

M A N U A L



BEST MANAGEMENT PRACTICES MANUAL FOR WATER QUALITY CONSTRUCTION

Geosyntec Project No. SW0186

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Why Is There A Need for This Manual?

Sempra Energy's Environmental Policy states in part, "Sempra Energy believes in treating the Earth's resources with respect. We are committed to protecting and conserving the environment and the health and the safety of our employees, our customers, and the diverse communities in which we operate and provide service." Therefore, Sempra Energy companies will:

- Meet applicable environmental laws, regulations, and permit requirements.
- Join customers, civic leaders and other community leaders in providing sound and responsible stewardship of our environment.
- Incorporate appropriate environmental management and compliance in strategic planning and operational decisions."

Municipalities (Cities, Counties, and Special Districts) have passed storm water ordinances intended to protect storm sewer systems and receiving water bodies from sediment, chemical, and biological pollutants. These ordinances require storm water Best Management Practices (BMPs) for construction projects and construction activities that disturb soil. Due to the numerous municipalities in the San Diego Gas & Electric (SDG&E) service territory, there is a need to consolidate the various municipal BMP requirements for consistent and cost effective construction practices. This manual has been written to supplement the operational procedures of SDG&E to meet the municipal storm water ordinance requirements within SDG&E's service territory. Municipal storm water ordinances include prohibitions regarding erosion, sedimentation and discharge of other pollutants without reference to soil disturbance area and include construction "like" activities that include construction or operation and maintenance activities that can impact the municipal storm water conveyance systems. These activities include saw cutting, potholing, trenching, excavation (including trench and excavation dewatering) and stockpiling. Therefore, this BMP manual is applicable to the above construction and construction "like" activities, including field operations and maintenance activities, regardless of soil disturbance area or its location. This manual is also applicable to construction "like" activities at SDG&E facilities, such as Construction & Operations (C&O) facilities, supplementing the Facility Storm Water Management Plan (SWMP) or Storm Water Pollution Prevention Plan (SWPPP) BMPs.

Construction or demolition activities that include any land disturbance of one (1) acre or more are subject to storm water control regulations in the California Construction General Storm Water Discharge Permit (CGP) established by the California State Water Resources Control Board (SWRCB) Order No. 2009-009-DWQ. This CGP has many new requirements compared to the previous permit (Order No. 99-08-DWQ) and requires electronic submittal of the Notice of Intent (NOI), risk assessment, site map, project specific SWPPP, and annual report requirements. Projects subject to the CGP must establish a project-specific construction site risk level based on the site-specific sediment discharge risk and the site's receiving water risk. These two factors are used to determine the project risk, which is assigned as Risk Level 1, 2, or 3 for traditional (non-linear) projects or Type 1, 2, or 3 for linear underground/overhead (LUP) projects. CGP requirements are more stringent for higher Risk Levels or Types. The CGP established numeric discharge limits for turbidity and pH for Risk Level/Type 2 and 3 sites. All projects risk levels/types must implement minimum BMPs and perform visual monitoring in accordance with the CGP. In addition, the CGP has specific certification requirements for those that prepare SWPPPs (i.e., "Qualified SWPPP Developers") and those that implement requirements in the field (i.e., "Qualified SWPPP Practitioners").

The purpose is to update the manual and BMP details to reflect requirements of the new California Construction General Storm Water Discharge Permit (CGP) (California State Water Resources Control Board (SWRCB) Order No. 2009-009-DWQ), which became effective on July 1, 2010 as well as to update information related to SDG&E operations and activities.

Many of the construction activities of SDG&E are linear in nature, unique to utility work, and do not correspond to typical large development project BMPs. There is a continuing need to tailor typical BMPs to utility type work and utility work crews. This manual incorporates the above mandates of Sempra Energy's Environmental Policy. The manual is the result of surveying the available governmental, association, and industry sources of construction BMPs, and the selection and editing of BMPs appropriate to SDG&E construction activities and personnel.

A Note Regarding Impacts to Construction Cost and Scheduling

It is important for a project's or activity's budget and schedule to include BMP selection, implementation and maintenance costs and time horizons into the design and construction of a project. It is also important that there is a mechanism to hand-off the BMP portion of a project to the appropriate SDG&E Operations and Maintenance Department for final stabilization and post-project permanent BMP maintenance (including final and post-construction costs). A project's field Environmental Representative will be able to assist in estimating and incorporating these costs and scheduling considerations into the project or construction activity.

BMP PROGRAM OVERVIEW

Water Quality Construction BMP Manual

The purpose of this Water Quality Construction BMP Manual (Manual) is to provide standardized BMPs to reduce or eliminate pollutants in runoff from SDG&E construction projects and construction activities for water quality protection. This Manual applies to SDG&E's construction projects and activities that disturb soil. This manual also applies to SDG&E's contractors performing such work as part of their contractual obligations. SDG&E's service area encompasses approximately 4,000 square miles of diverse terrain from Southern Orange County to the Mexican border. Many of SDG&E's projects and work activities throughout the service area are subject to coverage under the National Pollutant Discharge Elimination System (NPDES) CGP and its conditions, and/or local municipal storm water ordinance requirements. Because of the breadth of jurisdictions and requirements that apply to SDG&E's utility construction projects and activities, this Manual has been developed to provide a consistent approach to water quality management to be applied by SDG&E and their contractors throughout the SDG&E service area.

Most construction projects performed by SDG&E are linear projects which are often short term, and are low impact on narrow corridors of land. Many of the BMPs presented in this Manual have used the best and most practical pollution prevention features from several sources, such as the SWRCB, the California Stormwater Quality Association (CASQA), local municipalities, and California Department of Transportation (Caltrans) BMP Manuals, that have been modified to integrate into our utility construction activities but are also compliant with the applicable regulations and ordinances.

This Manual is organized into three main sections:

- BMP Program Overview.
- BMP Selection and Implementation.
- BMP Details.

The BMP Details section is divided into four functional BMP categories:

- Sediment Controls.
- Waste and Materials Management Controls.
- Non-Storm Water Discharge Controls.
- Erosion Control.

Within each of these categories, specific information, including "What," "When," "Where" and "How" to implement the BMP, plus maintenance and inspection information, are provided for each BMP. Pictures and diagrams are also provided for many of the BMPs for easy reference. Photographs provided in this Manual have been primarily obtained from URS Corporation, Geosyntec Consultants, California Department of Transportation (Caltrans), CASQA, and SDG&E.

The Manual is a tool designed to assist with the identification of BMPs appropriate for use on a construction or activity site. The Manual provides guidance to SDG&E for meeting regulatory water quality requirements for utility construction and maintenance activities that involve disturbance of soil. The BMP selection process provides users with guidance for the selection of typical BMPs that may apply to standard SDG&E construction activities. During BMP selection, the users of this Manual should take into account the benefits and limitations of each of the BMPs considered in the context of the site conditions. Finally, BMP success is contingent not only on appropriate selection and implementation, but also on the coordination and communication between project management, Field Environmental Representatives, and the field construction teams.

BMP PROGRAM OVERVIEW

Utility Type Projects

Most SDG&E projects are very different from commercial or residential developments, building sites, and Caltrans projects. Many SDG&E projects are smaller, short term, and impact narrow corridors of land. SDG&E projects are constantly progressing along the route. Often, SDG&E projects are in the right-of-ways of streets or along SDG&E utility corridors that must be maintained to ensure safe access to gas and electric lines and where temporary BMPs are initially installed for a short period of time during construction, followed by soil stabilization BMPs as necessary.

Training Program

Training for construction storm water pollution prevention and control is part of SDG&E's overall Water Quality Pollution Prevention Program. All applicable company employees and contractors hired by the company have the responsibility to comply with environmental laws, regulations, and permit requirements. Training for the prevention of environmental-related incidents is conducted for applicable SDG&E employees who perform any operation or activity that has the potential to cause a pollutant to be released into the environment, including construction activity. Records are maintained as to when employees have received this training and instruction.

Contractor responsibilities, including environmental training of their employees, are specified in the terms and conditions of the contract between SDG&E and the contractor.

Applicable employees should know and contact their local Field Environmental Representatives for support and guidance on any aspects of the training program.

BMP SELECTION AND IMPLEMENTATION

General Protocol BMP

To select BMPs that are appropriate for a given project, the following steps should be followed:

- Step 1 - In the project's design phase, identify "Permanent" or "Structural" BMPs required by the local municipality or the CGP. These BMPs are often stated in the requirements as "Post-Construction" or "Permanent" BMPs.
- Step 2 - Identify construction activities and the associated pollutants and issues of concern
- Step 3 - Evaluate site conditions and select applicable BMPs
- Step 4 - Implement, monitor, and maintain the BMPs

Step 1 - Identify "Permanent" or "Structural" BMPs required by Local Municipalities and/or the SWRCB General Construction Storm Water Permit.

Municipalities may have a Standard Urban Stormwater Mitigation Plan (SUSMP) or equivalent, and other requirements such as a requirement for conformance with the California Green Building Standards Code (CalGreen Code). These Plans and Codes may require:

- Permanent stabilization of exposed soil surfaces and slopes to minimize erosion and sedimentation. Stabilization structures and/or the planting of vegetation may be required.
- Matching post-construction runoff to pre-construction runoff, utilizing the 85th percentile storm event to reduce the risk of impact to the receiving water's channel morphology and provide some protection of water quality.
- Use of Low Impact Development (LID) practices. LID practices are environmentally sustainable practices that benefit water supply and contributes to water quality protection. Unlike traditional storm water management, which collects and conveys storm water runoff through storm drains, pipes, or other conveyances to a centralized storm water facility or outfall, LID takes a different approach by using site design and storm water management to maintain the site's pre-development runoff rates and volumes. LID practices include; Impervious surface reduction & disconnection; bio-retention facilities or rain gardens, grass swales and channels, vegetated rooftops, rain barrels, cisterns, vegetated filter strips, and permeable pavements.

Step 2 - Identify Activities, Pollutants, and Issues of Concern

The second step in BMP selection is to identify the construction activities, the associated potential pollutants, and the local issues of concern. Construction activities may include saw cutting, potholing, trenching, excavation, stockpiling of soil, grading and grubbing, new access road construction, paving, or other activities with the potential to impact storm water and non- storm water discharges. Pollutants of concern may include: sediment; petroleum products such as fuel, oil, and grease from vehicle and equipment operation; paving materials such as concrete and asphalt components; other materials used or stored on site, such as pesticides, herbicides, fertilizer, detergents, paint, adhesives, and solvents; and project wastes such as litter, debris, hazardous wastes, and liquid wastes. The local issues of concern may include:

- Proximity to sensitive receiving waters (environmentally sensitive areas or Clean Water Act Section 303(d) listed water bodies, particularly those meeting the criteria for "sediment sensitive" receiving waters identified in the CGP, example: Upper Newport Bay
- Local regulatory requirements influencing BMP selection, or timing of BMP implementation.

BMP SELECTION AND IMPLEMENTATION

Step 3 - Evaluate Site Conditions and Select BMPs

To assist in BMP selection, this Manual presents BMPs that are anticipated to be most applicable to utility construction projects and construction activities. Most SDG&E utility projects are unique in that they are typically very short-term, low impact on narrow corridors of land, and have minimal exposure of soil or transportable materials at any one time to storm water. The selector should consider any project-specific requirements or factors such as BMP effectiveness, cost, availability, feasibility, and suitability for the site. For example, important site conditions to consider include the amount of soil disturbance, anticipated weather conditions, soil type and erodibility, flow path length, and slope of exposed soil. Selected BMPs can and should be modified to suit the scope of the project and site conditions.

Table 1 presents guidelines for BMP selection and implementation at a construction site. Table 2 presents a BMP selection worksheet for utility activities. These implementation guidelines and selection worksheet can be used to select BMPs for a specific project or construction activity. Finally, a selector may discover a better BMP for their situation not listed in Tables 1 or 2. The Environmental Services Department encourages creative and practical pollution prevention techniques. These new techniques can be shared with others to support the water quality goals of the region.

Step 4 - Implement, Monitor, and Maintain the BMP System

It is important that selected BMPs be implemented in a sequence that maximizes protection of water quality, be monitored regularly for effectiveness and be maintained as necessary throughout the project. Appropriate BMPs must be implemented year round. Additional BMPs will be implemented when needed, and/or when a storm event is forecasted or occurs. Table 1 presents a suggested schedule for BMP implementation and sequencing. Steps in this schedule should be reviewed for each project as applicable. All BMPs should be monitored and inspected regularly and particularly before and after rain events, or in compliance with the frequency specified in the CGP, if applicable. BMPs should be maintained during a project in accordance with the procedures outlined in the BMP Details Section.

BMP Installation Contractors and BMP Material Suppliers

Construction crews will implement most BMPs. This Manual identifies some SDG&E utility activities and operations that may require outside contractors to install the applicable BMPs. As needed, please consult with the Environmental Services Department, Water Quality for the most current contractor listings and contractual arrangements.

BMP SELECTION AND IMPLEMENTATION

Table 1
BMP SELECTION AND SEQUENCING GUIDE

Step No.	Description	What to Do	BMP Options (see Table 2 for BMP activities)
1.	Design Stage and Before Construction	Contact the Field Environmental Representative early, at the beginning of a project, and provide him/her with the project information on the current environmental project information form. This information will allow the Environmental Department to identify environmental concerns such as, but not limited to, permitting requirements, potentially required structural BMPs, and the identification of endangered species and/or impaired water bodies that must be avoided or mitigated. As another example, before construction, it may be necessary to evaluate, mark, and protect important trees and associated rooting zones, unique areas (e.g., wetlands), and other areas to be preserved.	Local SUSMP, CalGreen Code, or General Construction Storm Water Permit requirements 4-01, other user-defined BMPs
2.	Site Access Areas (construction entrances, roadways, equipment parking areas)	Stabilize site entrances and access roads if applicable prior to earthwork.	1-07, other user-defined BMPs
3.	Storm Drain/Drainage Inlet Protection	Install inlet protection at down-gradient inlets that project runoff/tracking might impact.	1-06, other user-defined BMPs
4.	Perimeter Sediment Control	Install perimeter sediment controls (silt fence, fiber rolls, etc.) as applicable prior to soil disturbing activities. Install additional runoff control measures during construction as needed.	1-02, 1-03, 1-04, 1-05, other user-defined BMPs
5.	Material and Waste Storage Areas	Prepare staging areas and material storage and disposal areas, as applicable, to reduce run-on and runoff. Install perimeter control, obtain clean-up materials, plastic covers for stockpiles, etc. prior to storing materials on site.	2-01 through 2-08, 1-08, other user-defined BMPs
6.	Drainage Control and Run-on Diversion	Install run-on controls to direct run-on around or through the site to minimize erosion in addition to sediment control measures.	4-01 through 4-13, other user-defined BMPs
7.	Earthwork (trenching, excavation, grading, surface roughening, grubbing)	Begin excavation, trenching, or grading after installing applicable sediment and runoff control measures. Install additional control measures as work progresses as needed.	1-01 through 1-08, other user-defined BMPs
8.	Surface Stabilization (temporary and permanent seeding, mulching)	Apply temporary or permanent soil stabilization measures as applicable on all disturbed areas where work is delayed or completed.	4-01 through 4-08, other user-defined BMPs

BMP SELECTION AND IMPLEMENTATION

Table 1 (continued)
BMP SELECTION AND SEQUENCING GUIDE

Step No.	Description	What to Do	BMP Options (see Table 2 for BMP activities)
9.	Construction and Paving (install utilities, buildings, paving)	Implement applicable control practices as work takes place.	3-01 through 3-9, other user-defined BMPs
10.	Final Stabilization and Landscaping	Stabilize open areas as applicable. Remove temporary control measures and install final stabilization controls appropriately (topsoil, trees and shrubs, permanent seeding, mulching, sod, riprap)	3-07, 4-03, 4-04, other user-defined BMPs

BMP SELECTION AND IMPLEMENTATION

Table 2
BMP SELECTION WORKSHEET FOR UTILITY ACTIVITIES

Utility BMP No.	BMP Options	Construction						Maint. and Repair					
		Overhead Electric	Underground Electric	Potholing	Underground Gas	Boring/Directional Drilling	Pipe Spans	Gen. Maint. and Repair	Inspect and Repair	Tree Trimming	Veg. Control	Other	
Section 1 Sediment Controls													
Choose from one or more of the following BMP options when applicable:													
BMP 1-01	Scheduling												
BMP 1-02	Silt Fence												
BMP 1-03	Fiber Rolls												
BMP 1-04	Gravel Bag Berm												
BMP 1-05	Sand Bag Barrier												
BMP 1-06	Storm Drain/Drainage Inlet Protection												
BMP 1-07	Tracking Controls												
BMP 1-08	Stockpile Management												
BMP 1-09	Sediment Basin												
BMP 1-10	Sediment Trap												
BMP 1-11	Check Dam												
BMP 1-12	Active Treatment Systems (ATS)												
Other-User Defined	BMP Description:												
Section 2 Waste Management and Material Controls													
Choose from one or more of the following BMP options when applicable:													
BMP 2-01	Material Delivery and Storage												
BMP 2-02	Material Use												
BMP 2-03	Spill Control												
BMP 2-04	Solid Waste Management												
BMP 2-05	Hazardous Materials/Waste Management												
BMP 2-06	Contaminated Soil Management												
BMP 2-07	Sanitary/Septic Waste Management												
BMP 2-08	Liquid Waste/Drilling Fluid Management												
Other-User Defined	BMP Description:												

BMP SELECTION AND IMPLEMENTATION

Table 2 (continued)
BMP SELECTION WORKSHEET FOR UTILITY ACTIVITIES

Utility BMP No.	BMP Options	Construction						Maint. and Repair					
		Overhead Electric	Underground Electric	Potholing	Underground Gas	Boring/Directional Drilling	Pipe Spans	Gen. Maint. and Repair	Inspect and Repair	Tree Trimming	Veg. Control	Other	
Section 3 Non-Storm Water Discharge Controls													
Choose from one or more of the following BMP options when applicable:													
BMP 3-01	Dewatering Operations												
BMP 3-02	Paving Operations												
BMP 3-03	Vehicle and Equipment Washing												
BMP 3-04	Vehicle and Equipment Fueling												
BMP 3-05	Concrete/Coring/Saw cutting and Drilling Waste Management												
BMP 3-06	Dewatering Utility Vaults												
BMP 3-07	Over-Water Protection												
BMP 3-08	Paint Removal Control												
BMP 3-09	Temporary Stream Crossing												
BMP 3-10	Clear Water Diversion												
Other-User Defined	BMP Description:												
Section 4 Erosion Control and Soil Stabilization													
Choose from one or more of the following BMP options when applicable:													
BMP 4-01	Preservation of Existing Vegetation												
BMP 4-02	Temporary Soil Stabilization (General)												
BMP 4-03	Hydraulic Mulch												
BMP 4-04	Hydroseeding												
BMP 4-05	Soil Binders												
BMP 4-06	Straw Mulch												
BMP 4-07	Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats												
BMP 4-08	Dust (Wind Erosion) Control												
BMP 4-09	Diversion Berms and Drainage Swales												
BMP 4-10	Velocity Dissipation Devices												
BMP 4-11	Slope Drains												

BMP SELECTION AND IMPLEMENTATION

Table 2 (continued)
BMP SELECTION WORKSHEET FOR UTILITY ACTIVITIES

Utility BMP No.	BMP Options	Construction						Maint. and Repair				
		Overhead Electric	Underground Electric	Potholing	Underground Gas	Boring/Directional Drilling	Pipe Spans	Gen. Maint. and Repair	Inspect and Repair	Tree Trimming	Veg. Control	Other
BMP 4-12	Streambank Stabilization											
BMP 4-13	Soil Preparation											
Other-User Defined	BMP Description:											

BMP DETAILS

The previous section provides details for the selection and implementation of BMPs for the most common utility construction activities. Once the BMP objectives are defined, it is necessary to identify the category or categories of BMPs that are best suited to meet each objective.

A category is a grouping of BMPs related in how they prevent pollution. The four categories are:

- **Section 1 - Sediment Controls**
- **Section 2 - Waste Management and Material Controls**
- **Section 3 - Non-Storm Water Discharge Controls**
- **Section 4 - Erosion Control and Soil Stabilization**

BMP DETAILS 1



Section 1 - Sediment Controls

Why Are Sediment Controls Needed?

Sediment controls are needed to provide a secondary or back-up mechanism to erosion control techniques to prevent sediment discharges from a site. Erosion controls are designed to prevent erosion (the detachment of soil particles from the surface by rain, flowing water or wind), whereas sediment controls are designed to trap soil particles once dislodged by rain, flowing water, or wind. Sediment particles (soil/dust) from construction, operations, and maintenance (construction like) activities can be transported to a different location by wind or water flow. Once these particles have become detached, they can be transported by wind or runoff to water bodies where they can cause damage to aquatic life by burying the animals or plants or reducing oxygen and/or sunlight that is necessary for their survival. Soil particles can also carry other damaging pollutants with them. Displaced sediment from these activities is therefore considered a pollutant by water quality regulatory agencies.

What are Sediment Controls?

