

*Prepared for*



**San Diego Gas & Electric Company**  
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# **SOIL MANAGEMENT PLAN SUNRISE POWERLINK PROJECT**

*Prepared by*

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**SOIL MANAGEMENT PLAN  
SUNRISE POWERLINK PROJECT**

I certify that this document and attachments presented in this report are accurate and complete. This report was prepared by the staff of Geosyntec Consultants under my supervision to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who are directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

\_\_\_\_\_  
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California Professional Geologist No. 7115

\_\_\_\_6/29/2010\_\_\_\_\_  
Date

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## 1. INTRODUCTION

Geosyntec was previously contracted by the San Diego Gas and Electric Company (SDG&E) to prepare a Phase I Environmental Site Assessment for the Environmentally Superior Southern Route of the Sunrise Powerlink (Sunrise ESA) to address Sunrise Mitigation Measures stipulated by the California Public Utilities Commission (CPUC), and the United States Bureau of Land Management (BLM), including:

- Mitigation Measure HS-APM-5, “All Government Code §65962.5 sites or other known contamination sites along the transmission line ROW or such sites that would affect construction work shall be investigated to determine potential impacts to the project;” and
- Mitigation Measure P-7a, “Investigate the site to determine whether it has a record of hazardous material contamination which would affect construction activities.”

Based on the findings and conclusions of the Sunrise ESA, Geosyntec provided recommendations to further address the above-referenced Sunrise Mitigation Measure P-7a. Recommended actions included the preparation of this Soil Management Plan (SMP) to describe the procedures for identifying and managing displaced hydrocarbon-impacted soil if encountered during construction activities for the Sunrise Powerlink project.

### 1.1 Background

Based on the findings of the Sunrise ESA, three zones along the proposed underground utility section of the Sunrise Powerlink along Alpine Boulevard in Alpine, California were identified to potentially contain hydrocarbon-impacted soils and/or groundwater. The three zones include a 300 foot section of trenching in the vicinity of Geosyntec Site ID Nos. 78 and 79 (Zone 1 – Station 172+00 through 169+00); a 50 foot section of trenching in the vicinity of Geosyntec Site ID Nos. 88 and 90 (Zone 2 – Station 158+00 through 158+50); and a 300 foot section of trenching in the vicinity of Geosyntec Site ID Nos. 103 and 104 (Zone 3 – Station 130+00 through 127+00) (Figure 2).

This SMP has been prepared to provide guidance during trenching activities in the three identified zones of potentially impacted soil and/or groundwater located in Alpine, and during other construction activities for the Sunrise Powerlink if unanticipated hydrocarbon-impacted soil is encountered.

### 1.2 Objective

Pursuant to Sunrise Mitigation Measure P-7a, it is recommended that excavation near the identified zones be monitored for soil impacted by petroleum hydrocarbons and that a contingency plan be prepared to properly handle and dispose impacted soils in compliance with applicable health, safety, and environmental requirements, if encountered. The objective of this SMP is to outline the procedures for identifying, handling, characterizing,

transporting, and disposing displaced impacted soil which may be encountered during project construction in accordance with Mitigation Measures P-7a.

## 2. PRE-FIELD ACTIVITIES

The actions described below shall be implemented prior to initiation of trenching activities in the three identified zones along Alpine Boulevard. The hydrocarbon-impacted soil management procedures outlined in this SMP would also be applicable for other construction areas where hydrocarbon-impacted soil may be encountered.

### 2.1 Health and Safety Considerations

Appropriate health and safety precautions will be implemented to protect employees and the public to prevent or minimize exposure to potentially hazardous substances. Work shall be performed in accordance with California Occupational Safety and Health Administration (OSHA) standards. A site-specific health and safety plan (HASP) will be prepared and safety meetings with the Environmental Monitor (EM), contractors, and other onsite personnel will be conducted prior to initiation of site work.

### 2.2 Subcontractor Coordination

Multiple subcontractors may be involved with the implementation of the proposed project. Prior to initiation of work, at a minimum, the following services shall be coordinated:

- *Roll-off-bin supplier/waste hauler* - Local roll-off-bin suppliers or waste haulers shall be contacted to coordinate the staging of bins nearby the site for efficient delivery if/when impacted soil is encountered. .
- *Disposal facilities* – SDG&E approved disposal facilities shall be contacted to confirm the acceptance criteria for impacted and/or contaminated soil and hours of operation.
- *Analytical laboratory* – An analytical laboratory shall be notified that soil samples may be submitted for analysis and that coordination of a laboratory courier will require scheduling, as needed.

