriate analyses of the fill material, an appropriate number of samples should also be determined based on the approximate volume or area of soil to be used as fill material. The table above can be used as a guide to determine the number of samples needed to adequately characterize the fill material when sampled at the borrow site.

Alternative Sampling

A Phase I or PEA may be conducted prior to sampling to determine whether the borrow area may have been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with DTSC or appropriate regulatory agency. However, if it is not possible to analyze the fill material at the borrow area or determine that it is appropriate for use via a Phase I or PEA, it is recommended that one (1) sample per truckload be collected and analyzed for all compounds of concern to ensure that the imported soil is uncontaminated and acceptable. (See chart on Potential Contaminants Based on the Fill Source Area for appropriate analyses). This sampling frequency may be modified upon consultation with the DTSC or appropriate regulatory agency if all of the fill material is derived from a common borrow area. However, fill material that is not characterized at the borrow area will need to be stockpiled either on or off-site until the analyses have been completed. In addition, should contaminants exceeding acceptance criteria be identified in the stockpiled fill material, that material will be deemed unacceptable and new fill material will need to be obtained, sampled and analyzed. Therefore, the DTSC recommends that all sampling and analyses should be completed prior to delivery to the site to ensure the soil is free of contamination, and to eliminate unnecessary transportation charges for unacceptable fill material.

Composite sampling for fill material characterization may or may not be appropriate, depending on quality and homogeneity of source/borrow area, and compounds of concern. Compositing samples for volatile and semivolatile constituents is not acceptable. Composite sampling for heavy metals, pesticides, herbicides or PAH's from unanalyzed stockpiled soil is also unacceptable, unless it is stockpiled at the borrow area and originates from the same source area. In addition, if samples are composited, they should be from the same soil layer, and not from different soil layers.

When very large volumes of fill material are anticipated, or when larger areas are being considered as borrow areas, the DTSC recommends that a Phase I or PEA be conducted on the area to ensure that the borrow area has not been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with the DTSC.

For further information, call Richard Coffman, Ph.D., R.G., at (818) 551-2175.