Sediment controls include any method that aids in trapping soil particles after they have been detached and moved by wind or water. Sediment controls are usually passive systems that rely on filtering or settling the particles out of the water or wind that is transporting them. The sediment that has accumulated by the BMPs can be redistributed as excess soil on the construction site. Sediment controls are most effective in retaining sediment on site when used in combination with erosion control BMPs. Sediment Controls presented in this Manual include the following:

- BMP 1-01 Scheduling
- BMP 1-02 Silt Fence
- BMP 1-03 Fiber Rolls
- BMP 1-04 Gravel Bag Berm
- BMP 1-05 Sand Bag Barrier
- BMP 1-06 Storm Drain/Drainage Inlet Protection
- BMP 1-07 Tracking Controls
- BMP 1-08 Stockpile Management
- BMP 1-09 Sediment Basin
- BMP 1-10 Sediment Trap
- BMP 1-11 Check Dams
- BMP 1-12 Active Treatment Systems (ATS)



What	Scheduling consists of the planning of soil disturbance activities to avoid periods of rain whenever practical.
When	Scheduling of soil disturbance activities must be considered year-round.
Where	All construction and “construction like” operations and maintenance sites where soil disturbance activities take place.
How	<p>Use the following measures as applicable:</p> <ul style="list-style-type: none">• Consider scheduling major soil disturbing activities or activities near environmentally sensitive areas (e.g., adjacent to water bodies) during prolonged periods when no rain is forecast.• Monitor the weather forecast for seasonable and unseasonable rain events. Obtain weather information from the National Weather Service at<ul style="list-style-type: none">◦ www.srh.noaa.gov/• Print and maintain copies of forecasts to document decisions related to inspections and BMP implementation for projects subject to the CGP.• Appropriate sediment controls are required year round. Always be prepared to deploy additional erosion and sediment control and soil stabilization BMPs as needed. Off site sediment discharges can occur because of unseasonable rain, vehicle tracking, unanticipated wind, and non-storm water discharges.• Sequence work to minimize soil-disturbing activities during forecasted rain events.• Limit disturbed soil area to the amount of acreage that can be protected prior to a forecasted rain event.• Stabilize disturbed soil areas as soon as practical, and always prior to a forecasted rain event (See Section 4, Soil Erosion BMPs for soil stabilization methods).• Protect environmentally sensitive areas, such as drainage channels, streams, and natural watercourses.• When rain is forecast, adjust the construction schedule to implement soil stabilization and sediment controls on all disturbed areas prior to the onset of rain.
Maintenance and Inspection	<ul style="list-style-type: none">• Review applicable scheduling and sequencing of construction activities throughout the project or activity to minimize the total area of exposed soil and the exposed soil exposure time.• Inspect erosion and sediment controls prior to and after each storm event, and routinely throughout the construction and/or clean-up activity. If inspections warrant construction BMP changes, amend the schedule accordingly.



Pictures



Corresponding CASQA Fact Sheet

Fact Sheet EC-1



What	Silt fences are temporary linear sediment barriers made of permeable fabric that lets water through but prevents the majority of sediment from passing through. Silt fences also act by intercepting and slowing the flow of sediment-laden runoff and allowing sediment to settle from the runoff before water leaves the construction site.
When	<ul style="list-style-type: none"> Silt fences are designed to intercept sheet flows to moderately concentrated flows. Generally, silt fences shall be used in conjunction with soil stabilization source controls up slope (see Section 4) to provide effective control, particularly for steep slopes, and slopes adjacent to water bodies or Environmentally Sensitive Areas (ESAs). Consider BMP 1-03 "Fiber Rolls" for minor slopes or perimeter sediment control on flat or slightly sloped areas.
Where	<p>Silt fences are placed:</p> <ul style="list-style-type: none"> Below the toe of exposed and erodible slopes. Down-slope of exposed soil areas. Around temporary stockpiles. Along streams and channels. Along the perimeter of a project. Consider BMP 1-03 "Fiber Rolls" for small stockpiles and perimeters of areas with shallow slopes.
How	<ul style="list-style-type: none"> Construct silt fences with a setback of at least 3 feet from the toe of a slope in areas suitable for temporary ponding or deposition of sediment. Where a 3-foot setback is not practical, construct as far from the toe of the slope as practical. Construct the length of each reach (length of fence) so that the change in base elevation along the reach does not exceed one-third of the barrier height; each reach should not exceed 500 feet. The last 6 feet of the reach should be turned up slope. The maximum length of slope draining to the silt fence should be 200 feet or less. Excavate a trench approximately 6 inches wide and 6 inches deep to place the bottom of the silt fence into, ensuring that is not wider or deeper than necessary. Key-in, or bury the bottom of silt fence fabric in the trench and tamp into place. If it is not feasible to trench along the slope contour, use sand bags or backfilling to key in the bottom of the fabric. Install fence posts at least 12 inches below grade on the down slope side of trench. Silt fences should not be used to divert water. Silt fences should not be considered for installation below slopes steeper than 1:1 (vertical: horizontal) or that contain a high number of rocks or loose dirt clods unless the rocks are removed and erosion and soil stabilization controls (Section 4) are used up slope.
Maintenance and Inspection	<ul style="list-style-type: none"> Repair or replace split, torn, slumping, undercut or weathered fabric. Note that fabric may need to be replaced when installation is required for more than 5 to 8 months due to limited durability.





Maintenance and Inspection (cont.)

- Inspect silt fences prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Remove accumulated sediment when it reaches one third of the barrier height. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state and local requirements.
- Silt fences that are damaged and become unsuitable for the intended purpose shall be removed and disposed of and replaced with new silt fence barriers or other applicable control.
- Remove silt fence when no longer needed and after up-gradient areas are permanently stabilized. Fill and compact post-holes and the anchor trench, remove sediment accumulation, and work the surface of the fence alignment to blend with adjacent ground.

Pictures



Silt fence installed with at least a 3 foot setback from the toe of an erodible slope. Note that use is combined with fiber rolls and serves as perimeter control.

Corresponding CASQA Fact Sheet

Fact Sheet SE-1



What A fiber roll (straw waddle) consists of straw, flax or other similar materials that are rolled and bound into a roll. The fiber roll lets water through but prevents the majority of sediment from passing through. Fiber rolls also act by intercepting and slowing the flow of sediment-laden runoff and allowing sediment to settle from the runoff before water leaves the construction site. In sensitive vegetation areas, only certified weed-free rice straw is to be used.

When Fiber rolls are used for sheet flow or where flows are slightly to moderately concentrated.

Where Fiber rolls are generally placed on the face of slopes at regular slope intervals to intercept runoff, reduce flow velocity, release the runoff as sheet flow and provide sediment removal.

- May be used along the top, face and at grade breaks of exposed and erodible slopes to shorten slope length and spread runoff as sheet flow.
- Fiber rolls are appropriate for perimeter site control or along streams, channels, storm drain inlets, or around stockpiles to intercept sediment-laden storm water and non-storm water runoff.

How Installation

- Locate fiber rolls on level contours spaced in accordance with the CGP requirements for LUP Type 2 & 3 and Risk Level 2 & 3 sites as follows:

Slope Grade	Spacing (sheet flow length not to exceed)
0-25%	20 feet
25-50%	15 feet
Over 50%	10 feet

- In non-paved areas, stake fiber rolls into a trench that is the width of the roll and one-third the depth of the roll (2- to 4-inch deep trench).
- Drive stakes into fiber rolls at a minimum of 4-foot intervals.
- If more than one fiber roll is placed in a row, fiber rolls should be overlapped and not abutted together.

Removal

- When used in a permanent application, fiber rolls can be left in place.
 - Permanent fiber rolls are typically encased with a biodegradable material.
 - Note that removal can result in greater soil disturbance.
- When used for a temporary application as storm drain inlet protection or stockpile control for example, the fiber rolls should be removed at the completion of the construction cleanup activity in that area.
 - Temporary fiber rolls are typically encased with plastic netting that does not biodegrade.
 - Remove fiber rolls only when up gradient areas are stabilized and/or pollutant sources are no longer a hazard.

SEDIMENT CONTROLS

Fiber Rolls (Waddles)

BMP 1-03



How (cont.)

- Remove fiber rolls before vegetation becomes too mature to avoid unnecessary soil and vegetation disturbance.
 - If fiber rolls are removed, collect and dispose of fiber roll and sediment accumulation as appropriate in accordance with federal, state and local requirements. Trapped sediment may be incorporated into the construction site. Fill and compact holes, trenches, depressions, or any other ground disturbance to blend with adjacent ground.
- Note that the cost of disposal of wet fiber rolls may be more expensive than dry fiber rolls.

Maintenance and Inspection

- Repair or replace spilt, torn, unraveling, or slumping fiber rolls.
- Inspect fiber rolls if rain is forecasted and perform maintenance as needed.
- Inspect fiber rolls prior to and after each rain event, and daily during extended rain events throughout the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Do not use fiber rolls containing polyacrylamide or other flocculants. Use is considered "active treatment" and is subject to ATS requirements of the CGP (see BMP Detail 1-12).

Pictures



Fiber rolls as perimeter control.

SEDIMENT CONTROLS

Fiber Rolls (Waddles)

BMP 1-03



Pictures (cont.)



Fiber roll installation on the face of a slope.

Corresponding CASQA Fact Sheet

Fact Sheet SE-5



What	A gravel bag berm consists of at least a single row of gravel bags that are installed end-to-end to form a barrier across a slope to intercept runoff.
When	<p>Use gravel bag berms:</p> <ul style="list-style-type: none"> • When needed to reduce storm water flow velocity, release the runoff as sheet flow, and provide some sediment removal. • Gravel bag berms can also be used when flows are moderately concentrated and when it is desirable to filter sediment in runoff. Gravel bag berms are generally more permeable than sand bags.
Where	<ul style="list-style-type: none"> • Ditches, swales, and storm drain inlets • Gravel bag berms are also appropriate for perimeter site control or along streams, channels, storm drain inlets, or around stockpiles to intercept sediment laden storm water and non-storm water runoff. • Along the face and at grade breaks of exposed and erodible slopes to shorten slope length and spread runoff as sheet flow. • Gravel bags may be implemented with other BMPs to maximize sediment containment. • Sand bag barriers should be used in cases where it is desirable to block and pond flows (BMP 1-05 "Sand Bag Barrier").
How	<ul style="list-style-type: none"> • When used as a linear control for sediment removal: <ul style="list-style-type: none"> ○ Install along a level contour. ○ Turn ends of gravel bag row up slope to prevent flow around the ends. ○ Generally, gravel bag barriers are used in conjunction with temporary soil stabilization controls up slope to provide effective control. • When used for concentrated flows: <ul style="list-style-type: none"> ○ Stack gravel bags to required height. When the height requires 3 rows or more, use a pyramid approach. ○ Upper rows of gravel bags shall overlap joints in lower rows. • Construct gravel bag barriers with a setback of at least 3 feet from the toe of a slope. Where a 3-foot setback is not practical, construct as far from the toe of the slope as practical.
Maintenance and Inspection	<ul style="list-style-type: none"> • Perform routine inspections of gravel bag berms prior to and after each storm event, and daily during extended rain events throughout the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP. • Reshape or replace gravel bags as needed. • Repair washouts or other damage as needed. Note that bags may need to be replaced when installation is required for more than 6 months due to limited durability. • Inspect gravel bag berms for sediment accumulations and remove sediment when accumulation reaches one-third of the berm height. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state and local requirements.

SEDIMENT CONTROLS

Gravel Bag Berm

BMP 1-04



Maintenance and Inspection (cont.)

Pictures

- Remove gravel bag berms when no longer needed and when feasible, recycle gravel fill. Remove sediment accumulation, and clean, re-shape, and stabilize the area. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state and local requirements.



Gravel bags and fiber rolls used as perimeter sediment controls.



Gravel bags used as perimeter control.

Corresponding CASQA Fact Sheet

Fact Sheet SE-6



- What** A sand bag barrier is a temporary linear sediment barrier consisting of at least one row high of sand bags placed end-to-end, designed to intercept and slow sediment-laden storm water and non-storm water runoff. Sand bag barriers allow sediment to settle from runoff before water leaves the construction site. Sand bag barriers tend to block and pond storm water flows.
- When**
- During construction or operation and maintenance activities in streambeds when the contributing drainage area is small.
 - To capture and detain non-storm water flows.
 - When site conditions or activity sequencing require adjustments or relocation of the barrier to meet changing field conditions and needs during construction.
 - To temporarily close or continue broken, damaged or incomplete curbs.
- Where** Sand bag barriers are used:
- To divert or direct flow away from disturbed slopes or create a temporary sediment basin.
 - Where flows are moderately concentrated, such as ditches, swales, and storm drain inlets to divert and/or detain flows.
 - Along the perimeter of a site, vehicle and equipment fueling and maintenance areas, chemical storage areas, or stockpiles.
 - Below the toe or down slope of exposed and erodible slopes.
 - Parallel to streams, channels, and roadways.
 - Across channels to serve as a barrier for utility trenches or provide a temporary channel crossing for construction equipment, or to reduce stream impacts.
 - Caution - do not use sand bag barriers in traffic areas or other areas where potential flooding is possible. Consider use of BMP 1-03 "Fiber Rolls" or BMP 1-04 "Gravel Bag Berms."
- How**
- When used as a linear control for sediment removal:
 - Install along a level contour.
 - Turn ends of sand bag row up slope to prevent flow around the ends.
 - Generally, sand bag barriers shall be used in conjunction with temporary soil stabilization controls up slope to provide effective control.
 - When used for concentrated flows:
 - Stack sand bags to required height. When the required height is three rows or more, use a pyramid approach. Upper rows of sand bags shall overlap joints in lower rows.
 - Construct sand bag barriers with a setback of at least 3 feet from the toe of a slope. Where a 3-foot setback is not practical, construct as far from the toe of the slope as practical.



Maintenance and Inspection

- Perform routine inspections of sand bag barriers prior to and after each storm event, and daily during extended rain events throughout the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP. Repair washouts or other damages as needed.
- Note that bags may need to be replaced when installation is required for more than 6 months due to limited durability.
- Inspect sand bag barriers for sediment accumulations and remove sediments when accumulation reaches one-third the barrier height.
- Remove sand bags when no longer needed and when feasible, recycle fill. Remove sediment accumulation, and clean, re-grade, and stabilize the area. Incorporate removed sediment at appropriate project locations or disposed of in accordance with federal, state and local requirements.

Pictures



Sand bags used as perimeter control.

Corresponding CASQA Fact Sheet

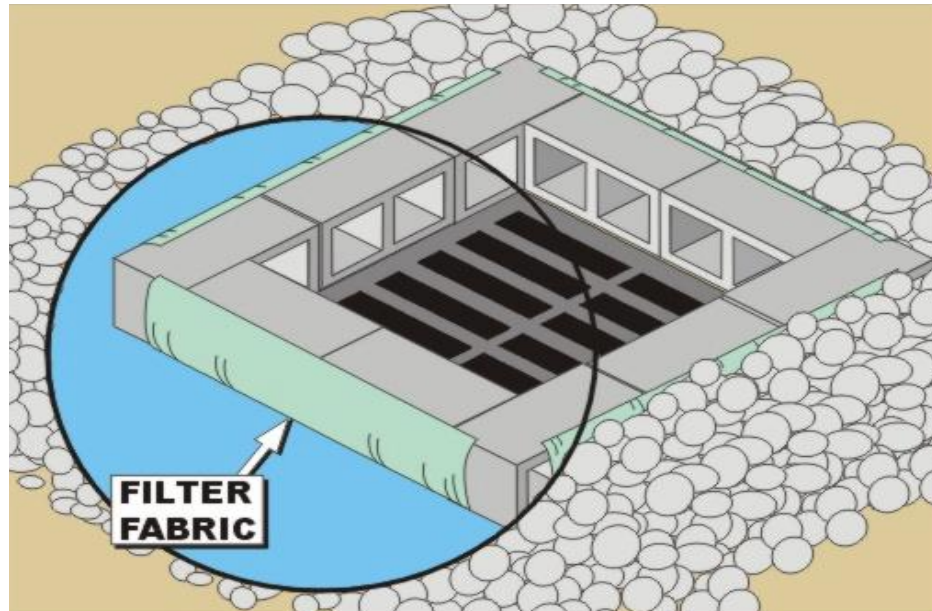
Fact Sheet SE-8



What	A BMP or a combination of BMPs used at storm drains or other drainage inlets to protect against the discharge of sediment-laden storm water and non-storm water runoff from construction or operational and maintenance activities. The BMP slows or ponds the storm water flow, giving the sediment time to settle out before discharge to the storm drain.
When	This BMP is required on all construction projects and operation and maintenance sites when sediment laden surface runoff may enter a storm drain inlet and/or drainage to watercourses. Do not construct when runoff will result in ponding into road traffic or onto erodible surfaces or slopes, or overflow onto the sidewalk.
Where	At downstream storm drain and/or drainage inlets that have the potential to be impacted by construction or "construction like" operation and maintenance activity, site storm water run-off, or non-storm water discharges.
How	<ul style="list-style-type: none"> Identify all downstream storm drain inlets or drainages that have the potential to receive runoff or non-storm water discharges from construction activities. Where a storm drain or drainage inlet is on or at the bottom of a slope, a series of small check dams (i.e., gravel bag berms) constructed at intervals along the slope may be required to slow the runoff. See BMP 1-11. Select appropriate protection and construct inlet protection based on the configuration of inlets at the site. Some municipalities require removal of BMPs from storm drains within 72 hours of a rain event (e.g., City of San Diego requires removal of inlet protection in the case that 0.25 inch or greater of rain is predicted). Consult with your project Field Environmental Representative for local requirements. Remove inlet protection devices at the end of the construction period, or when the inlet can no longer be impacted by the project or activity.
Maintenance and Inspection	<ul style="list-style-type: none"> Perform routine inspections of BMPs prior to and after storm event, and daily during extended rain events throughout the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP. During inspections: <ul style="list-style-type: none"> Inspect bags, silt fence, or filter fabric for holes, gashes, and snags. Check gravel bags for proper arrangement and displacement. Remove the sediment behind the barrier when it reaches one-third of the barrier height. Removed sediment should be incorporated in the project or disposed of in accordance with federal, state and local requirements.



Pictures



Block and gravel-type inlet protection.



Inlet protection that blocks flow, preventing non-storm water discharges from entering drain.

SEDIMENT CONTROLS

Storm Drain/Drainage Inlet Protection

BMP 1-06



Pictures (cont.)



Gravel bag inlet protection.



Inlet protection using fiber rolls and filter fabric.

Corresponding CASQA Fact Sheet

Fact Sheet SE-10



What	Tracking controls consist of constructed/manufactured steel plates (rumble plates) or gravel. Tracking controls reduce offsite tracking of sediment and other pollutants by providing a stabilized entrance at defined soil disturbance activity site entrances and exits with materials that aid in removing sediment from vehicles, especially their tires or tracks. Controls can also consist of providing methods to clean-up sediment or other materials to prevent them from entering a storm drain, such as sweeping or vacuuming. Tracking controls can also include implementing tire washing.
When	<ul style="list-style-type: none"> Stabilized entrances/exits should be implemented on each soil disturbance site having a defined entrance/exit consisting of soil which terminates into a paved roadway or substantial paved surface. Stabilized entrances/exits are in addition to other applicable BMPs. Daily sweeping or vacuuming should be implemented when sediment is tracked from the site onto public or private paved roads, typically at points of site exit. Install and implement tire washing when the above methods are not adequately controlling track-out.
Where	<p>Use stabilized entrances and/or sweeping (and tire washing, if needed) at construction and "construction like" operations and maintenance activity sites:</p> <ul style="list-style-type: none"> where dirt or mud is tracked onto public roads; adjacent to water bodies; where poor soils are encountered, such as soils containing clay; and where dust is a problem during dry weather conditions.
How	<p><u>Stabilized Entrances</u></p> <ul style="list-style-type: none"> Limit the points of entrance/exit to the construction or operations and maintenance site by designating combination or single purpose entrances and exits. Require all employees, subcontractors and others to use them. Limit speed of vehicles to control dust. Where feasible, grade each construction entrance/exit to prevent runoff from leaving the construction site. Route runoff from stabilized entrances/exits through a sediment-trapping device before discharge (see BMP 1-10). Design stabilized entrance/exit to support heaviest vehicles and equipment. Select construction access stabilization (aggregate, asphaltic concrete, concrete) based on longevity, required performance, and site conditions. Use of constructed or constructed/manufactured steel plates with ribs for entrance/exit access is allowed. If aggregate is selected, place crushed aggregate over geotextile fabric to at least 12 inches deep, or place aggregate to a depth recommended by a geotechnical engineer. A crushed aggregate greater than 3 inches but smaller than 6 inches shall be used. <p><u>Street Sweeping and Vacuuming</u></p> <ul style="list-style-type: none"> Inspect potential sediment tracking locations routinely. Visible sediment tracking should be swept or vacuumed as needed. Manual sweeping is appropriate for small jobs.



How (cont.)

- For larger projects, it is preferred to use mechanical sweeping methods that collect removed sediment and material.
- If not mixed with debris or trash, incorporate the removed sediment back into the project or dispose of in accordance with federal, state and local requirements.

Tire Washing

- Design wash rack to support the heaviest traffic loads.
- Provide a turnout or doublewide exit to avoid traffic from entering through the tire washing area.
- Design a drainage ditch to route all rinse or wash waters from the tire washing area to a sediment trapping device (see BMP 1-10) to prevent any wash runoff from leaving the site.
- Hoses should be equipped with automatic shutoff nozzles.

Maintenance and Inspection

Stabilized Entrances

- Inspect routinely for damage and assess effectiveness. Remove sediment and repair if the stabilized entrance/exit is clogged with sediment.
- Perform routine inspections of BMPs, prior to and after storm events, and daily during extended rain events throughout the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the CGP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Where tracking has occurred on roadways, sweeping should be conducted the same day. Water should not be used to wash sediment off the streets, unless necessary. If water is used, it must be captured, preventing sediment-laden water from running off the street or site.
- Keep all temporary roadway ditches clear.

Street Sweeping and Vacuuming

- Inspect silt fences prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Inspect all site paved access roads daily and remove any sediment or other materials on the roads by vacuuming or sweeping daily, as needed, and prior to any rain event in accordance with the CGP Risk Levels 2 & 3 requirements.
- Be careful not to sweep up any unknown substance or any object that may be potentially hazardous.
- After sweeping is finished, properly dispose of sweeper wastes.

Tire Washing

- Inspect BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Inspect rack and/or sediment trap system routinely for damage and assess effectiveness. Remove accumulated sediment to maintain system performance.



Pictures



Manufactured metal plates knock dirt off vehicle tires before exiting a site.



Drive through wheel wash before exiting a site.