### **3. MONITORING FOR IMPACTED SOIL**

Monitoring during trenching along portions of Alpine Boulevard where documented hydrocarbon impacts have been previously identified will be performed to address the potential for exposure of workers and/or the public to hydrocarbon-impacted soil that may be encountered during trenching. The onsite EM will be a qualified professional, experienced in field screening of impacted soil. The EM will screen soil for visual and/or olfactory indications of the presence of hydrocarbons, perform air monitoring in the work zone, and collect soil samples for laboratory analysis, if deemed warranted.

In the event that impacted soil is encountered, the EM will notify the Project Manager and onsite Foreman, instruct site workers to segregate soil, and coordinate the mobilization of roll-off bins to store affected soil, if warranted. Additionally, during safety meetings, site workers will be briefed on the potential to encounter impacted soil and will be instructed to notify the EM or onsite Foreman if impacts to soil are suspected. If obvious indications of contamination (e.g., stained or odorous soil) are not observed and field monitoring does not indicate the presence of impacted soil excavated during construction, displaced soil may be transported offsite for applicable re-use or disposal.

Monitoring for impacted soil during trenching in the three identified zones along Alpine Boulevard or other construction areas identified with potentially impacted soil shall follow the procedures described below.

#### **3.1 Alpine Boulevard Trenching Activities**

The following procedures shall be implemented during trenching activities in the three identified zones along Alpine Boulevard (Figure 2).

##### **3.1.1 Visual Monitoring**

The EM will conduct continuous visual monitoring during trenching activities within the identified zones (Figure 2). Visual observation will identify stained or discolored soil which may indicate a previous release of hydrocarbons to the subsurface. The presence of odorous soil will also be noted as an indication of potential hydrocarbon impacts. Soils with visible indications of impacts will be segregated for characterization prior to disposal. Monitoring observations will be recorded in a field notebook and locations of visually impacted soil will be noted.

##### **3.1.2 Air Monitoring**

A photoionization detector (PID) will be used by the EM to continuously monitor ambient air in the work zone during trenching. In addition to the continuous monitoring for worker health and safety purposes, air monitoring will be used to identify soils to be segregated for characterization prior to disposal. The results of the air monitoring will be recorded in the

daily field sheets.

Field screening of soil samples for petroleum hydrocarbons (if suspected) will be conducted by the EM using a PID and the head-space screening method. Approximately 2 to 4 ounces of soil will be placed in a sealed plastic bag, shaken gently, and allowed to equilibrate for approximately 3 minutes before inserting the PID probe to collect a head-space reading. Where visual staining is observed or odors are noted, more frequent field screening will be performed at the discretion of the EM. The screening level for considering soil impacted with petroleum hydrocarbons will be 50 parts per million (ppm) as measured by a PID. Soil identified with PID readings exceeding 50 ppm will be segregated for characterization prior to disposal. The identification and segregation of soil potentially impacted by other contaminants which cannot be determined with the PID will be done at the discretion of the onsite EM. Monitoring observations will be recorded in a field notebook, and locations and concentrations of head-space readings will be noted.

### **3.2 Other Construction Activities**

If additional construction areas for the Sunrise Powerlink outside of the three targeted zones along Alpine Boulevard are suspected to disturb potentially impacted soil, the following procedures shall be implemented.

#### **3.2.1 Visual Monitoring**

The EM will conduct visual monitoring during construction activities for the Sunrise Powerlink which are suspected to disturb potentially impacted soil. Visual observation will identify stained or discolored soil which may indicate a previous release of hazardous materials to the subsurface. The presence of odorous soil or soil containing other potentially hazardous materials (i.e. burn debris) will also be noted as an indication of potential impacts. Soils with visible indications of impacts will be segregated for characterization prior to disposal. Monitoring observations will be recorded in a field notebook and locations of visually impacted soil will be noted.

#### **3.2.2 Air Monitoring**

If odorous or potentially impacted soil is encountered, a PID will be used by the EM to monitor ambient air in the work zone in the vicinity of the potential impacts. In addition to the focused air monitoring for worker health and safety purposes, air monitoring will be used to identify soils to be segregated for characterization prior to disposal. The results of the air monitoring will be recorded in the daily field sheets.

Field screening of soil samples for petroleum hydrocarbons will be conducted by the EM using a PID and the head-space screening method discussed in Section 3.1.2.

### **3.3 Record Keeping and Reporting**

The EM will maintain records of monitoring and sampling activities conducted during the monitored activities. The locations of impacted soil and bin numbers where soil is stored will be recorded in daily summary logs. The EM will also document the potential constituents of concern (COCs) in each bin, and designate the sampling methodology to characterize each bin for disposal (Section 4.1). Field monitoring results and soil sample analytical data will be tabulated at the conclusion of the construction activities. SDG&E, or their authorized representative, will report the findings of field monitoring and laboratory analyses to the appropriate agency as required.