Corresponding CASQA Fact Sheet

Fact Sheets TC-1, TC-2, TC-3, and SE-7



What	Stockpile management consists of placing temporary BMPs, such as secured covers, over the piles, and/or placing berms, silt fences, fiber rolls, sand/gravel bags or straw bale barriers around the perimeter of stockpiles. Soil stabilizers/binders may also be used to augment stockpile management (BMP 4-05).
When	<p>Use this BMP when construction projects or operation and maintenance activities require stockpiled soil, waste materials, and/or paving materials. Protection of stockpiles must be implemented whenever there is a potential for transport of materials by a water source or by wind.</p> <ul style="list-style-type: none">• Construction and waste material stockpiles require protection from rain and wind at all times unless actively being used (protect during non-activity). Projects with SWPPPs require protection at the end of each day.
Where	Stockpiles at construction and “construction like” operation and maintenance activity sites, protecting against both run-on and run-off.
How	<p>One or more of the following options may be used to manage stockpiles and prevent stockpile erosion and sediment discharges for storm water and non-storm water runoff/run-on.</p> <ul style="list-style-type: none">○ Stockpile may be returned to the excavation if precipitation is forecast.○ Sufficient BMP materials for temporary stockpile protection should be available onsite. Select cover materials or methods based on anticipated duration.○ Protect stockpiles from storm water run-on and sediment runoff from the stockpiles using a temporary perimeter sediment barrier such as berms, silt fences, fiber rolls, sand/gravel bags, or straw bale barriers, as appropriate.○ Cover stockpiles to prevent erosion. Note that the CGP requires that inactive stockpiles be covered. Where feasible, cover/protect stockpiles using a soil binder, according to BMP 4-05. Alternately, secure stockpiles with covers such as Visqueen weighted down with gravel bags, or sand bags. Plastic should be properly re-used or disposed of properly. Note the CGP discourages the use of plastic materials for cover when more sustainable alternatives can be used.○ Stockpiles may be hauled off or temporarily stored in a protected location off site. <ul style="list-style-type: none">• Keep stockpiles organized and surrounding areas clean.• Protect storm drain inlets, watercourses, and water bodies from stockpiles, as appropriate.• Implement dust control practices as appropriate on all stockpiled material.• Stockpiles should be covered, stabilized, or protected prior to the onset of precipitation.• Repair and/or replace covers, and perimeter containment structures as needed.• Inspect BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.

**IMPORTANT
POINT**



**Maintenance
and
Inspection**



Pictures



Stockpile covered with plastic and secured with large rocks.



Silt fence used for stockpile perimeter control.

**Corresponding
CASQA
Fact Sheet**

Fact Sheet WM-3



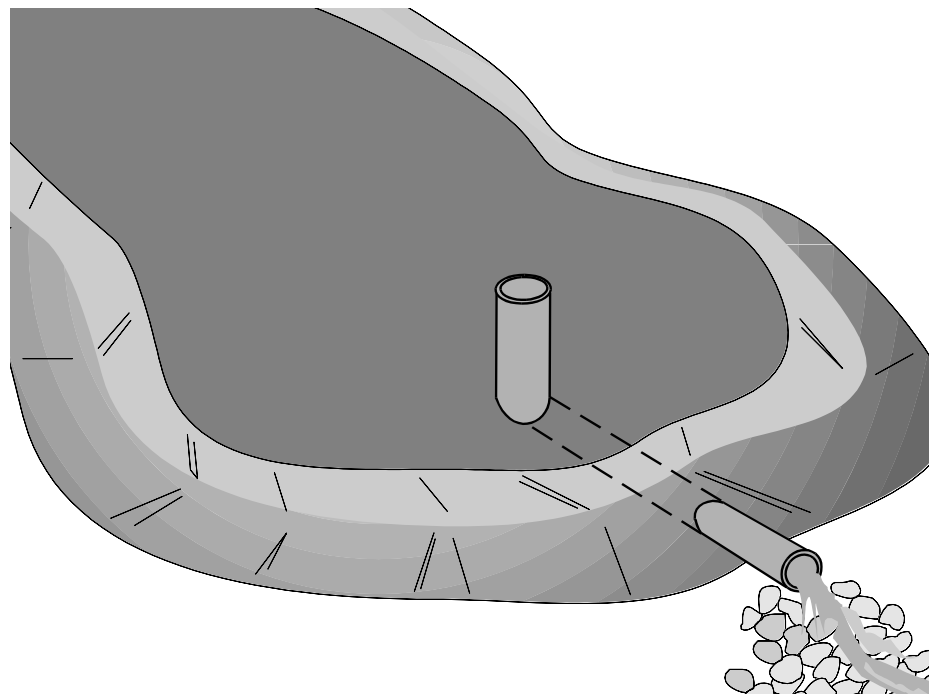
What	Sediment basins are temporary basins formed by excavation or by constructing an embankment to temporarily detain sediment-laden runoff, allowing sediment to settle out before water leaves the site. The CGP specifies that sediment basins be designed per the CASQA fact sheet SE-2, therefore, this BMP provides general guidance and the CASQA handbook reference.
When	<p>Sediment basins are appropriate:</p> <ul style="list-style-type: none">• If sediment-laden water may enter a drainage system or watercourse.• If areas are disturbed during the rainy season, in association with dikes, temporary channels, and pipes to convey runoff from disturbed areas.• To construct before land disturbance, when feasible.• In conjunction with erosion controls.
Where	<p>Sediment basins are suitable on larger projects with sufficient space for the basin, and should be considered:</p> <ul style="list-style-type: none">• Where maintenance is possible year-round.• Within property limits, and where failure will not result in loss of life, building damage, or interruption of public roads or utilities.• At the outlet of disturbed areas draining generally between 5 and 75 acres, evaluated on a site-specific basis.• Where post-construction detention basins are required.
How	<p>Design the sedimentation basin in accordance with CASQA fact sheet SE-2.</p> <ul style="list-style-type: none">• In general, the basin depth must be no less than 3 feet, not including freeboard, which includes a sediment storage zone and a settling zone of at least 1 and 2 feet deep, respectively.• Include features to accommodate overflow or bypass flows that exceed the design storm event.• Utilize rock, vegetation, or other erosion control measures to protect the basin inlet, outlet, and slopes against erosion.• Continuous fencing should be provided around the sedimentation basin to prevent unauthorized entry.



Maintenance and Inspection

- Inspect BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Inspect basin banks for seepage and structural soundness.
- Check inlet and outlet structures, spillway, and fencing for damage or obstructions. Repair damage and remove obstructions as needed.
- Remove accumulated sediment when it reaches 1/2 of the basin height or in accordance with the SWPPP requirements. Removed sediment shall be incorporated into the project appropriately or disposed of in accordance with federal, state and local requirements.
- Remove accumulation of any vegetation during every inspection.
- Remove standing water from the basin within 72 hours after accumulation to prevent the production of mosquitoes.
- Completely remove basin when no longer needed. Remove sediment accumulation. Fill and compact excavation, any fencing post-holes and anchor trench, and blend the surface with the adjacent ground.

Pictures



Corresponding CASQA Fact Sheet

Fact Sheet SE-2



What Sediment traps are small, temporary containment areas where sediment-laden runoff is detained, allowing sediment to settle from the runoff before water leaves the site. Sediment traps are formed by excavating or constructing an earthen embankment across a waterway or low drainage area, and usually have a gravel outlet. Sediment traps only remove large and medium-sized soil particles and require upstream erosion control.

When Sediment traps are appropriate:

- If the drainage area is less than 5 acres.
- If sediment-laden water may enter a drainage system or watercourse.
- Construction or operation and maintenance activity occurs in small drainage areas with no unusual drainage features, and short-duration construction activities.
- To construct before land disturbance, when feasible.
- In conjunction with upstream erosion controls.

Where Sediment traps are suitable on sites with sufficient space to allow for infiltration and sediment settling, and should be considered:

- Outside the area being graded, but as near as practical to sediment producing areas, with access for maintenance.
- At the perimeter of a site, at one or more locations where sediment-laden runoff is discharged offsite, to a storm drain or watercourse.
- Around or upslope from storm drain inlet protection measures.
- Within property limits and where failure will not result in loss of life, building damage, or interruption of public roads or utilities.



• **Should not be located in streams unless properly permitted with regulatory agencies. Consult with the Field Environmental Representative.**

How

- Design the sediment trap per referenced engineering standards or local grading ordinance.
- Trap side slopes should be 1:3 (vertical: horizontal) or flatter.
- Trap should be sized to accommodate a settling zone and sediment storage zone with recommended minimum volumes of 67 yd³/acre and 33 yd³/acre of contributing drainage area, respectively, based on 0.5 inch of runoff volume over 24 hours. Larger or multiple traps may be required to accommodate specific rainfall, soil, or site conditions.
- Traps with an impounding levee greater than 4.5 feet tall, measured from the lowest point of the impounding to the highest point of the levee, and traps capable of impounding more than 35,000 ft³, should be designed by a California Registered Civil Engineer.
- The outlet pipe or open spillway must be designed to convey anticipated peak flows.
- When an earth or stone outlet is used, the outlet crest elevation should be at least 1 foot below the top of embankment.
- When a crushed stone outlet is used, the crushed stone or gravel should meet AASHTO M43, size No. 2 or 24, or its equivalent.

**How
(cont.)**

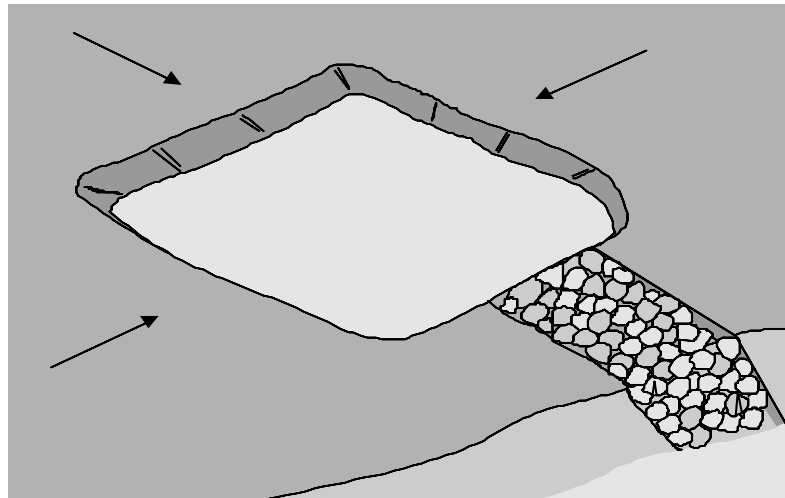
- Clear any vegetation under the embankment and pool area.
- The compacted embankment fill material must be free of roots, vegetation, oversize, or other objectionable material.
- When a riser is used, all pipe joints must be watertight, and at least the top 2/3 of the riser should be perforated with 0.5-inch diameter holes spaced 8 inches vertically and 10 to 12 inches horizontally.
- Utilize rock, vegetation, or other erosion control measures to protect the trap outlets against erosion.
- Fencing should be provided around the trap to prevent unauthorized entry.

**Maintenance
and
Inspection**

- Inspect BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Inspect trap banks for seepage and structural soundness.
- Inspect outlet structures, spillway, and fencing for any erosion, damage, or obstructions. Repair damage and remove obstructions as needed.
- Remove accumulated sediment when it reaches one third of the trap capacity. Removed sediment shall be incorporated in the project appropriately or disposed of in accordance with federal, state and local requirements.
- Remove accumulation of any vegetation during every inspection.
- Water suitable for mosquito production may stand in the sediment trap, particularly if subjected to daily non-storm water flows. Remove standing water from the trap 72 hours after accumulation.
- Remove trap when no longer needed. Remove sediment accumulation, fill and compact excavation, any fencing post-holes, and blend the surface with adjacent ground.
- BMPs that require dewatering shall be continuously attended during dewatering. Dewatering BMPs shall be implemented at all times during such activities.



Pictures



Corresponding CASQA Fact Sheet

Fact Sheet SE-3



What Check dams are small barriers constructed of rock, logs, gravel bags, sandbags, fiber rolls, or other suitable materials, placed across a swale or drainage ditch. Check dams create small pools and reduce the effective slope of the channel, reducing scour and erosion by reducing flow velocity and increasing residence time within the channel. Check dams promote sediment trapping.

When Check dams are appropriate:

- If sedimentation should be promoted behind the dam.
- If erosion protection is desired in small intermittent channels and temporary swales.
- During the establishment of grass linings in drainage ditches or channels.
- If grade control is desired or required.

Where Check dams should be considered:

- In small open channels that drain 10 acres or less.
- In channels to reduce slope and storm water runoff velocities.
- In temporary ditches where the short length of service does not warrant establishment of erosion-resistant lining.



Check dams should not be used:

- **In streams or in channels with flow between storm events.**
- In channels that are already grass-lined, unless erosion potential or sediment-laden flow is expected. Installation of check dams may damage vegetation.

How

- Do not construct check dams with straw bales or silt fence, since concentrated flows quickly wash out these materials.
- Check dams reduce the capacity of the ditch or swale. Alternative BMPs or an increased swale or ditch size may be necessary or the size of the ditch or swale may need to be increased to prevent overtopping.
- Maximum slope and velocity reduction is achieved when the toe of the upstream dam is at the same elevation as the top of the downstream dam. The center section of the dam should be lower than the edge sections (at least 6 inches), acting as a spillway, so that the check dam will direct flows to the center of the ditch or swale.
- The check dam should be installed along a level contour and should completely span the ditch or swale to prevent washout.
- Install the first check dam approximately 16 feet from the outfall device and at regular intervals based on slope gradient and type.
- Check dams should be placed at a distance and height to allow small pools to form between each check dam.
- For multiple check dam installation, backwater from a downstream check dam should reach the toe of the upstream check dam.
- High flows (typically a 2-year storm or larger) should safely flow over the check dam without an increase in upstream flooding or damage to the check dam.



How (cont.)

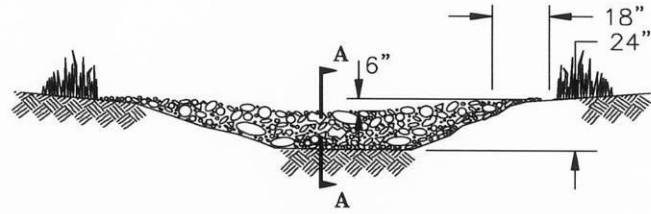
- Rock check dams are usually constructed of 8 to 12 inch rock placed individually by hand or mechanically, but never dumped. The rock used should be large enough to stay in place given the expected channel flow. Abutments should be extended 18 inches into the channel bank. Rock can be graded such that smaller diameter rock (2 to 4 inches) is located on the upstream side of larger rock, increasing residence time.
- Log check dams are usually constructed of 4 to 6 inch diameter logs installed vertically, and embedded at least 18 inches into the soil, and can be bolted or wired.
- See BMP 1-03 for installation of fiber roll check dams. Fiber rolls should be trenched in, backfilled, and firmly staked.
- Gravel bag and sand bag check dams are constructed by stacking bags across the ditch or swale. Gravel bags and sand bags used to construct check dams should conform to the requirements of BMP 1-04 and 1-05, respectively. Tightly abut bags and stack in a pyramid fashion no higher than 3 feet. Upper rows shall overlap joints in lower rows.
- Manufactured products used to construct check dams should be installed in accordance with the manufacturer's instructions, and typically requires trenching or anchoring.
- If grass is planted to stabilize the ditch or swale, the check dam should be removed when the grass has matured, unless the slope of the swale is greater than 4 percent.

Maintenance and Inspection

- Check dams require extensive maintenance following high-velocity flows.
- Inspect BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Replace missing, damaged, or degraded rock, bags, rolls, etc.
- If the check dam is used as a grade control structure, sediment removal is not required as long as the system continues to control the grade.
- Sediment can be re-suspended during subsequent storms or removal of the check dam. Remove accumulated sediment when it reaches 1/3 of the barrier height, and prior to permanent seeding or soil stabilization. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state and local requirements.
- Water suitable for mosquito production may stand behind check dams, particularly if subjected to daily non-storm water flows. Remove standing water from the dam 72 hours after accumulation.
- Remove check dam and accumulated sediment when no longer needed.

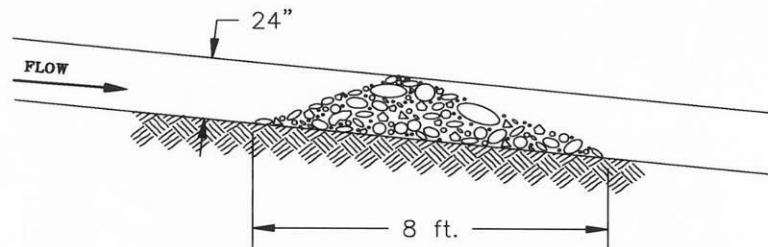


Pictures



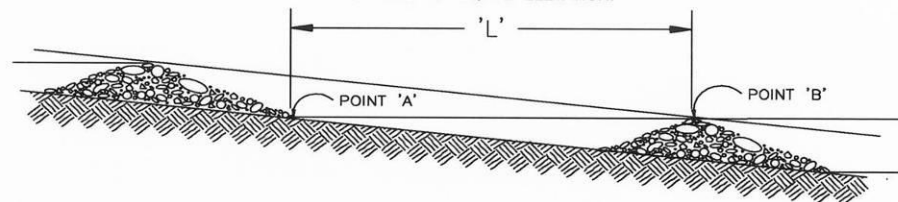
VIEW LOOKING UPSTREAM

NOTE:
KEY STONE INTO THE DITCH BANKS
AND EXTEND IT BEYOND THE ABUTMENTS
A MINIMUM OF 18" TO PREVENT OVER
FLOW AROUND DAM.



SECTION A - A

'L' = THE DISTANCE SUCH THAT POINTS 'A' AND
'B' ARE OF EQUAL ELEVATION.



SPACING BETWEEN CHECK DAMS

Corresponding
CASQA
Fact Sheet

Fact Sheet SE-4



What Active Treatment Systems (ATS) reduce turbidity of runoff by introducing chemicals to storm water through direct dosing or an electrical current to enhance flocculation, coagulation, and sediment settling. Coagulants and flocculants include inorganic salts and polymers which enhance sediment settling and removal and reduce turbidity. The CGP has specific requirements for ATS. Only general guidance for ATS is provided in this BMP; additional details are provided in the CASQA Handbook.

Limitations:



- **Specific permit requirements or mitigation measures such as RWQCB 401 Certification, U.S. Army Corps of Engineers 404 permit, and approval by the California Department of Fish and Game supersede the guidance in this BMP.**
- If numerical water quality standards are mentioned in any permits, testing and sampling may be required. Streams listed as 303(d) impaired for sediment, silt, or turbidity, are required to conduct sampling to verify that there is no net increase in sediment load due to construction activities.

When ATS should be used when a rigorous combination of drainage control, erosion control, and sediment control BMPs are not effective or are not anticipated to be effective based on site soil types (e.g., fine grained or highly erosive soils), proximity to sediment-sensitive receiving waters, and/or other site constraints. Phasing and limiting active areas of disturbance should be considered prior to use of an ATS.

Where ATS should be considered where turbid discharges to sediment and turbidity sensitive waters cannot be avoided using traditional BMPs.

How



- **ATS should be implemented in accordance with the guidance provided in the CASQA Handbook.**
- **Dischargers choosing to utilize chemical treatment in ATS must also follow all guidelines of the CGP Attachment F - Active Treatment System Requirements.**
- ATS must be operated and maintained by experienced personnel meeting CGP training requirements at all times during treatment operations. Visual monitoring for proper performance shall be performed daily and recorded in a data log. The project data log shall include the name, phone number, and training documentation of the person responsible for operating and monitoring ATS.
- Requirements for ATS shall include but are not limited to operational and compliance monitoring, toxicity monitoring for batch and flow-through treatments, numeric effluent limit compliance, operator training, implementation of standard BMPs, and proper sediment removal and disposal.

**Maintenance
and
Inspection**



Pictures

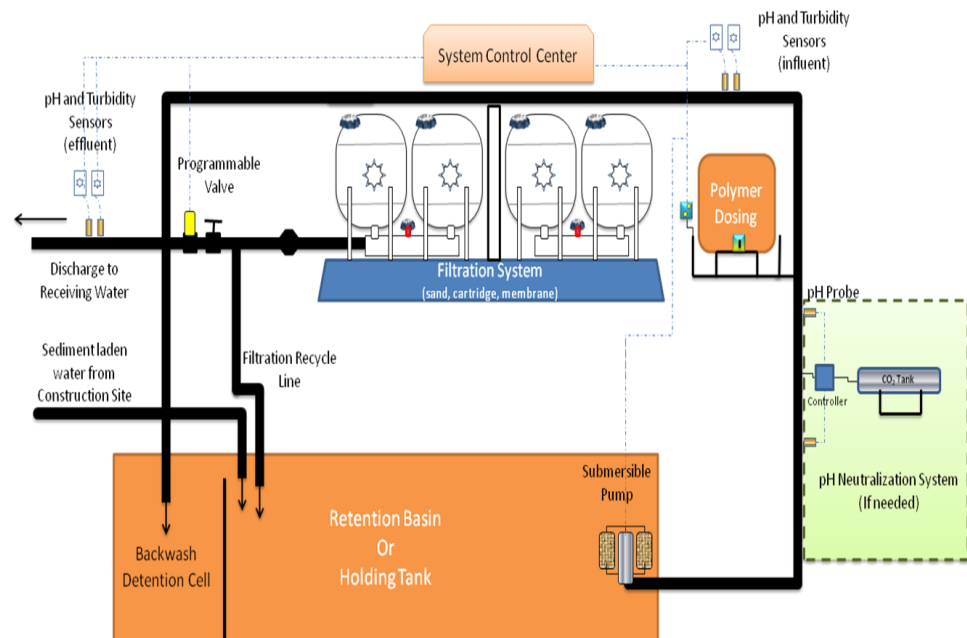


Figure has been adapted from Port of Seattle response to Washington Dept. of Ecology Action Order 2948

Corresponding CASQA Fact Sheet

Fact Sheet SE-11

BMP DETAILS 2



Section 2 – Waste Management and Material Controls

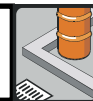
Why Are Waste Management and Material Controls Required?