#### **4. DISPLACED SOIL MANAGEMENT**

During the trenching activities in impacted areas, impacted soil will be placed into roll-off bins, stored at designated staging areas, and covered, pending receipt of laboratory analysis. A licensed waste hauler will be consulted prior to the start of construction to provide a sufficient number of 20 cubic-yard roll-off bins to the designated staging area as needed. Characterization and disposal of impacted soil is described in the following subsections.

##### **4.1 Soil Characterization**

Prior to disposal, two soil samples from each roll-off bin (one from each half of bin) of impacted soil will be collected and analyzed in accordance with San Diego Department of Environmental Health (DEH) Site Assessment and Mitigation (SAM) Manual [DEH, 2004]. Soil samples will also be analyzed in accordance with disposal facility acceptance requirements, and the observations of the onsite EM. Based on previous investigations along Alpine Boulevard, petroleum hydrocarbons are the most likely contaminants to be encountered. COCs encountered in soil may result from the presence of petroleum hydrocarbons. However, other potential hazardous materials which may be encountered during construction include pesticides, metals, and solvents. Anticipated laboratory analyses include:

- Total petroleum hydrocarbons, extended range, by EPA method 8015M;
- Volatile Organic Compounds by EPA Method 8260; and
- Metals by EPA Method 6010

Based on the field screening described in Section 3, the onsite EM evaluate the presence of potential COCs, collect samples for laboratory analysis, track the contents of roll-off bins used, and assist in coordinating proper waste disposal.

##### **4.2 Disposal**

Once laboratory analytical data for a specific roll-off bin is received, the data will be forwarded to a certified disposal for waste classification (Non-Hazardous, California-Hazardous, or Resource Conservation and Recovery Act [RCRA] Hazardous Waste) and manifesting. The concentrations of COCs in soil will be used for waste classification and identifying an appropriate disposal location. Non-hazardous soil generated during construction activities is anticipated to be disposed at an approved local Class III landfill such as:

Otay Landfill  
1700 Maxwell Road  
Chula Vista, California 91911  
Phone: (619) 421-3773

or:

Sycamore Landfill  
14494 Mast Blvd  
Santee, CA 92145  
Phone: (619) 562-0530

If the impacted soil is characterized as California-Hazardous or RCRA hazardous waste, the appropriate disposal facility will be identified. SDG&E, a Contractor for SDG&E or a designated agent will sign disposal manifests prior to offsite transportation for disposal.

During construction activities, concrete and or asphalt type debris may be generated. Concrete and/or asphalt type debris may be sent to a demolition materials processing company for recycling. If the concrete and/or asphalt type material is not acceptable for recycling, it may be sent to a local Class III landfill approved for such use.

#### **4.3 Transportation**

For each applicable construction area, a staging area will be identified to stage roll-off bins for storing soil. Access and egress routes for delivering bins to the specific staging areas will be developed by the construction contractor when staging yards are identified. Access and egress routes will be provided to the waste hauler by the construction contractor to allow for rapid and efficient delivery of roll-off bins to the staging yard and/or disposal facility.

During transport, roll-off bins containing soil shall be covered. The loaded trucks will proceed directly to a designated disposal facility as described in Section 4.2 of this SMP. For impacted soils, the transportation company will be responsible for having proof of valid hauler registration with the California EPA and shall ensure that all vehicles are properly registered, operated, and placarded in compliance with local, state, and federal requirements. Loading and transporting of soil will be conducted in such a manner that the generation of dust is minimized. Dust suppression will be managed through the application of water spray and/or suspending loading activities. If at any time, dust emissions are observed to be causing adverse affects off-site, the EM will suspend field activities until the problem is corrected.

The transportation contractor will be required to follow Spill Response Guidelines in compliance with Federal regulations 49 CFR 172.602. The transportation contractor will ensure that each driver is equipped with an Emergency Response Guidebook and is properly trained to respond to an emergency. The onsite EM will observe the contaminated soil loading and other related activities, and will follow the requirements of the HASP. The excavation contractor will be responsible for ensuring that transportation activities are in accordance with this SMP and their Health and Safety Program.

#### **4.4 Transportation Route**

For disposal of non-hazardous materials, soils may be transported to the selected Class III