Federal, state and local laws, regulations, ordinances and permits prohibit the discharge of contaminated storm water to storm drains, drainages, and surface waters. Pollutants such as litter, paint, solvents, fuel, lubricants and demolition wastes, can be transported by runoff from a construction site. These BMPs address pollutants associated with material use and waste management to ensure that all pollutants are properly managed and are not discharged to storm drains, drainages, and surface waters.

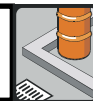
What are Waste Management and Material Controls?

Waste Management and Materials Controls are source control BMPs that reduce or prevent contact between wastes and/or materials and storm water. Waste Management and Materials Controls presented in this Manual include the following:

- BMP 2-01 Material Delivery and Storage
- BMP 2-02 Material Use
- BMP 2-03 Spill Control
- BMP 2-04 Solid Waste Management
- BMP 2-05 Hazardous Materials/Waste Management
- BMP 2-06 Contaminated Soil Management
- BMP 2-07 Sanitary/Septic Waste Management
- BMP 2-08 Liquid Waste/Drilling Fluid Management



What	Material Delivery and Storage Controls are procedural BMPs controlling the delivery and storage of construction materials, supplies and wastes so that storm water run-on and run-off and non-storm water discharges do not contact the material or wastes.
When	This BMP is applicable when it is necessary to store materials at a construction or operations and maintenance site, and does not apply to materials and supplies stored on trucks that are driven on site and off site daily.
Where	All construction or operations and maintenance activity sites where construction material is delivered or stored and has the potential to be contacted by storm water.
How	<p>Use the following BMP measures as appropriate:</p> <ul style="list-style-type: none">• Only store the minimum amount of material that is needed for the job.• Locate storage areas away from storm drain inlets, drainage systems, and watercourses to prevent storm water run-on from reaching the materials.• If practical, store materials in enclosed storage containers such as cargo containers.• Store materials on impervious surfaces or use plastic groundcovers and berms on bare soil to prevent spills or leakage from contaminating the ground.• For known hazardous materials, keep materials covered using plastic or other waterproof materials.• Store chemicals in water tight containers with appropriate secondary containment systems or in a storage shed to prevent contaminated run-off/run-on from leaving storage areas.• Keep an adequate supply of spill kit materials nearby.• Ensure that qualified personnel are available when hazardous materials are delivered to ensure proper delivery and storage in a designated area.• Material Safety Data Sheets (MSDS) should be made available on-site for all materials stored that have the potential to come in contact with storm water.• When a storage area is no longer needed, return it to original condition.• Bagged materials such as cold patch, concrete mix, and other materials with the potential to pollute runoff should be placed on pallets and covered during non-working days and prior to and during rain events.
Maintenance and Inspection	<ul style="list-style-type: none">• Repair or replace covers, containment structures, or perimeter controls as needed to ensure proper function.• Perform Routine BMP inspections of labels on containers and designated delivery and storage areas.• Inspect BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.



Pictures



Materials are covered and neatly stored within a curbed area.

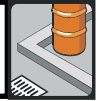
Corresponding CASQA Fact Sheet

Fact Sheet WM-1



What	Material Use is a procedural BMP that controls the amount or use of materials, chemicals and/or hazardous substances stored onsite and minimizes their potential for contact with storm water run-on or runoff or by non-storm water discharges.
When	<p>Apply the Material Use BMP when the following materials are used or prepared on site:</p> <ul style="list-style-type: none"> • Pesticides (herbicides, insecticides, and biocides). • Fertilizers and soil amendments. • Detergents. • Petroleum products such as fuel, oil, and grease. • Asphalt and other concrete components. • Hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds. • Mastic, pipe wrap, primers, and paint. • Concrete compounds. • Welding material. • Other materials that may be detrimental if released to the environment.
Where	All construction and operations and maintenance activity sites that utilize the above materials.
How	<ul style="list-style-type: none"> • Only use products or materials onsite that have been approved through the SDG&E Product Approval process. • Reduce or eliminate use of hazardous materials on site when practical. Contact your Field Environmental Representative for additional information. • Do not remove the original product label; it contains important safety and disposal information. Use the entire product before disposing of the container. • Thoroughly dry empty latex paint cans, used brushes, paint rags, absorbent materials, and drop cloths. These dry wastes may be disposed of with other construction debris. • When possible, mix paint indoors, otherwise use secondary containment structures. Do not clean paintbrushes or rinse paint containers into a street, gutter, storm drain, sanitary sewer or watercourse. • Dispose of any paint thinners, residue, and sludge that cannot be recycled as hazardous waste (see BMP 2-05). For water-based paint, clean brushes to the extent practical, and rinse into a concrete washout pit or temporary sediment trap. Do not allow liquid to discharge to a storm water conveyance system. For oil-based paints, clean brushes to the extent practical and filter and reuse thinners and solvents. • If possible, recycle residual paints, solvents, non-treated lumber, and other materials. • Do not over-apply fertilizers, pesticides, and soil amendments. Prepare only the amount needed. Strictly follow the recommended usage instructions.





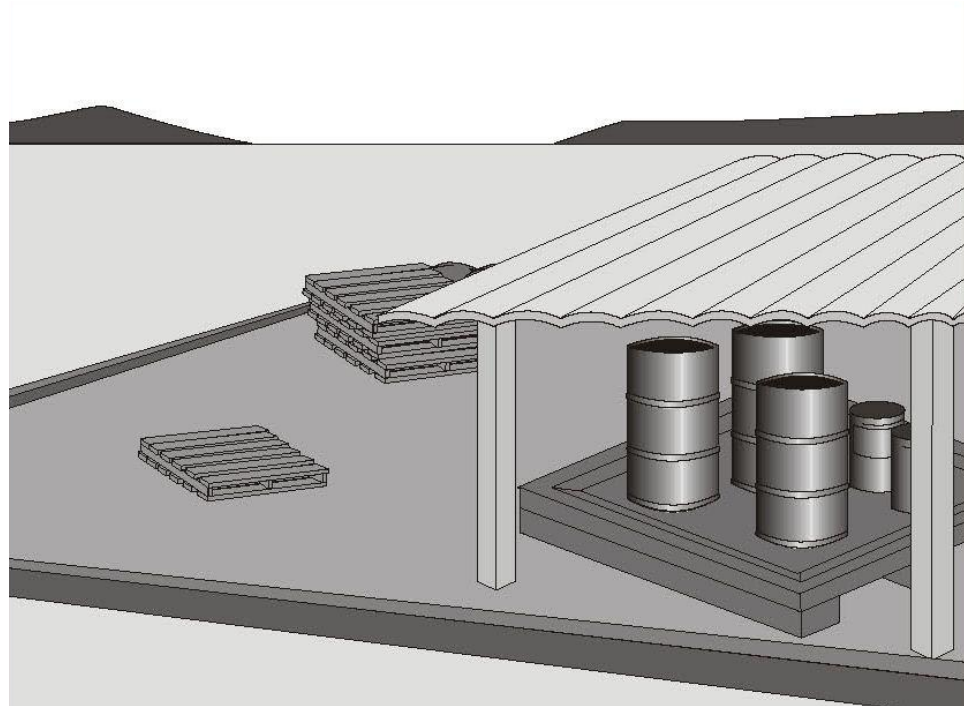
How (cont.)

- For termiticide applications (termite control pesticide) refer to CASQA Fact Sheet WM-2 "Material Use." Note that termiticide can only be applied when it is done in accordance with all applicable federal, state and local labeling requirements and in no case shall it be applied in a manner that would result in either a direct or indirect (e.g., drift) discharge to waters of the US or state.
- Keep an ample supply of spill cleanup material near use areas. Instruct employees in spill cleanup procedures.

Maintenance and Inspection

- Spot-check employees and contractors regularly throughout the job's duration to ensure appropriate practices are being employed.
- Inspect BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable).

Pictures



Corresponding CASQA Fact Sheet

Fact Sheet WM-2



What	Spill Control is a procedural BMP used to control, contain, and clean-up spills on site so that storm water run-on and runoff and non-storm water discharges do not become contaminated.
When	<p>This BMP applies to all personnel present at construction and operations and maintenance activity sites at all times. Spill control procedures are implemented anytime chemicals (liquid or solid form) and/or hazardous materials and/or wastes are handled, used or stored. A single handling, use, or storage of a hazardous material or waste is sufficient to trigger this requirement. Such substances may include, but are not limited to fuels, lubricants, solvents, fertilizers, pesticides, herbicides, soil binders, coolants, paints, and sewage.</p> <p>To the extent that work can be accomplished safely, spills of materials or chemicals shall be contained and cleaned up immediately.</p>
Where	All construction and operations and maintenance activity sites where chemicals and/or hazardous materials and/or wastes are handled, used, or stored.
How	<ul style="list-style-type: none"> • Install and maintain spill control and cleanup kits in areas where any chemicals and/or hazardous materials and/or waste are handled, used and/or stored. • Construction Supervisor, Crew Foreman, or Facility Supervisor and sufficient onsite personnel should be trained in spill control to address potential spills on the site. • Only staff trained on spill response procedure should be used to control spill. • If the spill is a threat to life or the environment, or other emergency situation where emergency medical support, fire department response, or outside assistance is needed, immediately call the 911 Operator and the local emergency response agency (usually the local fire department). Then, promptly call Service Dispatch (Trouble) @ (619) 725-5100 and your supervisor. • For all spills immediately notify the activity and site supervisor and/or the Field Environmental Representative and describe the spill and current situation. The Field Environmental Representative will make any required regulatory agency notifications per Environmental Standard (ES) G7841 and the Company's Release Reporting Scenario Guidance available on the Environmental Services Department website. • If possible, and if you have proper training and personal protective equipment, stop the flow of the spill. If it can be done safely, contain the spill to a confined area. Containment may be able to be accomplished with: <ul style="list-style-type: none"> ○ Earthen berms ○ Sand bags ○ Absorbent booms ○ Absorbent socks <p>Containment material on site as part of the Spill Kit should reflect site characteristics. For guidance, request assistance from the Field Environmental Representative.</p> • To the extent that it doesn't compromise cleanup activities, spills shall be covered and protected from storm water run-on/-off during rain events.



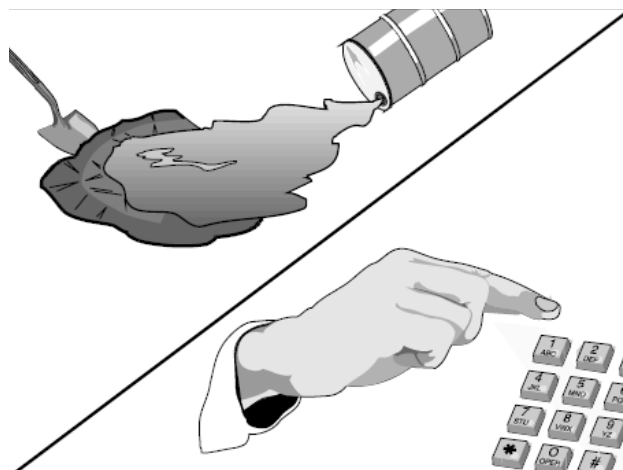
How (cont.)

- Immediately clean the impacted area, and properly dispose of any impacted materials.
 - Spills shall not be buried, except as necessary for immediate interim containment purposes. Spilled material and impacted burial material must be removed as soon as possible after proper control and containment and properly disposed of.
 - Use absorbent materials on spills to thoroughly clean up the material to the maximum extent possible. Spills shall not be diluted with water or other liquid for purposes of mitigating the spill (the solution to pollution is not dilution). When it is necessary to use water or other liquid for final cleaning and decontamination of a spill, the water or other liquid shall not be allowed to enter storm drain inlets, drainages, or watercourses, and shall be collected and disposed of properly. Coordinate disposal of these wastes with the Field Environmental Representative.
- Used clean up materials, contaminated materials, and recovered spill material shall be stored and disposed of in accordance with federal, state and local regulations and BMP 2-05 "Hazardous Materials/Waste Management."

Maintenance and Inspection

- Perform routine inspections to verify that spill control clean-up materials are located near material storage, unloading, and use areas prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable).

Pictures

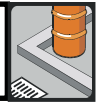


Corresponding CASQA Fact Sheet

Fact Sheet WM-4

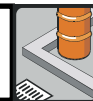


What	<p>Solid Waste Management is a procedural BMP used to minimize site non-hazardous solid waste generation, and control the contact of site non-hazardous solid waste with storm water or non-storm water runoff.</p> <p>Examples of potential solid wastes requiring management control BMPs include, but are not limited to:</p> <ul style="list-style-type: none">• Concrete, cement, asphalt rubble, masonry brick/block.• Vegetation debris, general trash, and materials used to transport and package construction materials.• Steel and scrap metals, pipe, electrical cuttings and equipment parts.• Hazardous Materials/Waste Management is covered in BMP 2-05.
When	<p>During all phases of construction or operations and maintenance activities</p>
Where	<p>These BMPs should be used on all construction projects and operations and maintenance activities that generate solid waste.</p>
How	<ul style="list-style-type: none">• Practice good housekeeping and keep site clean.• Use dry methods for site cleanup such as sweeping, vacuuming and hand pick-up.• Designate a waste storage area on site. If a designated waste storage area is not feasible, remove wastes from the site regularly.• Prohibit littering by employees, contractors and visitors.• Trash receptacles with lids or weatherproof covers should be available on site and/or on construction vehicles.• Cover or close lids of all waste containers at the end of each day and prior to rain.• Protect wastes from being washed away by rain, storm water run-on, or other waters (irrigation, water line breaks, etc.).• To prevent storm water run-on from contacting stored solid waste (stockpiled materials) use berms, secondary containment, covered dumpsters/roll-offs or other temporary diversion structure or measures (BMP 1-08 "Stockpile Management").• For materials with the potential for spills or leaks, stockpile the material on impervious surfaces or on plastic groundcovers to prevent spills or leaks infiltrating the ground.• Do not hose out or clean out dumpsters or containers at the construction site.• Prevent solid waste and trash from entering and clogging storm drain inlets.• As practical, incorporate any removed clean sediment and soil back into the project.
Maintenance and Inspection	<ul style="list-style-type: none">• Collect site trash regularly, especially before rainy or windy conditions. Perform routine inspections of site, including storage areas, dumpsters, stockpiles and other areas where trash and debris are collected prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Close trash can lids and dumpster covers at the end of each day and before rainy or windy conditions.



**Corresponding
CASQA
Fact Sheet**

Fact Sheet WM-5



What Hazardous Materials/Waste Management is a procedural BMP for the use, control, containment, and disposal of hazardous materials and waste. This BMP is to be used in conjunction with SDG&E Environmental Standard (ES) G 8724 Hazardous Materials/Waste Management.

Examples of potential hazardous materials and waste requiring management control BMPs may include, but are not limited to:

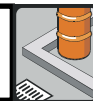
- Petroleum products such as oil, fuel, grease, cold mix, and tar.
- Glues, adhesives, and solvents.
- Herbicides, pesticides, and fertilizers.
- Paints, stains, and curing compounds.
- Other hazardous or toxic substances.

When Use this BMP during all phases of construction or operations and maintenance activity when the activity involves the storage and use of hazardous materials, or the generation of hazardous waste byproducts.

Where All applicable construction and operations and maintenance activity sites where hazardous materials are used and/or hazardous waste is generated. A single instance of handling, use, or storage of a hazardous material or waste is sufficient to trigger this requirement.

How Hazardous materials and hazardous wastes shall be managed in accordance with the following procedures:

- Only use products or materials onsite that have been approved through the SDG&E Product Approval process.
- Minimize the amount of hazardous materials stored at the site and the production and generation of hazardous waste at the site.
- Cover or containerize and protect from vandalism and exposure any hazardous materials and hazardous wastes.
- Clearly mark all hazardous materials and hazardous waste containers per the ES. Place hazardous waste containers in watertight storage sheds for hazardous waste containers. Alternately, use secondary containment systems, but watertight storage sheds are preferred when hazardous waste containers are stored at the construction site.
- Hazardous materials and hazardous waste containers must meet DOT type and specifications per the ES. The containers must be closed (hand tightened) during activity hours and securely tightened during non-activity hours.
- Stockpiled cold mix should be placed on and covered with plastic.
- Mixing of waste materials is strictly prohibited.
- Storm water that collects within secondary containment structures must be inspected prior to being discharged to ensure no pollutants, oil sheens or non-stormwater discharges are present.
- Spills cannot be discharged to the environment from secondary containment (see BMP 2-03 "Spill Control").



How (cont.)

- All secondary containment systems for hazardous materials or hazardous wastes must be able to hold the volume of the largest container in the storage area and, if uncovered, sufficient additional capacity for storm events. A general rule of thumb for Southern California is that the additional containment volume for an anticipated rain event can be approximated by adding at least an additional four inches (a 4-inch rain) to the height of the containment sized for the entire waste volume of the largest container (Based on the Los Angeles Area 10 year, 24 hour precipitation frequency and a 24-hour manned facility). However, even within Southern California, this varies by the geographic region precipitation frequency and the hours of operation of the facility (containment inspection frequency). Consult with your Field Environmental Representative for determining the minimum volume required for the specific situation and geographical location.



- Hazardous waste must be segregated from other solid waste and stored and disposed of properly according to the ES. **Only company approved vendors with current contracts in place will be used to manage or dispose of hazardous wastes.**
- In addition to following this BMP and ES G8724, employees or contractors are responsible for compliance with federal, state, and local laws and regulations regarding storage, handling, transportation, and disposal of hazardous waste.

Maintenance and Inspection

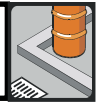
- Routinely inspect the covers on hazardous material storage areas for tears or flaws and repair as necessary. Drums and drum storage areas are to be inspected at least weekly and the results recorded on an inspection log.
- All secondary containment systems for hazardous materials or hazardous wastes must be able to hold the volume of the largest container in the storage area and, if uncovered, sufficient additional capacity for storm events. A general rule of thumb for Southern California is that the additional containment volume for an anticipated rain event can be approximated by adding at least an additional four inches (a 4-inch rain) to the height of the containment sized for the entire waste volume of the largest container. Check with your Field Environmental Representative in the event you are unsure whether sufficient secondary containment exists for any facility.
- Inspect BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable) to ensure that no hazardous materials or waste are improperly left exposed to storm water. Immediately initiate repairs related to a storm event and no later than within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event.

Corresponding CASQA Fact Sheet

Fact Sheet WM-6

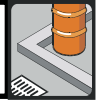


What	Contaminated Soil Management is a procedural BMP for the control of contaminated soils, or soils suspected of being contaminated, that are encountered during site activities. Importation of fill shall also be managed in accordance with G8755 Import Fill Materials for Large Projects (>100 Cubic Yards), Projects within Coastal Zone, and Environmentally Sensitive Areas.
When	This contaminated soil management BMP should be used whenever soil is imported for fill, soil contamination is suspected, or when contaminated soil is encountered during construction or operation and maintenance “construction like” activities. Construction crews should be vigilant when projects are located in highly urbanized or industrial areas or in highway or roadway right-of-ways.
Where	All construction or “construction like” activity sites, but especially construction and operation and maintenance sites in urbanized or industrial areas where soil contamination may have occurred because of spills, illicit discharges, and leaks from underground storage tanks. Contaminated soils may also be encountered during digging and trenching activities on highway and roadway right-of-ways.
How	<p>Contaminated soil (including soil import that may be contaminated) should be managed in accordance with the following procedures:</p> <ul style="list-style-type: none"> • Identify contaminated soil by looking for the following: <ul style="list-style-type: none"> ○ Soil that is discolored, black, gray, white; or ○ Soil that has an unusual odor, such as, petroleum, acid, alkaline, sewage, solvent, or any other chemical smell. • If any potentially contaminated soil is detected, immediately discontinue the activity and contact the project’s Field Environmental Representative. • The CGP requires that the discharger sample and test contaminated soils to ensure proper handling and notify the appropriate local, State and federal agencies, as well as the appropriate Regional Water Board if there is a reportable release event. A reportable release is a discharge or release of oil, hazardous materials or wastes, hazardous substances or chemicals in quantities that may be harmful to the public health. This includes non-stormwater discharges of any kind into the stormwater conveyance system. • Contaminated soils must also be managed properly per SDG&E Environmental Standards (ES). See ES G8729; G8724; and G8755.
Maintenance and Inspection	<ul style="list-style-type: none"> • Inspect all imported fill for contamination per Environmental Standard G8755. • Perform routine inspections of digging and trenching operations during construction and operation and maintenance activities looking for contaminated soils in addition to normal BMP inspections prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Immediately initiate repairs related to a storm event no later than within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP. • All contaminated soils must be managed properly in accordance with applicable federal, state, and local laws and regulations.