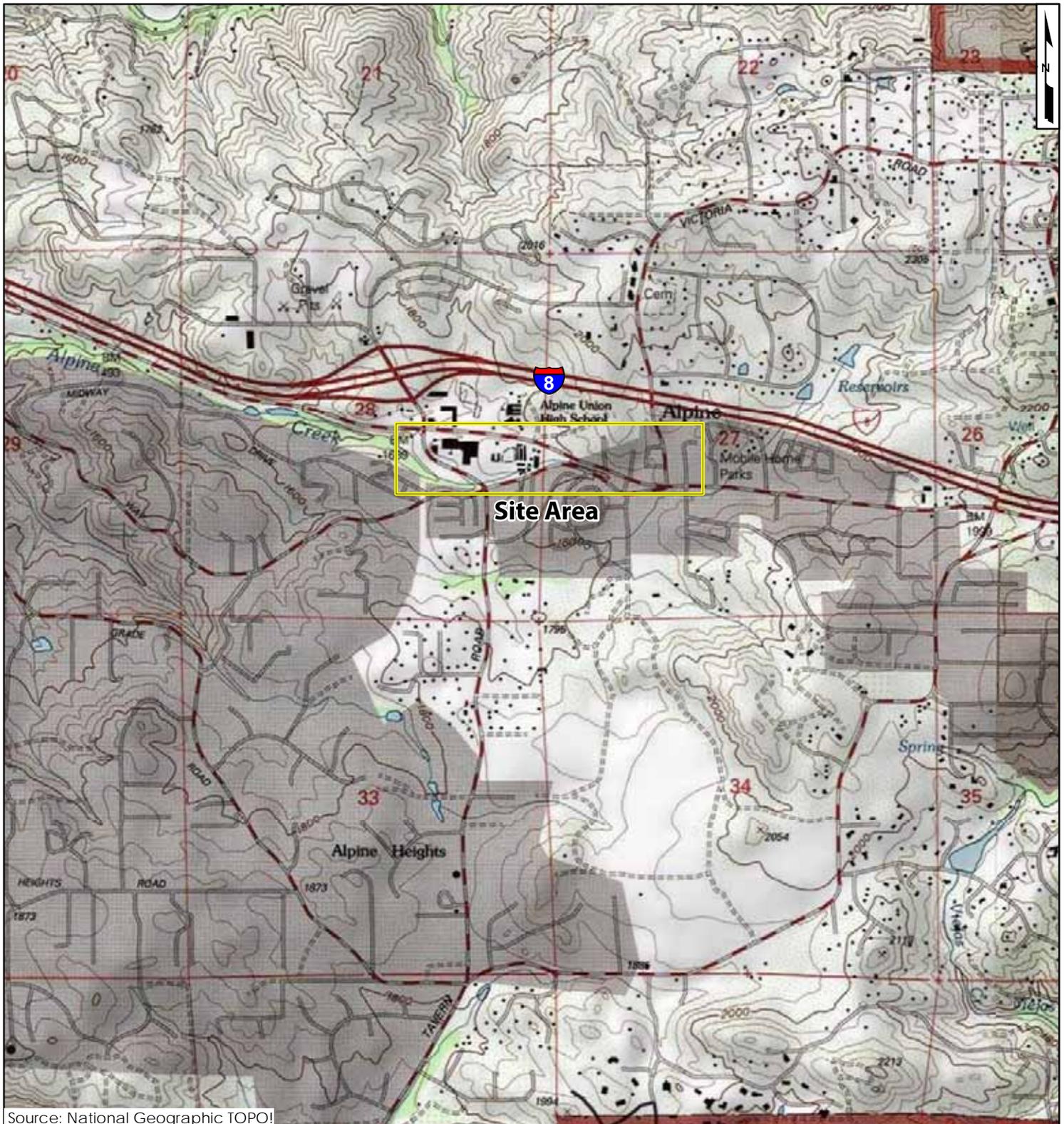
Landfill. If excavated material is characterized as California-hazardous or RCRA hazardous waste, the disposal contractor will be consulted to determine the transportation route from the specific staging yard to the disposal facility.

5. **REFERENCES**

County of San Diego Department of Environmental Health (DEH), Land and Water Quality Division, 2004. "Site Assessment and Mitigation (SAM) Manual 2004" 22 January 2004.

California Regional Water Quality Control Board, San Diego Region (RWQCB), 1999. *Addendum No. 1 to Order No. 93-86, Waste Discharge Requirements For Soils Containing Nonhazardous Concentrations Of Petroleum Hydrocarbons, Organic and Inorganic Compounds, Metals, and Pesticides.* 8 June 1999.

# FIGURES



Source: National Geographic TOPO!



2,000 1,000 0 2,000 Feet



**Site Location**  
**Potentially Impacted Zone Area**

Soil Management Plan  
 Sunrise Powerlink  
 Alpine, California

**Geosyntec**  
 consultants

**Figure**

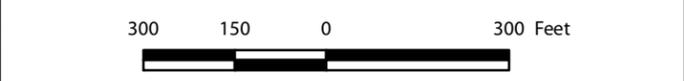
**1**

San Diego

May 2010



Legend	
	Environmentally Superior Southern Route
	Zone 1 Stations 172+00 through 169+00
	Zone 2 Stations 158+00 through 158+50
	Zone 3 Stations 130+00 through 127+00



<b>Potentially Impacted Zone Detail</b>	
Soil Management Plan Sunrise Powerlink Alpine, California	
	
San Diego	May 2010
<b>Figure</b> <b>2</b>	