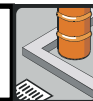


**Corresponding
CASQA
Fact Sheet**

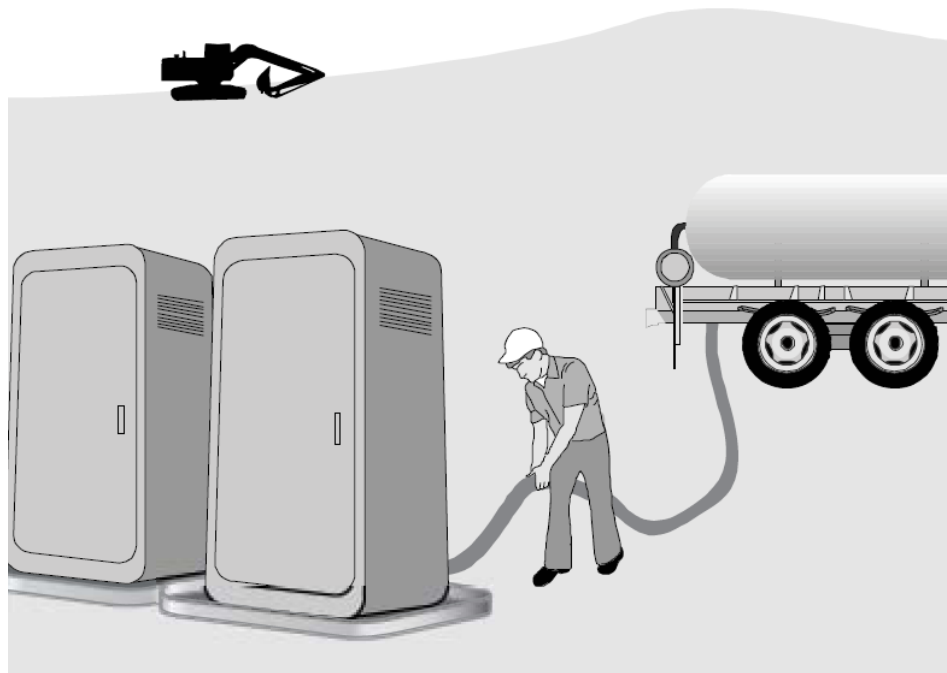
Fact Sheet WM-7



What	Sanitary/Septic Waste Management is a procedural BMP for the control of sanitary/septic wastes. Sanitary/Septic waste is domestic (human) waste.
When	When construction or operation and maintenance site location requires onsite sanitary/septic waste portable toilets, or hand wash/rinse stations, or shower units.
Where	All applicable construction and field operations and maintenance sites.
How	<p>Sanitary/septic wastes shall be managed in accordance with the following procedures:</p> <ul style="list-style-type: none"> • Incorporate into regular safety meetings the education of employees, contractors, and suppliers on: <ul style="list-style-type: none"> ○ Potential dangers to humans and the environment from contact with sanitary/septic wastes due to bacteria, viruses, and parasites. ○ Approved sanitary/septic waste storage and disposal procedures. • Use only reputable, licensed sanitary/septic waste facility providers and haulers for sanitary facilities (portable toilets, hand wash stations, shower units) and their transportation to and from the construction site. • Ensure that sanitary facilities are equipped with secondary containment to prevent discharge of pollutants to the storm water drainage system or receiving water. • Sanitary facilities should be located away from drainage systems and watercourses, minimizing the likelihood of leaks or spills contaminating waterways. • Sanitary facilities should be located away from highways and roadways to avoid vehicles colliding with the sanitary units. • When subjected to high winds, risk of high winds, or risk of vandalism, sanitary facilities shall be secured to prevent overturning. • Sanitary wastewater should not be buried or discharged, except to a properly permitted sanitary sewer discharge facility. A permit may be required from the local Sanitation District. • Temporary sanitary facility's holding tanks shall be emptied by a licensed waste hauler prior to transport.
Maintenance and Inspection	<ul style="list-style-type: none"> • Perform inspections of sanitary facilities and BMPs routinely prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP. • Ensure that sanitary/septic facilities are maintained in good working order and routinely serviced by a licensed service. • When servicing of portable sanitary facilities is conducted, wash/rinse water shall, not be allowed to runoff and shall be collected and disposed of properly in accordance with federal, state, and local requirements.

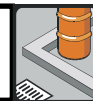


Pictures



**Corresponding
CASQA
Fact Sheet**

Fact Sheet WM-9



- What** Non-hazardous Liquid Waste/Drilling Fluid Management is a procedural BMP for managing non-hazardous liquid wastes on a construction or operation/maintenance activity site.
- Hazardous liquid wastes, including water with an oily sheen, should be managed using BMP 2-05 "Hazardous Materials/Waste Management."
- Dewatering operations, and concrete slurry residue should be managed according to BMP 3-01, and BMP 3-05, respectively.
- Non-hazardous Liquid wastes include, but are not limited to:
- Drilling slurries/muds and fluids, and waste water and rinse water without an oil sheen (including pressure washing).
 - Dredging spoil, and non-storm water liquid discharges that do not have discharge permits.
- When** Liquid waste management is applicable when construction projects and operations and maintenance activities generate any non-hazardous liquid byproducts, residuals,, or wastes.
- Where** All applicable construction and operations and maintenance sites where non-hazardous liquid waste is present.
- How**
- Vehicle and equipment cleaning using water is discouraged on site. If washing is required for safety or for the work, utilize BMP 3-03 "Vehicle and Equipment Washing."
 - Drilling residue and drilling fluids should be disposed of in accordance with federal, state and local requirements. Coordinate the disposal of these wastes with your Field Environmental Representative.
 - Wastes generated as part of a construction, operation, or maintenance procedure, such as water laden with dredged material and drilling mud should be contained and not allowed to flow into drainage channels, storm drains, or receiving waters.
 - Contain non-hazardous liquid wastes in a controlled area and manner, such as a lined pit, lined roll-off bin with a sealed bottom, or a portable tank.
 - Storage tanks used for collecting and settling non-hazardous water shall be routinely checked for leaks and to ensure they are not overfilled.
 - Piping used to connect storage tanks shall be routinely checked to ensure connections are secure and not leaking.
 - Containment devices must be of sufficient quantity or volume to completely contain the liquid wastes generated and, if uncovered, any additional volume needed for anticipated precipitation. A general rule of thumb for Southern California is that the additional containment volume for an anticipated rain event can be approximated by adding at least an additional four inches (a 4 inch rain) to the height of the containment sized for the entire waste volume. Contained material must be routinely removed and properly disposed of in accordance with federal, state and local requirements.
 - **Do not locate containment areas or devices where accidental release of the contained liquid can threaten health or safety, or discharge to watercourses, storm drain system, or to a water body.**
 - Capture all liquid wastes running off a surface including wash water and rinse water from cleaning walls or pavement, including pressure washing.

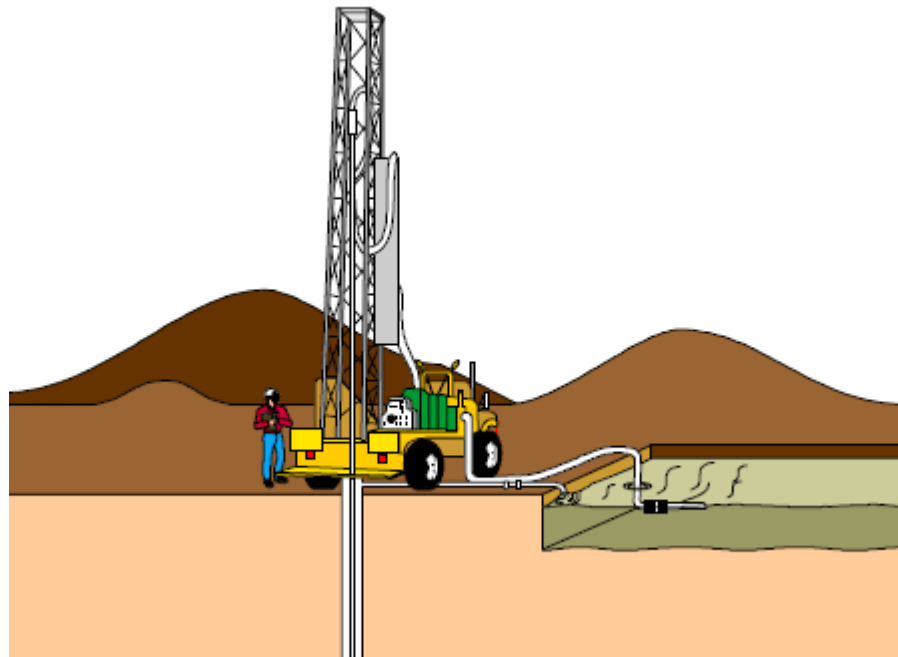


**How
(cont.)**

- If the liquid waste is sediment laden, use a sediment trap (see BMP 1-10) or capture in a containment device and allow sediment to settle.
- Disposal of liquid wastes are subject to specific laws and regulations, or to requirements of other permits secured for the construction project. Contact your Field Environmental Representative for further information.

**Maintenance
and
Inspection**

- Remove deposited solids from containment areas and containment systems as needed, and at the completion of the project. Soil, dredged material and drilling mud to be transported offsite for reuse or disposal must first be profiled using chemical analysis. Liquid waste disposal may also need to be profiled prior to transportation and disposal. Contact the Field Environmental Representative as far in advance of the anticipated transportation need as possible.
- Inspect containment systems routinely for damage, and repair as needed.
- BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.

Pictures**Corresponding
CASQA
Fact Sheet**

Fact Sheet WM-10

BMP DETAILS 3



Section 3 - Non-Storm Water Discharge Controls

What Is Non-Storm Water?

Non-storm water is any water that does not originate as rain or snowmelt, or is rain or snowmelt that has come into contact with pollutants caused by human activities at construction and industrial sites, and commercial and residential sites.

Why Are Non-Storm Water Discharge Controls Required?

Storm water conveyance systems (natural or manmade, wet or dry) are, by regulation, for conveying storm water or exempt or permitted non-storm water discharges only. Storm water conveyance systems eventually discharge to natural water bodies. Non-storm water, which may reach these storm water conveyance systems, may contain pollutants, such as sediment, that are harmful to the natural water bodies. Also, sediment from construction sites can clog storm water systems or reduce the volume of storm water that can be handled by the storm water system.

What Are Non-Storm Water Discharge Controls?

Non-Storm Water Discharge Controls include general site and operations BMP measures that minimize pollution of water. Non-Storm Water Discharge Controls presented in this Manual include the following:

- BMP 3-01 Dewatering Operations
- BMP 3-02 Paving Operations
- BMP 3-03 Vehicle and Equipment Washing
- BMP 3-04 Vehicle and Equipment Fueling
- BMP 3-05 Concrete/Coring/Saw Cutting and Drilling Waste Management
- BMP 3-06 Dewatering Utility Vaults
- BMP 3-08 Over-Water Protection
- BMP 3-09 Paint Removal Control
- BMP 3-10 Stream Crossings
- BMP 3-11 Clear Water Diversion



What Dewatering Operations is a procedural BMP for controlling construction or operations and maintenance dewatering to assure regulatory compliance.

- When**
- This BMP is applicable when groundwater from an excavation, trench, or non-storm water from a pipeline hydrostatic test must be removed.
 - When excavation/trench dewatering, also see Environmental Standard (ES) 104.0226.
 - When dewatering hydrostatic test water, also see ES 104.0220.
 - **This BMP is not Applicable to drilling mud or similar products used in drilling foundations (see BMP 2-08 "Non-hazardous Liquid Waste/Drilling Fluid Management")**
 - **This BMP is not applicable to utility vault or sub-structure dewatering. For these applications, refer to the BMP 3-06 "Dewatering Utility Substructures and Vaults."**
 - **This BMP is not applicable when the water is known, or suspected to be, contaminated. Under these conditions, contact your Field Environmental Representative.**
 - **Water from dewatering operations cannot be discharged to the sanitary sewer, storm drain systems, drainages, creek beds (even if dry), or to water bodies without a permit. This prohibition includes groundwater dewatering to these conveyance systems or water bodies (groundwater may contain pollutants not easily detected except by analytical laboratory tests).**
 - **Groundwater from excavation or trench dewatering or hydrostatic test water cannot be discharged to land without a permit or permit waiver. Groundwater and hydrostatic test water may contain pollutants not easily detected except by analytical laboratory tests.**
 - Non-contaminated discharges of water from hydrostatic tests of new pipe utilizing potable water as a water source, reused for soil compaction and dust control, or reused for agricultural irrigation may be allowed to be discharged to land without a permit or under a permit waiver, depending on the local and regional regulatory requirements. Consult with your project Field Environmental Representative for permitting applicability prior to planning a discharge.

**IMPORTANT
POINT**

Where All construction sites and operations and maintenance activity sites that require excavation or trench dewatering, or pipe hydrostatic test discharges.

How Water generated by dewatering activities should be managed in accordance with the following procedures:

- If allowed by regulations, permit, or the regulating agencies, use the water for construction activities such as onsite soil compaction and dust control. If used for these applications, ensure that the water does not run-off to storm drain systems, drainages, creek beds (even if dry), or to water bodies.
 - The water may contain uncontaminated sediments, but the water must not be contaminated with other pollutants.

Note: Discharge to land for site compaction, dust control or for infiltration (to groundwater) may require a permit or permit waiver to discharge from the Regional Water Quality Control Board (RWQCBs) and/or local jurisdictions (such as Flood Control District). Consult with your Field Environmental Representative.



How (cont.)

- If allowed by regulations, permit, or the regulating agencies, water from dewatering, that contains only uncontaminated sediment, may be discharged to one of the following:
 - To land for infiltration (also see soil compaction and dust control above). In some locations, a permit may be required from the RWQCB and/or a local jurisdiction (such as a Flood Control District). Consult with your Field Environmental Representative. The permit may allow sediment without settling or filtration. The permit may specify limits on other pollutants, requiring sampling and analysis, and submittal of analysis results prior to discharge approval. If allowed by regulations, permit, or the regulating agencies, infiltrate to an appropriate landscaped, vegetated, or soil area. If used for these applications, ensure that the water will infiltrate and not run-off to storm drain systems, drainages, creek beds (even if dry), or to water bodies. Land owner permission to discharge to land for infiltration is required.
 - To the Sanitation or Wastewater District Sanitary/Industrial Sewer - Requires a permit or approval of the above wastewater authority. District may require sampling and analysis and a Batch Discharge application (application for a short-term discharge of a stated volume) prior to approval. District may set a numeric limit on the amount of acceptable sediment discharged. District may require a fee, dependent on discharge volume and pollutant load.
 - To Surface Water (including storm drains) - A RWQCB discharge permit is required and a local jurisdiction permit (such a Flood Control District permit) may be required. Consult with your Field Environmental Representative. The permit may specify limits on sediment and other pollutants, require sampling and analysis, and the submittal of analysis results prior to discharge approval. These permits take advanced planning.
 - A surface water (including storm drains) discharge permit may have a numerical limit on the concentration of Total Suspended Solids (sediment) that can be discharged and a restriction limiting an increase in turbidity of the receiving water. Other pollutants, such as Oil and Grease (O&G) and Total Petroleum Hydrocarbons (TPH) may also have stringent numerical limits. As a minimum, contaminant-free temporary storage (Baker tanks) may need to be provided until permit coverage is obtained and sampling and analysis can be completed. A properly sized sediment clarifier and petroleum hydrocarbon treatment may be required. The cost of this potential treatment for discharge to surface waters should be compared to the treatment cost of discharging to the sanitary sewer (if logistically feasible) before deciding on this discharge option.
- Transport for Disposal in a Vacuum Truck for Proper Disposal. This option is usually the most expensive option and only utilized when the discharge options above cannot be permitted or is otherwise infeasible.
- If a permit is obtained for discharge to a storm water or sanitary sewer system, conduct all dewatering discharge activities in accordance with permit requirements, including installation of appropriate BMPs.
- Dewatering records should be maintained in accordance with permit requirements.

NON-STORM WATER DISCHARGE CONTROLS

Dewatering Operations

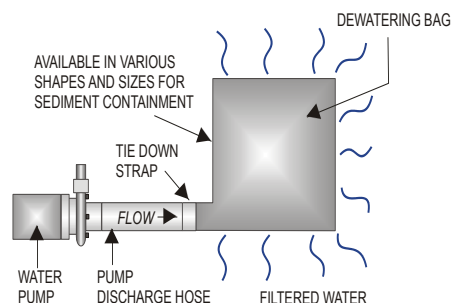
BMP 3-01



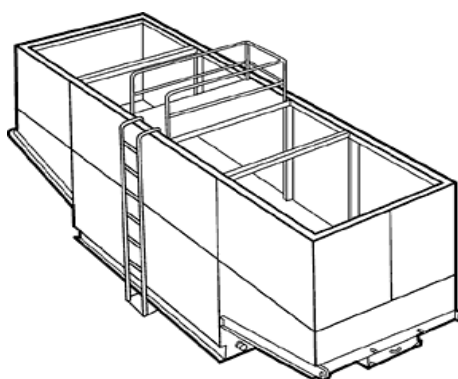
Maintenance and Inspection

- Inspect pumps, hoses and all equipment before use to ensure they are in proper operating condition and free of contamination. Monitor dewatering operations to ensure it does not cause offsite discharge or erosion.
- Monitor the discharge for any change in characteristics (amount of sediment, oil sheen, color, etc.) that is not permitted. Stop the discharge immediately if there is a visual indication that the permit conditions are being exceeded.
- BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Sample dewatering discharges in accordance with permit requirements, if applicable.
- These operations and equipment should be made secure.

Pictures



Gravity Bag Filter



Weir Tank

Corresponding CASQA Fact Sheet

Fact Sheet NS-2



What Paving Operations is a procedural BMP for controlling non-storm water discharges associated with pavement surfacing or resurfacing, patching, or pavement removal.

Paving Operations activities may typically utilize the following materials:

- Cold mix,
- Asphalt,
- Chip Seal, Seal Coat, Tack Coat, Slurry Seal, Fog Seal, and
- Portland Cement Concrete.

For pavement grinding, saw cutting, coring or drilling, refer to BMP 3-05 "Concrete/Coring/Saw cutting and Drilling Waste Management."

When Use this BMP whenever paving operations are being conducted.

Where All construction or operations and maintenance work sites that have paving activities.

How Use the following methods as applicable:

- Protect storm drain inlets near work and down gradient of the area to be paved (see BMP 1-06 "Storm Drain Inlet Protection").
- If onsite mixing is planned, an area must be designated for conducting the mixing. This area should already be paved or made impervious (e.g., plastic or wood sheeting) and be located away from storm drain inlets, drainages, or watercourses.
- Minimize overspray of tackifying emulsions or placement of other paving materials beyond the limits of the area to be paved. Schedule the application of tackifying agents according to manufacturer's instructions regarding rain events.
- Use dry methods to clean equipment and conduct cleaning in accordance with BMP 3-03 "Vehicle and Equipment Washing."
- Material use and stockpiles are to be managed in accordance with BMP 2-02 "Material Use" and BMP 1-08, "Stockpile Management."
- Collect and remove all broken asphalt and concrete, recycle when feasible, and dispose of materials in accordance with local, state, and federal requirements.
- **Do not apply asphalt, concrete paving, seal coat, tack coat, slurry seal or fog seal if rain is expected during the application or curing period.**
- **Avoid if possible, the transferring, loading, or unloading of paving materials near storm drain inlets, drainages, or watercourses. If not possible, use BMP 1-06 "Storm Drain Inlet Protection."**
- **CGP Risk Level 2 & 3 projects, that construct concrete structures onsite or store concrete mixing materials onsite, are subject to pH Numeric Action Levels (Risk 2) or pH Numeric Effluent Limits (Risk 3) for those drainage areas of the project where the concrete construction or storage of concrete mixing or waste materials take place.**
- **CGP Type 2 & 3 projects are subject to pH Numeric Action Levels (Type 2) or pH Numeric Effluent Limits (Type 3) for active areas.**
- Inspect and maintain equipment and machinery routinely to minimize leaks.

**IMPORTANT
POINT**

**Maintenance
and
Inspection**

NON-STORM WATER DISCHARGE CONTROLS

Paving Operations

BMP 3-02



Maintenance and Inspection (cont.)

- Inlet protection BMPs prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.

Corresponding CASQA Fact Sheet

Fact Sheet NS-3

NON-STORM WATER DISCHARGE CONTROLS

Vehicle and Equipment Washing

BMP 3-03



What	Vehicle and Equipment Washing is a procedural BMP for controlling vehicle and equipment washing on construction or operation and maintenance activity sites.
When	Onsite washing of vehicles and equipment on sites shall only be conducted when prior authorization has been received from the field Environmental Representative. Use this BMP on all sites when vehicle and equipment cleaning is being performed. Note that construction site vehicle and equipment washing is not typically performed on utility type construction sites unless required by safety considerations, or is necessary for work completion.
Where	Applicable to all construction and operation and maintenance sites where equipment or vehicles are washed.
How	<p>Use the following methods as applicable:</p> <ul style="list-style-type: none">• Use dry cleaning methods such as wiping down, rather than water washing vehicles or equipment.• If onsite vehicle washing is authorized by the Field Environmental Representative, use the following general methods:<ul style="list-style-type: none">○ Vehicle and equipment washing must be located away from storm drain inlets, drainage systems, or watercourses.○ Place secured impermeable liners, sand bags or another type of berm around storm drain inlets and drainage systems to prevent wash water from entering a storm inlet, drainage system or watercourse. Secured, impermeable liners are preferable to sand bags. Sand bags are preferable to gravel bags. Sand bags are preferable to gravel bags because they are less porous, and are much better at preventing water and pollutants from passing through the barrier.○ Never discharge wash water to the storm drain system, drainages, watercourses, or water bodies.○ Use as little water as possible. High-pressure sprayers may use less water than a hose.○ Use a positive shutoff valve to minimize water usage.○ Collect all wash and rinse water for proper disposal.
Maintenance and Inspection	Monitor employees and contractors through the duration of the construction project to ensure appropriate practices are being implemented.

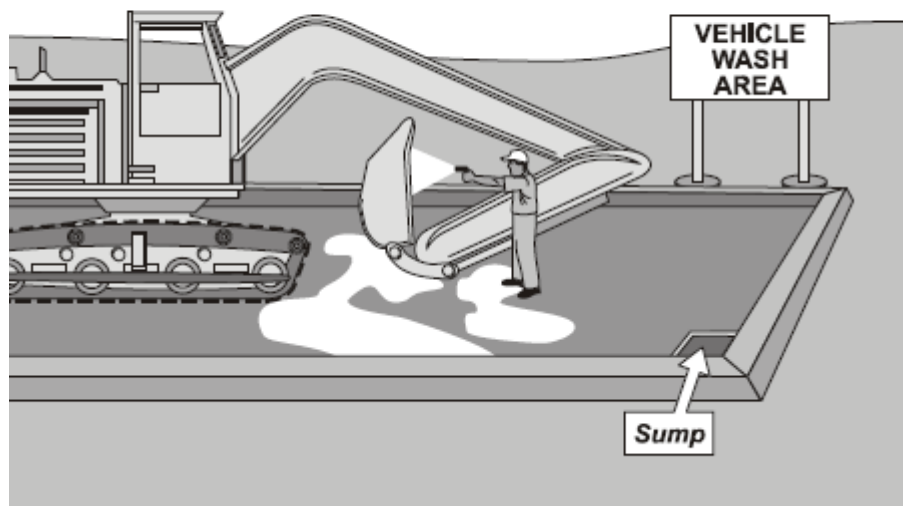
NON-STORM WATER DISCHARGE CONTROLS

Vehicle and Equipment Washing

BMP 3-03



Pictures



Corresponding CASQA Fact Sheet

Fact Sheet NS-8



What	Vehicle and Equipment Fueling is a procedural BMP for controlling vehicle and equipment fueling at construction and operation and maintenance activity sites.
When	<p>Use this BMP for construction and operation and maintenance activity sites when onsite fueling of vehicles and equipment, including handheld equipment, is planned or conducted.</p> <p>Vehicle and equipment fueling, except for handheld equipment, is typically not done on a construction site. Onsite fueling of vehicles and equipment may be planned if it is impractical to send vehicles and equipment off site for fueling.</p> <p>Handheld equipment is treated separately from other equipment. Handheld equipment includes those smaller, manually operated pieces of equipment such as trenchers, mowers, chainsaws, generators, and other equipment that need fueling during regular daily operation.</p>
Where	All construction and operation and maintenance activity sites where vehicle and equipment fueling occurs.
How	<ul style="list-style-type: none"> • If practical, fuel vehicles and equipment off site. • Mobile fueling equipment is the preferred equipment used for construction site fueling. • Fuel storage and fueling areas should be located away from storm drain inlets, drainage systems, watercourses, and water bodies. • All fueling will be conducted with the fueling operator in attendance at all times regardless if fuel nozzles are equipped with automatic shutoff features. • Fuel tanks should not be "topped off." • All fueling operators should have readily available spill containment and cleanup equipment and materials. • Clean up spills immediately and properly dispose of contaminated materials. • Properly store and dispose of rags and absorbent material used to clean up spilled fuel. • Mobile fueling trucks and operators must have all necessary permits, licenses and training.
Maintenance and Inspection	<ul style="list-style-type: none"> • Check to ensure that there is an adequate supply of spill cleanup materials available. • Perform routine inspections of designated fueling areas and inspect vehicles and equipment for leaks. • Report all spills immediately to the project Supervisor <i>and/or</i> the Field Environmental Representative.

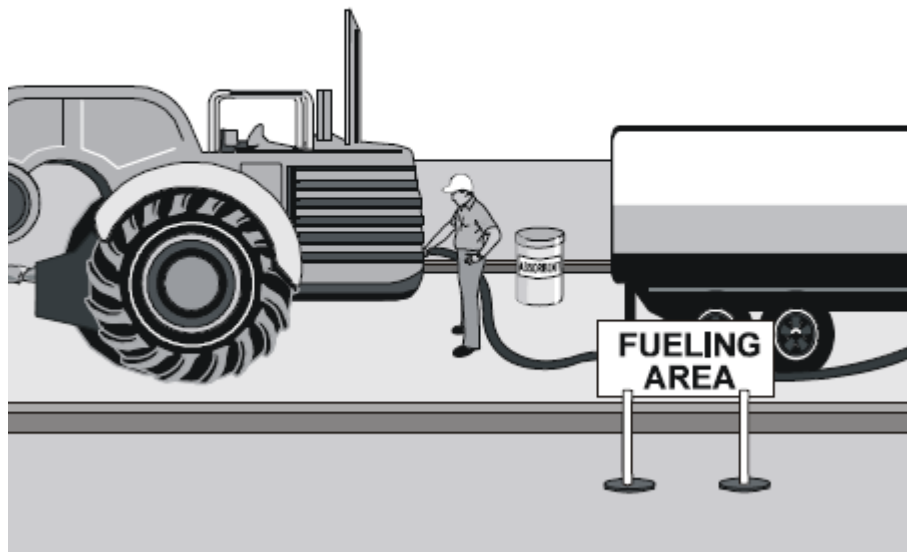
NON-STORM WATER DISCHARGE CONTROLS

Vehicle and Equipment Fueling

BMP 3-04



Pictures



Corresponding
CASQA
Fact Sheet

Fact Sheet NS-9

NON-STORM WATER DISCHARGE CONTROLS

Concrete/Coring/Saw Cutting and Drilling Waste Management

BMP 3-05



What Concrete/Coring/Saw Cutting and Drilling Waste Controls are procedural BMPs for the proper management of liquid and solid wastes from concrete/coring/saw cutting and drilling activities.

For managing any concrete curing compounds, also use BMP 2-05 "Hazardous Materials/Hazardous Waste Management." For managing paving operations, use BMP 3-02.

When Use this BMP at construction and operation and maintenance activity sites when the activity utilizes concrete and asphalt or when slurry or pavement/concrete wastes are generated by the activities, including:

- Saw cutting.
- Coring/drilling.
- Grinding, re-paving or patching.
- Encasing conduit in concrete.
- Tower footings.

Where All construction and operation and maintenance activity sites where the above activities are conducted.

How

- Install storm drain protection at any down-gradient inlets that may be impacted by the activity per BMP 1-06 "Storm Drain Inlet Protection."
- Minimize the amount of water used during coring/drilling or saw cutting. During wet coring or saw cutting, use a wet vacuum to lift the slurry from the pavement as the coring or saw cutting progresses. Additionally, sand bag barriers or other containment should be used at nearby down gradient storm drain or drainage inlets per BMP 1-06 "Storm Drain Inlet Protection."

- If concrete residue remains after drying, the area should be swept in a timely manner and residue removed to avoid contact with storm water or entering a storm drain or water body via the wind. If concrete residue still remains, pressure wash the surface, with in-progress vacuum recovery of wash water to remove residual material.



- **Do not wash residue or particulate matter into a storm drain or drainage inlet or a watercourse or water body.**

- The following options should be used for concrete truck chute and/or pump and hose washout:

- If available, arrange to use an existing concrete washout station. Upon entering the site, concrete truck drivers should be instructed about proper site practices.
- **Concrete Washouts:** Washout stations can be: self contained concrete trucks; commercial portable washout stations (rent-a-washout); plastic lined temporary pits, or a bermed and lined area designed with sufficient volume to completely contain all liquid and waste concrete materials plus enough capacity for rainwater. The lining must be impervious (such as Visqueen with no holes or tears). The designated area must be located away from storm drain inlets, drainages, watercourses, or water bodies.
- **Washout in Trench:** Manually rinse the concrete truck chute into the lined trench itself. Note that this practice is not allowed on CGP projects, where minimum BMPs in the permit require containment of concrete washout areas and prohibits discharge into the underlying soil or surrounding areas. Check with the Field Environmental Representative regarding site-specific applicability.

NON-STORM WATER DISCHARGE CONTROLS

Concrete/Coring/Saw Cutting and Drilling Waste Management

BMP 3-05



How (cont.)



- **Bucket Washout:** Manually rinse the chute into a wheelbarrow, plastic bucket or pail, and then empty the bucket into the concrete truck barrel or on top of the placed concrete within a trench or excavation. Prevent or protect against spillage, and clean up any spillage promptly.

- **CGP Risk Level/Type 2 & 3 projects, that construct concrete structures onsite or store concrete mixing materials onsite, are subject to pH Numeric Action Levels (Risk/Type 2) or pH Numeric Effluent Limits (Risk/Type 3) for those drainage areas of the project where the concrete construction or storage of concrete mixing or waste materials take place.**

Maintenance and Inspection

- Responsible personnel should ensure that all drivers of concrete trucks arriving onsite are instructed about proper project practices.
- Clean out designated washout areas as needed or at a minimum when the washout is 75 percent full to maintain sufficient capacity throughout the project duration. Add additional designated areas as necessary and available to maintain capacity.
- Any designated onsite washout areas must be cleaned out and all debris removed upon project completion. Dispose of concrete waste according to BMP 2-04 "Solid Waste Management."
- Inspect routinely, when washout activities are underway to ensure the integrity of the concrete washout lining and that the concrete washout does not overflow.

Corresponding CASQA Fact Sheet

Fact Sheet WM-10



What Dewatering Utility Vaults is a procedural BMP for controlling water from dewatering utility vaults and underground structures. This BMP does not apply to trench, excavation or other general dewatering associated with construction activities, which is covered by BMP 3-01.

When This BMP is applicable whenever water must be removed from SDG&E utility vaults and underground structures.

Where All SDG&E utility vault locations.

How The discharge of clean water from dewatering of vaults and underground structures to the storm drain, drainages, or water bodies is allowed under the statewide General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters (Order No. 2006-0008-DWQ and NPDES No. CAG990002).

Discharges to land (e.g., vegetation, bare soil area) are not covered by this permit. A Waste Discharge Requirements (WDR) permit or waiver may be required by the local Regional Water Quality Control Board (RWQCB) for discharges to land. If a RWQCB does not have a general WDR or waiver for discharges to land, then the State Water Resources Control Board (SWRCB) General Permit for dewatering to land may apply. Consult with your Field Environmental Representative. Discharges to land also require the prior approval from the landowner.

General requirements for discharge under Order 2006-0008-DWQ/Permit Number CAG990002) are listed below:

- All vault dewatering discharges conducted by utility crews, including contractors, shall follow the latest version of SDG&E's Environmental Standards (ES) on Vault and Underground Structure Dewatering. For dewatering utility gas/electric vaults & underground structures follow ES <http://techdocs.sempra.com/doclib.nsf/docframe?openform&docno=G8718>.
- Prior to discharge, the water in the vault shall be assessed in accordance with the requirements in the ES.
- A SDG&E-approved filter system with hydrocarbon removal capability is required to be used on the pump discharge for compliance assurance when dewatering to a surface water (drainage, gutter, storm drain inlet, or a water body).
- **If the water to be discharged is Clear Water as described in the ES, then the discharge to storm drains, drainages, or water bodies is acceptable as long as the discharge does not cause nuisance or harm to the environment.**
- Water discharged to the street, gutter, drainages, watercourses, or water bodies must be clean and clear, with no evidence of oil sheen and no chemical or sewage smell.
- The dewatering discharge must be monitored at all times during the discharge to ensure the discharge is "clean and clear" with no chemical or sewage odor. If the characteristics of the discharge change (i.e., color, smell, sheen), the discharge must be stopped immediately. In such an event call the Field Environmental Representative.
- Whenever possible, discharge the clean, clear water directly to the storm drain, drainage, or water body to avoid pre-existing pollutants in the discharge path. Pre-existing soil or contaminants in the path of the discharge (i.e., gutter) that can discolor/contaminate the discharge need to be cleaned up before discharging vault water.



NON-STORM WATER DISCHARGE CONTROLS

Dewatering Utility Vaults

BMP 3-06



IMPORTANT POINT

How (cont.)

- The discharge from the filter system must be clean and clear at all times, and if not, the discharge must be stopped.
- As a last resort, when the water, because of sediment or pollutant contamination, cannot be discharged to the environment, contact the project Field Environmental Representative for transport of the water in an approved manner (see the linked SDG&E ES from the previous page).

Maintenance and Inspection

- Implement applicable provisions of the ES.
- Inspect pumps, hoses, filter system and equipment before use and routinely when applicable activities are underway.
- Observe dewatering activities to ensure they do not cause erosion or discharge of potential pollutants.

Corresponding CASQA Fact Sheet

Not applicable. See also Fact Sheet NS-2, Dewatering Operations



What	<p>Over-Water Protection is a procedural and containment system BMP for protecting watercourses from overhead construction and maintenance and repair activities.</p> <ul style="list-style-type: none">• Over-water construction and maintenance activities include, but are not limited to, chipping, grinding, scraping, welding/burning, painting, wrapping and coating of pipes and conduits.• Watercourses (dry or wet) include drainages, creeks, streams, rivers, lakes and wetlands, bays, estuaries and oceans.
When	<p>This BMP applies to projects when:</p> <ul style="list-style-type: none">• Construction, maintenance or repair activities will be conducted above watercourses (dry or wet). <p>Prior to conducting over-water activities, check with the Field Environmental Representative for the possible need for permits with the appropriate local and state agencies. As an example, the design or installation of a containment system may itself impact the watercourse and require a permit, or the timing of the activity may impact wildlife breeding seasons, requiring a permit or preventing the activity during certain portions of the year.</p>
Where	<p>All construction or operation and maintenance activity above any portion of a watercourse.</p>
How	<p>Use the following measures as applicable:</p> <ul style="list-style-type: none">• Containment systems must be properly designed and installed prior to the beginning of any operation that may impact a water body to prevent discharge of pollutants to surface waters, taking into account the construction or maintenance activity and factors such as wind, rain, etc.• The work area should be kept clean of all trash and potential pollutants.• Containment booms should be placed around the area of work as necessary to contain the discharge of potential contaminants such as oil and hydraulic fluid.• Special attention should be given to existing and forecasted wind and weather conditions to prevent pollutant discharges to surface waters.• Shrouds of appropriate material should be used to prevent paint overspray, welding slag, and other pollutants from entering surface waters. Shrouding may not be effective during periods of high wind.• Shrouds should be large enough to adequately enclose or segregate the working area from surface waters. This may include a plywood barrier, Visqueen, and scaffolding to help prevent fugitive material from entering surface waters.• Support structures such as scaffolding shall be used in conjunction with shrouding to withstand potential wind stress.• Contaminated shrouding material and equipment shall be thoroughly cleaned or disposed of properly.
Maintenance and Inspection	<ul style="list-style-type: none">• Inspect the containment systems, shrouds, and support structures prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable) to ensure their integrity and safety. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event.

NON-STORM WATER DISCHARGE CONTROLS

Over-Water Protection

BMP 3-07



Pictures



**Corresponding
CASQA
Fact Sheet**

Fact Sheet NS-14



What	Paint Removal Control is a procedural BMP for protecting storm water and water courses from mark-out paint or graffiti paint removal activities.
When	Use this BMP when utility activities have used mark-out paint on surfaces and the paint is required to be removed by local jurisdictions or another authority, or when graffiti on company property is discovered and must be removed.
Where	Mark-out paint is usually used on road, sidewalk, and land surfaces to show the location of underground utility services. Graffiti on company property may have been painted on company fences or walls, buildings, walkways, curbs or other surface.
How	<p>Use the following options to remove mark-out paint or graffiti:</p> <ul style="list-style-type: none"> • Use non-toxic, light degradable mark-out paint when possible. • Avoid the use of chemical paint removers whenever possible. When chemical paint removers are required, only use products that have been approved through the product review process and utilize containment and wet vacuuming of material during the removal process. • Hydro pressure wash. • Dry abrasive blast/grinding. • Wet abrasive blast/grinding. <p>Use one or more of the following methods to promptly and effectively contain and remove paint and residues in order to protect storm water sewers, drainages and watercourses:</p> <ul style="list-style-type: none"> • Dry sweep. • Install storm drain inlet protection at down gradient inlets during hydro pressure washing, wet abrasive blasting, grinding, and chemical removal. Discharge of any wet or dry residuals or wash water to the drainage system is prohibited. • Minimize the amount of water used during hydro pressure washing. • Wet or dry vacuum. • Use wet vacuum to lift the paint slurry from the pavement or surface as hydro pressure washing progresses or as soon as possible, and before the material has a chance to migrate from the work area. • If wet vacuuming is not adequate to capture all wastewater from these activities, use additional containment (sand bags, booms, or other containment devices) methods as near the work area as possible to prevent the discharge to a street, gutter, storm drain/drainage inlet, or watercourse. • If paint residue remains after drying, the area should be swept up and residue removed in a timely manner to avoid contact with storm water. • If paint residue remains after sweeping, the area can be water washed, as long as the water containing the paint residue is contained near the work and wet vacuumed and not allowed to enter storm drain inlets or watercourses. • All waste should be disposed of using the BMP 2-08 "Non-Hazardous Liquid Waste Management."
Maintenance and Inspection	<ul style="list-style-type: none"> • Inspect all containment systems to ensure proper placement prior to starting utility paint removal operations. • Inspect equipment frequently and adjust as necessary to maximize efficiency and minimize water or other material use of the paint removal operations.

NON-STORM WATER DISCHARGE CONTROLS

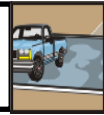
Paint Removal Control

BMP 3-08



Corresponding
CASQA
Fact Sheet

NA



What

A stream crossing is a culvert, ford, or bridge placed across a waterway to provide access for construction or operations and maintenance activities. Utility stream crossings are not intended to maintain public traffic and project-specific permits may be required for use (see "Limitations"). The crossing design and construction allows safe access and reduces erosion and downstream sediment from vehicles.

The project Field Environmental Representative should be consulted for any permit requirements and for the stream crossing location.

The following types of stream crossing should be considered:

- **Culverts:** Appropriate to control erosion, but may cause erosion during installation/removal without appropriate BMP measures. Easily constructed and allows for heavy equipment loads.
- **Fords:** A ford is a streambed crossing alternative that involves crossing a waterbody at grade, on a hard surface maintained at the streambed bottom. Appropriate during dry weather and in arid areas in dry washes, ephemeral streams, and low-flow perennial streams. Ford crossings generally involve the placement of gravel or other non-erodible material to facilitate crossing and are appropriate for streams that would benefit from additional clean native or compatible gravel; for example, salmonid streams or rivers below reservoirs, and urban, channelized streams. Fords provide minimum sediment and erosion control in a stream channel and are most appropriate when the potential for stream channel erosion and dislodgement of sediment due to the addition of the material and traffic is low. A ford is the least expensive stream crossing, allows for maximum load limits, and offers very low maintenance. Fords may degrade water quality due to vehicle and equipment contact. Direct placement of gravel may be appropriate for short-term use. In addition, soil-confinement systems can also be used in low-flow intermittent stream crossings for ease with implantation and removal. Examples include:
 - Cellular Confinement Systems (CCS) crossings consist of three-dimensional cellular-type material placed on the streambed bottom and filled with rock or soil. CCSs are an effective option when used in conjunction with ford crossings because it is sufficient to support most construction equipment and is readily removable.
 - Articulated concrete mats (e.g., concrete blocks held together by steel cable or interlocking concrete blocks) can also be used for fording a stream. Articulated concrete mats can be used to harden the streambed for crossing. Gravel should be placed on the mats to fill in the voids between concrete blocks.
 - Gabion mattresses consisting of rock contained in rectangular, wire-mesh can also be used for constructing a hard driving surface. Gabion mattresses are strong and durable, flexible structures, and are easily constructed.
- **Bridges:** Appropriate for streams with high flow velocities, steep gradients, and where temporary restrictions in the channel are not allowed. Bridges are more expensive to design and construct, but provide the least streambed disturbance and waterway flow constriction.



What (cont.)



Limitations:

- Installation may cause a waterway constriction, which can obstruct flood flow and cause flow backups, washouts, and/or scouring.
- **Installation may require RWQCB 401 Certification, USACOE 404 permit and approval by the California Department of Fish and Game. If numerical water quality standards are mentioned in any permits, sampling and testing may be required.**
- Installation and removal will usually disturb the waterway, and may require dewatering or temporary stream diversion.
- Soil confinement systems used for stream crossings must be constructed in accordance with the manufacturer's specifications, and inspected and maintained for structural integrity.
- Gravel use in the stream for soil-confinement system crossings will require agency approval.
- Requires other BMPs to minimize soil disturbance during installation and removal.

When

Stream crossings are installed at sites when:

- Appropriate permits have been secured for activities and for the stream crossing.
- Construction or operation and maintenance equipment or vehicles need to frequently cross a waterway.
- Alternate access routes impose significant constraints.
- Crossing perennial streams or waterways without a stream crossing causes significant erosion.

Where

Stream crossings should be installed at all designated crossings of perennial and intermittent streams and in dry channels that may be significantly eroded by construction or operation and maintenance traffic at locations where:

- Erosion potential from the installation is low.
- Site runoff is not directed towards the crossing in a manner that promotes erosion of the crossing.

How



Minimum standards and specifications for the design, construction, maintenance, and removal of the structure should be established by a California Registered Civil Engineer, and for bridges, a California Registered Structural Engineer. The design flow and stability safety factor should be based on risk evaluation of overtopping, flow backups, or washout.

Construction and Use:

- Install sediment traps immediately downstream of the crossings to capture sediment. Sediment traps may also be required to be part of the crossing permit. For CCS ford crossings, the gravel depth should be 6 to 12-inches to support construction vehicular traffic. Clean, washed, angular or rounded gravel should be used with cellular-block confinement systems.
- Avoid oil or other potentially hazardous materials for surface treatment.



How (cont.)

- Stabilize construction roadways, work area, and streambed bottom against erosion. Stream bed and bank stabilization, if necessary, may also be required to be part of the crossing permit.
- Construct during dry periods to minimize stream disturbance and reduce costs.
- Construct at or near the streambed elevation to prevent potential upstream flooding.
- Install erosion control BMPs to minimize erosion of embankment into flow lines.
- Any artificial obstruction placed within flowing water should only be built from material that will not introduce sediment or silt into the watercourse.
- Vehicles and equipment should not be driven, operated, fueled, cleaned, maintained, or stored in the wet or dry portions of a water body. Wetland vegetation, riparian vegetation, or aquatic organisms could be destroyed.
- The exterior of vehicles and equipment that will encroach on the water body should be maintained free of grease, oil, fuel, and residues.
- Drip pans should be placed under all vehicles and equipment placed over water bodies (e.g., bridges) when the equipment is planned to be idle for more than one hour.
- Disturbance or removal of vegetation should not exceed the minimum necessary to complete operations. Disturbed vegetation should be replaced with the appropriate soil stabilization measures.
- Riparian vegetation, when removed pursuant to the work provisions, should be cut off no lower than the ground level to promote rapid re-growth. Access roads and work areas built over riparian vegetation should be covered by a sufficient layer of clean river run cobble to prevent damage to the underlying soil and root structure. The cobble must be removed upon completion of project activities.

Maintenance and Inspection

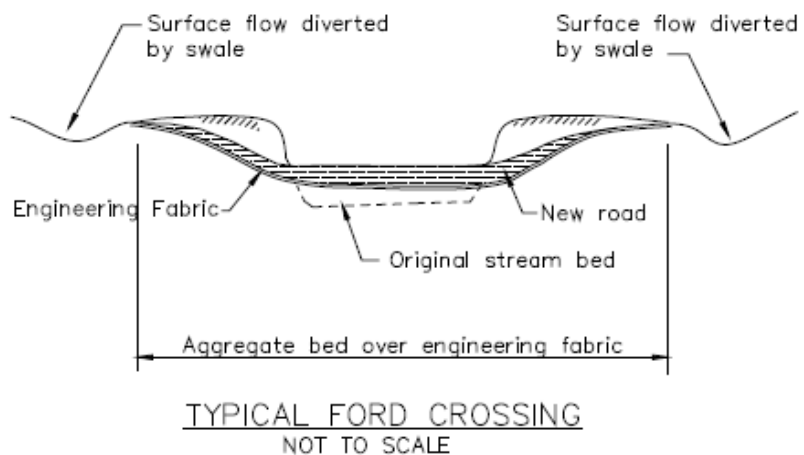
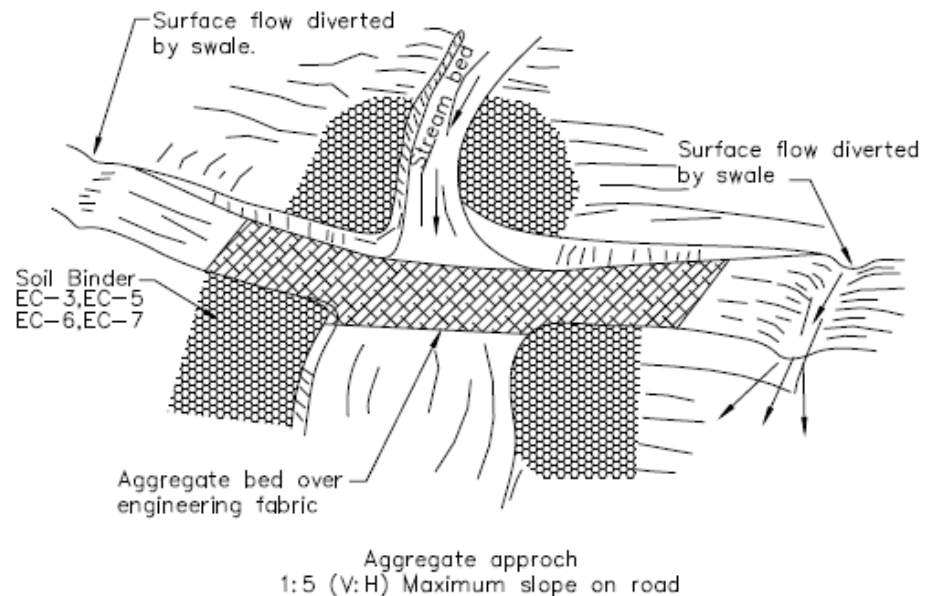
- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect prior to and after each storm event, daily during extended rain events during the construction and/or clean-up activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Check for blockage in the channel, sediment buildup or trapped debris in culverts, blockage behind fords or under bridges.
- Check for erosion of abutments, channel scour, riprap displacement, or other signs of erosion.
- Check for structural weakening of the crossings, such as cracks, and undermining of foundations and abutments.



Maintenance and Inspection (cont.)

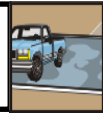
- Remove sediment that collects behind fords, in culverts, and soil confinement systems. Removal of undesirable sediment may be required to be part of the crossing permit.
- Replace lost or displaced support aggregate from inlets and outlets of culverts and soil confinement systems.
- With proper BMPs, remove temporary stream crossings promptly when it is no longer needed.

Pictures



Corresponding CASQA Fact Sheet

Fact Sheet NS-4



What Clear water diversion is a system of structures and measures that intercept clear surface water runoff upstream of a construction project or operation and maintenance activity, transport it around the work area, and discharge it downstream with minimal water quality degradation. It encloses a construction area in a waterway and reduces sediment pollution from construction in, or adjacent to water. Structures commonly used as part of this system include diversion ditches, berms, dikes, slope drains, rock, gravel bags, wood, aqua barriers, cofferdams, filter fabric, or turbidity curtains, drainage or interceptor swales, pipes, or flumes.

Limitations:

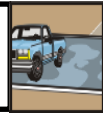
- Diversion activities will usually disturb the waterway during installation/removal.
- Installation may require RWQCB 401 Certification, USACOE 404 permit and approval by California Department of Fish and Game. If numerical water quality standards are mentioned in any permits, sampling and testing may be required.
- Diversion activities may constrict the waterway, obstruct flood flows, and cause flooding or washouts. Diversion structures should not be installed without identifying potential impacts to the stream channel.
- Diversion or isolation activities are not appropriate in channels where there is insufficient stream flow to support aquatic species in the dewatered area or if they will disturb sensitive aquatic species.
- Diversion or isolation activities are inappropriate in deep water unless designed and reviewed by a California Registered Civil Engineer.
- Diversion or isolation activities should not completely dam stream flow.
- Dewatering and removal may require additional sediment control or water treatment.

When Clear water diversions should be implemented when:

- Isolating construction or operations and maintenance activities is necessary within or near a water body to protect the water body from the activity. Applicable activities may include but are not limited to: stream bank stabilization, culvert, bridge, pier, or abutment installation. They may also be used in combination with other methods, such as clear water bypasses and/or pumps.

Where

- A clear water diversion is typically implemented where appropriate permits have been secured and work must be performed in a flowing stream or water body.
- Pumped diversions are suitable for intermittent and low flow streams.
- Excavation of a temporary bypass channel, or passing the flow through a flume with a trench excavated under it, is appropriate for the diversion of streams less than 20 feet wide, with flow rates less than 100 cubic feet per second.
- Clear water diversions incorporating clean washed gravel may be appropriate for use in fish spawning streams.

**How**

In general:

- Where working areas encroach on flowing streams, barriers adequate to prevent the flow of muddy water into streams should be constructed and maintained. During construction of the barriers, stream muddying should be minimized.
- Diversion structures must be adequately designed to accommodate fluctuations in water depth or flow volume due to tides, storms, floods, etc.
- Equipment driven in a water body should be clean of petroleum residue, and water levels should be below the fuel tanks, gearboxes, and axles, unless lubricants and fuels are sealed such that water inundation will not result in pollutant discharges.
- Only excavation equipment buckets may reach out into the water body to remove or place fill. The main equipment body should not enter the water except as necessary to cross the stream to access the work site.
- Stationary equipment, such as motors or pumps located within or adjacent to a water body, should be positioned over drip pans.
- When any artificial obstruction is being constructed or maintained, sufficient water should at all times pass downstream to maintain aquatic life.
- Equipment should not park below high water marks unless allowed by permit.
- Disturbance or removal of vegetation should be minimized. Disturbed vegetation should be replaced with appropriate erosion control measures.
- Riparian vegetation, when removed pursuant to the work provisions, should be cut off no lower than the ground level to promote rapid re-growth. Access roads and work areas built over riparian vegetation should be covered by a sufficient layer of clean river run cobble to prevent damage to the underlying soil and root structure. The cobble must be removed upon completion of project activities.
- Drip pans should be placed under all vehicles and equipment placed structures over water bodies when the equipment is planned to be idle for more than one hour.
- Where possible, minimize diversion and encroachment impacts by scheduling construction during periods of low flow. Scheduling should also consider seasonal releases of water from dams, fish migration, and spawning seasons, and water demands due to irrigation.
- Construct diversion structures with materials free of potential pollutants such as soil, grease, or oil.

Several types of clear water diversions are detailed in the CASQA Handbook, each with different applications, design considerations, limitations, and inspection and maintenance requirements. These types of diversions include:

- Temporary Diversions and Encroachments
- Temporary Dry Construction Areas
- Filter Fabric Isolation

NON-STORM WATER DISCHARGE CONTROLS

Clear Water Diversion

BMP 3-10



How (cont')

- Turbidity Curtain Isolation
- K-Rail River Isolation
- Stream Diversions

The CASQA Handbook should be consulted for additional information for these clear water diversions.

Maintenance and Inspection

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two week intervals in the non-rainy season to verify continued BMP implementation (e.g., or in compliance with the frequency specified in the CGP, if applicable).

Pictures



Corresponding CASQA Fact Sheet

Fact Sheet NS-5

BMP DETAILS 4



Section 4 - Soil Erosion Control

What is Erosion?

Erosion is the detachment of soil particles by water or wind. Erosion is a natural process that can be accelerated by construction activities such as grading and trenching. For example, when a site is cleared and grubbed, protective vegetation is removed and the disturbed soil is directly exposed to wind, rain, and flowing water.

Why is Erosion Control Required?

Water or wind can transport soil particles to water bodies where they can cause damage to, or destruction of, aquatic animals and plants by burying them or reducing oxygen and/or sunlight that is necessary for their survival. Erosion control is required by regulatory agencies to minimize the potential additional erosion and damage to the environment from construction activities.

What is Erosion Control?

Erosion Controls are methods used to protect the soil surface and prevent the soil particles from being detached and transported by rain, flowing water or wind. Erosion controls include limiting soil or vegetation disturbance to reduce erosion. Preservation of Existing Vegetation is an example of an Erosion Control BMP.

Soil Stabilization is the most widely used and most effective method of erosion control. Preventing or reducing erosion potential by directing or controlling drainage runoff, as well as preparing and stabilizing disturbed soil areas protects the exposed soil surface from rain and wind thereby preventing erosion. Diversion Berms and Drainage Swales is an example of an erosion control BMP that intercepts and conveys run-on around or through the project reducing erosion potential. Hydroseeding is also an example of an erosion control BMP that stabilizes the soil. Erosion control BMPs used in this Manual to direct or control runoff and/or stabilize soil include:

- BMP 4-01 Preservation of Existing Vegetation
- BMP 4-02 Temporary Soil Stabilization (General)
- BMP 4-03 Hydraulic Mulch
- BMP 4-04 Hydroseeding
- BMP 4-05 Soil Binders
- BMP 4-06 Straw Mulch
- BMP 4-07 Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats
- BMP 4-08 Dust (Wind Erosion) Control
- BMP 4-09 Diversion Berms and Drainage Swales
- BMP 4-10 Velocity Dissipation Devices
- BMP 4-11 Slope Drains
- BMP 4-12 Streambank Stabilization
- BMP 4-13 Soil Preparation

EROSION CONTROL AND SOIL STABILIZATION

Preservation of Existing Vegetation

BMP 4-01



What Preservation of Existing Vegetation is a procedural BMP that maximizes the preservation of existing trees, shrubs, bushes, and grasses on a construction or operations and maintenance activity site.

When This BMP is applicable to utility activities when there is existing vegetation.

Where All construction and operations and maintenance activity sites where:

- There are areas on site where no activity is planned or will occur later.
- There are areas with vegetation that can be preserved to protect against soil erosion, such as on steep slopes, watercourses, and building sites in wooded areas.
- There are areas designated as ESAs, or where federal, state, or local government regulations require preservation, such as wetlands, vernal pools, marshes, etc.

How Use the following measures as applicable:

- Preserve existing vegetation whenever possible.
- Identify areas to be preserved in the immediate vicinity of the construction or activity site, and mark as appropriate before clearing and grubbing or other soil disturbance activities.
- If necessary, contact the project Field Environmental Representative for any clarification regarding areas to be preserved.
- Whenever possible, minimize disturbed areas by locating temporary roadways to avoid stands of trees and shrubs and follow existing contours to reduce cutting and filling.
- Construction materials, equipment storage and parking areas should be located outside the drip line of any tree to be retained.
- Consider the impact of grade changes to existing vegetation and the root zone.
- Remove any markings, barriers, or fencing after project is completed.

Maintenance and Inspection Pictures

- Maintain the clearly marked limits of disturbance during construction to preserve vegetation.
- Inspect barriers regularly during construction.



Vegetation to be preserved is marked and outside the work area.

**Corresponding
CASQA
Fact Sheet**

Fact Sheet EC-2

EROSION CONTROL AND SOIL STABILIZATION

Temporary Soil Stabilization (General)

BMP 4-02



What	<p>Temporary Soil Stabilization is a procedural BMP utilizing protective materials to cover exposed soil, where the soil exposure is caused by construction or operation and maintenance activities. Materials may include hydraulic mulch and seeding, soil binders, straw, geotextiles, plastic covers and erosion control blankets.</p> <p>Temporary soil stabilization BMPs and their associated materials include:</p> <ul style="list-style-type: none">• BMP 4-03 - Hydraulic Mulch• BMP 4-04 - Hydroseeding• BMP 4-05 - Soil Binders• BMP 4-06 - Straw Mulch• BMP 4-07 - Geotextiles, Plastic Covers and Erosion Control Blankets/Mats
When	<p>This BMP, and the situation appropriate BMPs listed above, is applicable when slopes are constructed or disturbed and/or where there are inactive soil disturbance areas that will not be worked for 14 days or more. The procedures are to be implemented after slope construction activity is complete and then prior to the onset of precipitation.</p>
Where	<ul style="list-style-type: none">• Slopes, soil stockpiles, and inactive disturbed soil areas.• Soil binders (BMP 4-05) may be applicable to areas where there is light traffic that would minimize the effectiveness of other temporary soil stabilization BMPs.
How	<ul style="list-style-type: none">• Sediment control BMPs used to break up the slope lengths, such as fiber rolls (BMP 1-03) or gravel bag berms (BMP 1-04) should be spaced in accordance with the CGP requirements (see installation for BMP 1-03 "Fiber Rolls")• Permanent erosion control shall be applied to areas deemed substantially complete during the project's defined seeding season window.• Refer to individual temporary soil stabilization BMPs for specific instructions for use (see BMP 4-03 through BMP 4-07).
Maintenance and Inspection	<ul style="list-style-type: none">• Refer to individual temporary soil stabilization BMPs listed above for maintenance and inspection requirements.



Pictures



Applying a tackifier using a trailer mounted pump and hose.



Applying soil stabilization manually in harder to reach areas.

Corresponding CASQA Fact Sheet

Fact Sheet EC-2



What	<p>Hydraulic Mulch is a procedural BMP for applying mulch to protect the soil surface from wind and rain erosion.</p> <p>Mulch consists of a mixture of shredded wood fiber or other fiber in water and a stabilizing emulsion, or tackifier. The mulch is applied with hydro-mulching equipment (water mixture spraying equipment).</p>
When	<p>Hydraulic mulch is typically applied when a temporary soil cover is required for protection until permanent vegetation is established, or to disturbed areas that must be re-disturbed following a period of inactivity of 14 or more days.</p>
Where	<ul style="list-style-type: none"> • To disturbed areas requiring temporary protection. • Do not apply to active work areas where the mulch would interfere with or be destroyed by immediate earthwork activities or construction traffic. Consider using soil binders instead (BMP 4-05).
How	<ul style="list-style-type: none"> • Prior to application, roughen embankment and fill areas with a crimping or punching type roller or by track walking. Track walking shall only be used where other methods are impractical and slope angle allows safe equipment operation. Track walking must be performed upslope so that equipment tracks traverse the slope horizontally along the slope. • Avoid mulch over-spray onto the traveled way, sidewalks, lined drainage channels, and existing vegetation. • Avoid use of mulch without a tackifier component, especially on slopes. • Hydraulic Mulches: <ul style="list-style-type: none"> ○ Apply as liquid slurry using a hydraulic application machine (i.e., hydroseeder) at rates of mulch and stabilizing emulsion recommended by the manufacturer. Wood fiber hydraulic mulches are generally short-lived (only last a part of a growing season) and must be applied no less than 24 hours before rain events to dry and become effective. <ul style="list-style-type: none"> • Hydraulic Mulch with Binder (Matrix): <ul style="list-style-type: none"> ○ Apply a combination of wood fiber and/or paper fiber mixed with acrylic polymers as binders. Apply the mulch matrix as liquid slurry using a hydraulic application machine (i.e., hydroseeder) at rates recommended by the manufacturer. Hydraulic matrices must be applied no less than 24 hours before a rain event to dry and become effective. • Bonded Fiber Matrix (BFM): <ul style="list-style-type: none"> ○ Apply BFM using a hydraulic application machine (mulch and tackifier are pre-mixed in a single bag) in accordance with manufacturer's instructions. Do not apply immediately before, during, or after a rain event. ○ Note that cellulose fiber mulches alone may not perform well on steep slopes or in coarse soils.
Maintenance and Inspection	<ul style="list-style-type: none"> • Maintain an unbroken, temporary mulched ground cover throughout the period of construction when the soils are not being reworked. Inspect before expected rain and repair any damaged ground cover and re-mulch areas of exposed soil (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). • After any rain event, maintain all slopes to prevent erosion.



Pictures



Applying hydraulic mulch.



Close-up of bonded fiber matrix

Corresponding CASQA Fact Sheet

Fact Sheet EC-3



What	Hydroseeding is a procedural BMP for the application of vegetation seed in a protective mixture for both soil and seed. The seed then sprouts, providing vegetation that provides additional soil erosion control (holds the soil in place and shields the soil from erosion). Hydroseeding material typically consists of a mixture of fiber, seed, fertilizer, and stabilizing emulsion.
When	<ul style="list-style-type: none"> • When temporary protection is needed until permanent vegetation protection can be established. Temporary vegetation should not be used for more than 3 to 6 months. • Avoid using hydroseeding during dry weather periods, unless supplemental irrigation is used.
Where	<ul style="list-style-type: none"> • Use on disturbed soil areas that must be re-disturbed following construction inactivity of 14 or more days. • Avoid use of hydroseeding in areas where the BMP would be incompatible with site conditions. These conditions include: <ul style="list-style-type: none"> ○ Slopes steeper than 1:3 vertical: horizontal. Steep slopes are difficult to protect with temporary seeding. ○ Traffic areas, where construction or other traffic would prevent seed sprouting or vegetation growth. Consider using soil binders instead (see BMP 4-05).
How	<ul style="list-style-type: none"> • Hydroseeding can be accomplished using a multiple-step (with straw mulch) or a one-step process (mixed with hydraulic mulch, hydraulic matrix, or bonded fiber matrix). When the one-step process is used to apply the mixture of fiber, seed, etc., the seed rate shall be increased to compensate for all seed not having direct contact with the soil. Confirm with your project Field Environmental Representative the appropriate seed mix to be used. • Prior to application roughen the slope, fill area, or area to be seeded with the furrows trending along the contours. • Apply straw mulch as necessary to keep seeds in place and to moderate soil moisture and temperature until the seeds germinate and grow. • Follow-up applications shall be made as needed to cover weak spots, and to maintain adequate soil protection. • Avoid over-spray onto the travel way, sidewalks, drainage channels and existing vegetation.
Maintenance and Inspection	<ul style="list-style-type: none"> • All seeded areas shall be inspected for failures and re-seeded, fertilized, and mulched within the planting season, using not less than half the original application rates. Any temporary re-vegetation effort that does not provide adequate cover must be re-vegetated. • After any rainfall event, maintain all slopes to prevent erosion.



Pictures



Applying hydroseed.

Corresponding CASQA Fact Sheet

Fact Sheet EC-4



- What** Soil Binders is a procedural BMP for applying soil binder material to the soil surface to temporarily prevent water-induced erosion of exposed soils on construction or applicable operations and maintenance sites. Soil binders bind with the soil, creating a crust that sheds water and prevents the water erosion. Soil binders also provide temporary dust, wind, and soil stabilization benefits.
- When** Soil binders are typically applied to disturbed soil areas that require short-term temporary protection.
- Soil binders have the following application timing limitations:
- May not cure when low temperatures occur within 24 hours of application.
 - Soil binders generally experience spot failures during heavy rain and may need reapplication after a storm.
 - Some soil binders may not perform well during periods of low relative humidity.
- Where** Soil binders can be used for any disturbed soil area. Soil binders can often be incorporated into the work so they may be a good choice for areas where grading activities will soon resume or that experience light construction traffic.
- Soil binders have the following limitations for particular areas of application:
- Soil binders may not penetrate areas where soil surfaces are made up primarily of silt and clay, particularly when compacted.
 - Soil binders may not hold up well in areas of heavy pedestrian or medium to heavy vehicular traffic.
- How** Selection of soil binders should be approved by the project Field Environmental Representative after an evaluation of site-specific factors. Chemical soil binders must be on the SDG&E List of Approved Products. These approved soil binder products have low or no toxicity to aquatic organisms and wildlife and may not trigger the construction site sampling requirements of the CGP. Follow manufacturer's recommendations for application procedures and cleaning of equipment after use. Any onsite cleaning must use appropriate BMPs (BMP 2-02 "Material Use", 2-03 "Spill Control", 2-04 "Solid Waste Management", 2-08 "Liquid Waste/Drilling Fluid Management", and 3-03 "Vehicle and Equipment Washing").
- Prior to application, roughen embankment and fill areas. Track walking shall only be used where rolling is impractical.
 - Soil binders should not be applied during or immediately before rain events. Soil binders must be applied no less than 24 hours before rain to cure and dry and become fully effective.
 - Avoid over-spray onto paths, sidewalks, lined drainage channels, sound walls, and existing vegetation.
 - **Do not apply soil binders to frozen soil, areas with standing water, under freezing conditions, or when the temperature is below 40°F during the curing period.**
 - More than one treatment is often necessary, although the second treatment may be diluted or have a lower application rate.
 - For liquid agents:
 - Crown or slope ground to avoid ponding.
 - Uniformly pre-wet ground according to manufacturer's recommendations.
 - Apply solution under pressure. Overlap solution 6 to 12 inches.





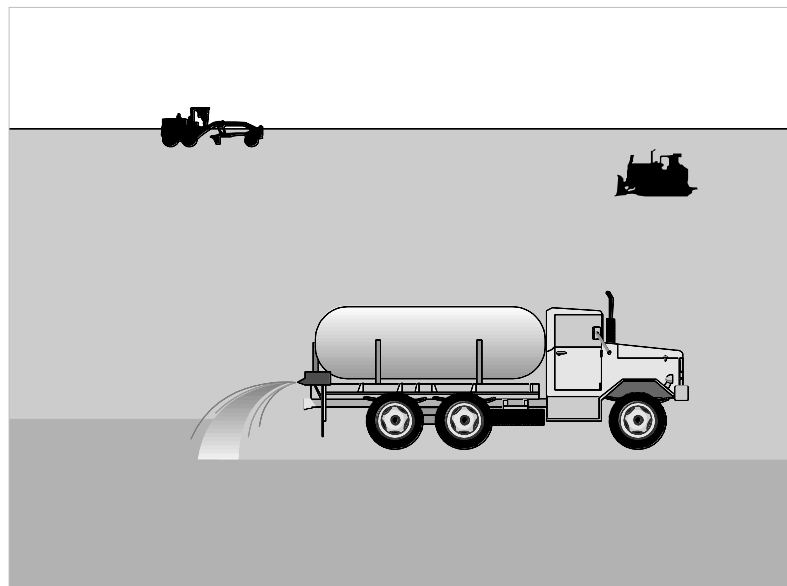
How (cont')

- Allow treated area to cure for the time recommended by the manufacturer; typically at least 24 hours.
- Apply second treatment before first treatment becomes ineffective, using 50 percent application rate.
- In low humidity, reactivate chemicals by re-wetting according to manufacturer's recommendations.

Maintenance and Inspection

- Reapplying the selected soil binder may be needed for proper maintenance. Traffic areas should be inspected routinely.
- After any rainfall event, maintain all slopes to prevent erosion.

Pictures



Corresponding CASQA Fact Sheet

Fact Sheet EC-5



What	Straw Mulch is a procedural BMP for the application of a uniform layer of straw to exposed soil surfaces to protect exposed soil from rain and wind erosion. Straw mulch consists of straw, and may incorporate a tackifier emulsion for stabilization of the mulch when used for protecting sloped areas of exposed soil.
When	<p>Straw mulch is used when:</p> <ul style="list-style-type: none"> • Temporary soil stabilization surface cover is needed on disturbed areas until soils can be prepared for re-vegetation and permanent vegetation is established. • In combination with temporary and/or permanent seeding strategies to enhance plant establishment. Straw mulch typically lasts less than six months. <p>Limitation: There is a potential for introduction of weed-seed and unwanted plant material with straw. Certified Weed free rice straw must be used when it is important not to introduce unwanted plants.</p>
Where	Application of straw mulch is applicable to flat areas of exposed soil and areas of exposed soil with gradual slopes.
How	<p>Use tackifier to anchor straw mulch to the soil on slopes. Tackifiers act to glue the straw fibers together and to the soil surface, and the tackifier shall be selected based on longevity and ability to hold the fibers in place. Soil binders (tackifier) will generally experience spot failures during heavy rain events. A tackifier is typically applied at a rate of 125 pounds per acre. In windy conditions, the rates are typically 150 pounds per acre.</p> <ul style="list-style-type: none"> • Crimping, punch roller-type rollers, or track-walking may also be used to incorporate straw mulch into the soil on slopes. Track walking shall only be used where other methods are impractical. • Avoid placing straw onto construction traffic ways, sidewalks, lined drainage channels, and existing vegetation. • Straw mulch with tackifier shall not be applied during or immediately before rain events. • Apply loose straw at a rate between 3,000 and 4,000 pounds per acre (lb/acre), either by machine using a straw blower or by hand distribution and provide 100 percent ground cover. Use a lighter application on flat surfaces and a heavier application on slopes. • The straw mulch must be evenly distributed on the soil surface. • Anchor mulch in place by "punching" it into the soil mechanically in lieu of using a tackifier. "Punching" of straw does not work in sandy soils. • Methods for holding the straw mulch in place depend on the slope steepness, accessibility, soil conditions and longevity. If the selected method is incorporation of straw mulch into the soil, then proceed as follows: <ul style="list-style-type: none"> ○ A tackifier acts to glue the straw fibers together and to the soil surface. Selection of a tackifier should be based on longevity and ability to hold the fibers in place. Application of a tackifier is typically at a rate of 125 lb/acre and 180 lb/acre in windy conditions. ○ On very small areas, a spade or shovel can be used. ○ On soil slopes which are stable enough, and gradually sloped to safely support construction equipment without contributing to compaction and instability problems, straw can be "punched" into the ground using a knife-blade roller or a straight bladed coulter, known commercially as a "crimper."



How (cont')

- On small areas and/or steep slopes, straw can also be held in place using plastic netting or jute. The netting shall be held in place using 11 gauge wire staples, geotextile pins or wooden stakes (BMP 4-07), “
- On small areas and/or steep slopes, straw can also be held in place using plastic netting or jute. The netting shall be held in place using 11 gauge wire staples, geotextile pins or wooden stakes (BMP 4-07, “Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats”).
- Remove straw as necessary prior to permanent seeding or soil stabilization.

Maintenance and Inspection

- The key consideration in maintenance and inspection is that the straw needs to last long enough to achieve erosion control objectives.
- Reapplication of straw mulch and tackifier may be required to maintain effective soil stabilization over disturbed areas and slopes.
- After any rain event, inspect and maintain all slopes and straw mulch cover to prevent erosion.

Pictures



Straw mulch.

Corresponding CASQA Fact Sheet

Fact Sheet EC-6



What This Erosion Control and Soil Stabilization BMP is a procedural BMP for the installation of specific erosion control soil stabilization materials to control erosion from wind and water. These materials consist of:

- Geotextile blankets/mats,
- Plastic covers, and
- Natural/man-made material erosion control blankets.

Geotextiles are permeable fabrics typically made from polypropylene (plastic) or polyester that have the ability to protect the soil from erosion but are able to allow some water to reach and to drain the soil. Geotextile fabrics come in three basic forms: woven, needle punched, or heat bonded. Geotextiles also allow controlled rate and filtered drainage from a slope for slope moisture control, while providing slope reinforcement and protection.

Plastic Covers, such as Visqueen, are essentially impermeable and are used for immediate, temporary protection.

Erosion control blankets/mats are meant to protect exposed soil from wind and rain impact and reduce the speed at which water moves across the soil surface. These blankets can be made out of straw, coconut fiber, aspen fiber, jute, and polypropylene. Permeability varies according to material and material weave.

When • Use blankets/mats when disturbed soils, especially on moderate to steep slopes, are difficult to stabilize or access. Due to wildlife concerns, consult with your project Field Environmental Representative for any restrictions on using these products on your project.

- Geotextile blanket/mats should be used when slope reinforcement may be required.
- Geotextile blankets/mats and natural fiber blankets/mats (depending on their permeability) are used when it is important to allow some water to reach the soil for seed germination or allow slope drainage for moisture control.

Where • Blankets and mats are generally not suitable for excessively rocky sites or areas where the final vegetation will be mowed (because staples and netting can catch in mowers).

- Plastic results in 100 percent runoff, therefore, their use is limited to:
 - Covering small stockpiles.
 - Covering small graded areas for short periods, such as through an imminent storm event, until alternative measures may be installed.
 - Note the CGP discourages the use of plastic materials for cover when more sustainable alternatives can be used.

Blankets/mats should be used where there are:

- Steep slopes, generally steeper than 1:3 (vertical: horizontal).
- Slopes where the erosion hazard is high.
- Slopes and disturbed soils where mulches would need to be anchored.
- Disturbed areas where plants are slow to develop adequate protective cover.
- Channels with high flows.
- Channels intended to be vegetated.
- Slopes adjacent to water bodies or ESAs).

How For blankets or mat materials, proper site preparation is essential to ensure complete contact of the blanket or matting with the soil.

- Grade and shape the area of installation.



How (cont.)

- Remove all rocks, clods, vegetation or other obstructions so that the installed blankets or mats will have complete, direct contact with the soil.
- Prepare seedbed by loosening of topsoil.
- Seed the area before blanket installation for erosion control and vegetation. Seeding after mat installation is often specified for turf reinforcement. When seeding prior to blanket installation, all check slots and other areas disturbed during installation must be re-seeded. Where soil filling is specified, seed the matting and the entire disturbed area after installation and prior to filling the mat with soil.
- U-shaped wire staples, metal geotextile stake pins, or triangular wooden stakes can be used to anchor mats and blankets to the ground surface.
- Wire staples and metal stakes should be driven flush to the soil surface.
- All anchors should be 6 inches to 18 inches long and have sufficient ground penetration to resist pullout. Longer anchors may be required for loose soils.
- Installation on slopes - Consult the manufacturer's recommendations for installation. In general, these will be as follows:
 - Begin at the top of the slope and anchor the blanket in a 6 inch deep by 6 inch wide trench. Backfill trench and tamp earth firmly.
 - Unroll blanket down slope in the direction of water flow.
 - Overlap the edges of adjacent parallel rolls 2 inches to 3 inches and staple every 3 feet.
 - When blankets must be spliced, place blankets end over end (shingle style) with a 6 inch overlap. Staple through overlapped area, approximately 12 inches apart.
 - Lay blankets loosely and maintain direct contact with the soil. Do not stretch.
 - Staple blankets sufficiently to anchor blanket and maintain contact with the soil. Staples shall be placed down the center and staggered with the staples placed along the edges.
- Blankets and mats must be removed and disposed of prior to application of permanent soil stabilization measures.
- For plastic sheeting, it is important for the entire stockpile or exposed soil area to be covered completely, and the plastic firmly anchored with anchor objects spaced evenly along the entire perimeter so that wind, or storm water run-on, does not uncover the stockpile. Suitable anchors are gravel bags, sand bags, hay bales, or other non-polluting objects that can be safely handled.

Maintenance and Inspection

- Areas covered with temporary soil stabilization should be inspected routinely and before and after significant forecasted storm events. Any failures should be repaired immediately. Areas covered with temporary soil stabilization should be maintained to provide adequate erosion control. Temporary soil stabilization should be reapplied or replaced on exposed soils when greater than 10 percent of the previously covered area becomes exposed or exhibits visible erosion.
- If washout or breakage occurs, re-install the material after repairing the damage to the slope or channel.



Pictures



Several types of erosion control blankets.

Corresponding CASQA Fact Sheet

Fact Sheet EC-7



What	Dust (Wind Erosion) control is a procedural BMP that consists of applying water or other dust suppressant to prevent or alleviate dust nuisance generated by construction and operations and maintenance activities.
When	<ul style="list-style-type: none"> Dust control must be used whenever wind speed picks up dust and creates visual dust emissions. Dust control should be used at least initially on any project when exposed soil is subject to vehicle traffic and soil disturbance activities (e.g., dirt construction site, dirt access road traffic, grading, excavating, and soil stockpile generation, or soil removal from soil stockpiles). Dust control must be implemented in accordance with local air quality requirements.
Where	All construction and operations and maintenance activity sites where exposed soil is susceptible to wind erosion.
How	<p>Use the following measures as applicable:</p> <ul style="list-style-type: none"> Appropriate methods of applying dust control (water, chemical dust suppressant, or soil covers and the means to apply it) should be available for construction or operation and maintenance activity sites with the potential to create dust. Water applied for dust control should be applied evenly and in a manner that does not generate runoff. Dust control methods should be approved by the project Field Environmental Representative. A construction permit or an agency rule may require specific control procedures. Obtain prior approval to use any chemical dust suppressant from the project Field Environmental Representative. Dust suppressant chemicals must be on SDG&E's approved product list Non-potable water should not be conveyed in tanks or drainpipes that will be used to convey potable water, and there should be no connection between potable and non-potable supplies. Non-potable tanks, pipes and other conveyances should be marked "NON-POTABLE WATER - DO NOT DRINK." Approval for use of all non-potable sources of water must be obtained from the project Field Environmental Representative. If reclaimed wastewater is used for dust control, the sources and discharge must meet California Department of Health Services water reclamation criteria and RWQCB requirements. Approval for use of reclaimed wastewater must be obtained from the project Field Environmental Representative.
Maintenance and Inspection	<ul style="list-style-type: none"> Check areas protected to ensure coverage. Reapply water, chemical dust suppressants, or maintain soil covers as necessary to maintain their effectiveness.



EROSION CONTROL AND SOIL STABILIZATION

Dust (Wind Erosion) Control

BMP 4-08



Pictures



Water being applied for dust control.

Corresponding CASQA Fact Sheet

Fact Sheet WE-1



What	<p>A diversion berm is a temporary berm of compacted soil used to direct runoff water to a desired location. A drainage swale is a shaped and sloped soil depression used to convey runoff to a desired location. Diversion berms and drainage swales divert off site runoff around the construction or operation and maintenance site, divert runoff from flowing onto stabilized areas and disturbed areas, and direct runoff into sediment basins or traps. A diversion berm or swale itself does not control erosion or remove or trap sediment from runoff.</p> <p>Limitations:</p> <ul style="list-style-type: none">• Diversion berms may create disturbed areas and become construction equipment barriers.• Diversion berms must be stabilized immediately, adding cost and maintenance.• Diverted storm water may cause downstream flood damage.• Berms should not be constructed of easily eroded soils.• Regrading the site to remove the berm may add cost.• Other soil stabilization and sediment controls such as check dams, plastics, and blankets may be needed to prevent erosion in newly graded berms and swales.• Sediment accumulation, scour depression, and/or persistent non-storm water discharges can result in standing water suitable for mosquito production.
When	<p>Diversion berms and drainage swales are suitable for use, individually or together, where runoff needs to be diverted from one area to another. These BMPs may be used:</p> <ul style="list-style-type: none">• To direct runoff away from disturbed areas or at the top of slopes.• To convey surface runoff down sloping land.• To divert runoff towards a stabilized watercourse, drainage pipe, or channel.• To intercept runoff from paved surfaces.• To divert sediment laden runoff into sediment basins or traps.
Where	<p>Diversion berms and drainage swales should be considered:</p> <ul style="list-style-type: none">• At the top of slopes to divert run-on from adjacent or undisturbed slopes.• At bottom and mid-slopes to intercept sheet flow and convey concentrated flows.• Below steep grades where runoff begins to concentrate.• Along roadways and facility improvements subject to flood drainage.• Berms should not be used for drainage areas greater than 10 acres or along slopes greater than 10 percent. For larger drainage areas, more permanent drainage structures should be built in accordance with local requirements.• Drainage areas more than 5 acres should not drain to a temporary drainage swale. For larger drainage areas, use berms, or more permanent drainage structures should be built in accordance with local requirements.
How	<p>Berms and swales should not adversely affect adjacent properties and must conform to local floodplain management regulations. Obtain written authorization from property owner to divert runoff onto another property.</p>



How (cont.)

- Care must be applied to correctly size and locate berms and drainage swales.
- Conveyances and outlets should be stabilized.
- Size to control flow velocity based on evaluation of the erosion risk, soil types, overtopping, flow backups, washout, and site drainage flow patterns.
- Install permanent berms and swales early in the construction process.

Diversion Berms:

- Compact all berms and provide positive drainage to an outlet.
- All berms should have 1:2 (vertical: horizontal) or flatter side slopes, and minimum 18-inch height, and minimum 24-inch top width. Wide top widths and flat slopes are usually needed for construction traffic crossings.
- Runoff should be conveyed to a sediment trapping device when the berm channel or the drainage area above the berm are not adequately stabilized.
- Temporary stabilization may be achieved using seed and mulching for slopes less than 5 percent and either riprap or sod for slopes greater than 5 percent. Stabilization should be completed immediately after installation/placement.
- If riprap is used to stabilize the channel formed along the toe of the berm, the following typical specifications apply:

Channel Grade	Riprap Stabilization
0.5 - 1%	4 inch Rock
1.1 - 2.0%	6 inch Rock
2.1 - 4.0%	8 inch Rock
4.1 - 5.0%	8 to 12 inch Riprap

- The riprap, recycled concrete, etc. should be pressed into the soil with construction equipment.
- Filter fabric may be used to cover berms in use for long periods.
- Construction activity on the earthen berms should be kept to a minimum.

Drainage Swales:

Standard engineering design criteria for small open channel and closed conveyance systems should be used. Unless local drainage design criteria state otherwise, drainage swales should be designed as follows:

- Place drainage swales above or below, not on, a cut or fill slope.
- Swale bottom width should be at least 2 feet, and the depth of the swale should be at least 18 inches. The swale side slopes should be 1:2 (vertical: horizontal) or flatter.
- Drainage swales should be at a grade of at least 1 percent, but not more than 15 percent.
- The swale must not be overtopped by the peak discharge from a 10-year storm, irrespective of the design criteria above.
- Remove all vegetation and other objectionable materials and compact the fill material along the swale path.



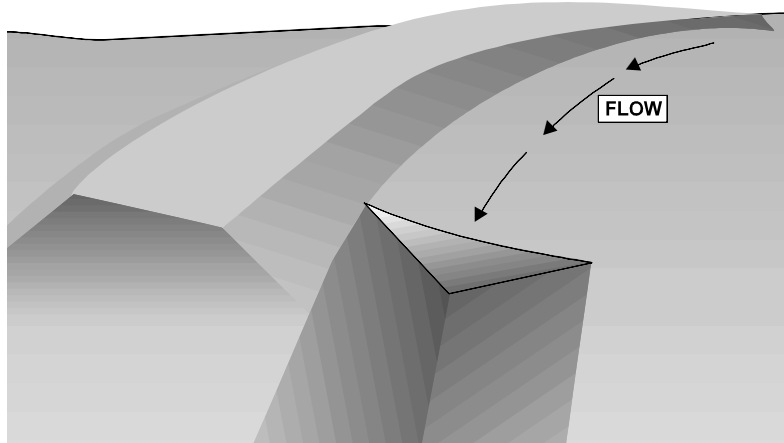
How (cont.)

- Stabilize all swales immediately after installation/placement. Seed and mulch swales with slopes of less than 5 percent and use riprap or sod for swales with slopes between 5 and 15 percent. For temporary swales, geotextiles and mats may provide immediate stabilization.
- Irrigation may be required to establish sufficient vegetation to prevent erosion.
- Do not operate vehicles across a swale unless a stabilized crossing is provided.
- Permanent drainage facilities must be designed by a California Registered Civil Engineer.
- At a minimum, the drainage swale should conform to predevelopment drainage patterns and capacities.
- Construct the drainage swale with a positive grade to a stabilized outlet.
- Provide erosion protection or energy dissipation measures if the flow out of the drainage swale can reach erosive velocity.

Maintenance and Inspection

- Inspect berms and drainage swales dams prior to, daily during, and after each storm event, and routinely throughout the construction activity (e.g., weekly, or in compliance with the frequency specified in the CGP, if applicable).
- Inspect BMPs subject to non-storm water discharges daily while the discharges occur.
- Inspect ditches and berms for washouts and erosion. Repair riprap, damaged linings, or soil stabilizers, and linings as needed.
- Inspect channel linings, embankments, and beds of swales and berms for erosion and accumulation of debris and sediment. Remove accumulated debris and sediment as needed. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state and local requirements.
- Temporary conveyances should be completely removed as soon as the surrounding drainage area has stabilized or at the completion of construction.

Pictures



Corresponding CASQA Fact Sheet

Fact Sheet EC-9



What	<p>Velocity dissipation devices are composed of rock, riprap, grouted riprap or concrete rubble, placed at the outlet of a pipe, channel, or waterbar to prevent scour and erosion caused by concentrated high velocity flows. There are many types of dissipation devices.</p> <p>Limitations:</p> <ul style="list-style-type: none"> • Large storms or high flows can wash away the outlet protection and leave the area susceptible to erosion. • Sediment captured by the outlet protection may be difficult to remove without removing the protection. • Outlet protection may negatively impact the channel habitat. • Grouted riprap may break up in areas of freeze and thaw. • With inadequate drainage, water may build up behind and break grouted riprap. • Sediment accumulation, scour depression, and/or persistent non-storm water discharges can result in standing water suitable for mosquito production.
When	<p>Velocity dissipation devices are suitable when discharge velocities and energies at the outlets of culverts, conduits, waterbars, or channels are sufficient to erode the next downstream reach.</p>
Where	<p>Velocity dissipation devices should be considered:</p> <ul style="list-style-type: none"> • At outlets of pipes, drains, culverts, slope drains, diversion ditches, swales, conduits, channels, waterbars, etc. • At outlets located at the bottom of mild to steep slopes. • At discharge outlets that carry continuous water flow. • At outlets subject to short, intense water flows, such as flash floods. • At points where lined conveyances discharge to unlined conveyances.
How	<p>Depth of flow, roughness, gradient, side slopes, discharge rate, and velocity should be considered in the outlet design. Compliance to local and state regulations should be considered, particularly while working in environmentally sensitive streambeds.</p> <ul style="list-style-type: none"> • Determine the apron length and rock size gradation using the discharge pipe diameter and estimated discharge rate table below. Select the longest apron length and largest rock size suggested by the pipe size and discharge rate. Recommendations for rock size and length of outlet protection mat should be considered minimums. Use sound, durable, and angular rock. • Where flows are conveyed in open channels such as ditches or swales, use the estimated discharge rate for selecting the apron length and rock size. Flows should be the same as the culvert or channel design flow but never less than the peak 5 year flow for temporary structures planned for one rainy season, or the 10 year peak flow for temporary structures planned for two or three rainy seasons. • Install filter fabric, riprap, grouted riprap, or concrete apron at selected outlet. Install filter fabric or well-graded filter layer beneath the riprap apron. Riprap aprons are best suited for temporary use during construction. Grouted or wired riprap can minimize maintenance. • Rock outlet protection is usually less expensive and easier to install than concrete aprons or energy dissipaters, and serves to trap sediment and reduce flow velocities.



How (cont.)

- Carefully place riprap to avoid damaging the underlying filter fabric.
 - Rock 4 to 6-inches may be carefully dumped onto the filter fabric from a maximum height of 12 inches.
 - 8- to 12-inch rock must be hand placed onto filter fabric, or the filter fabric may be covered with 4 inches of gravel, and the rock may be dumped from a maximum height of 16 inches.
 - Rock greater than 12 inches shall only be dumped onto filter fabric protected with a layer of gravel with a thickness equal to one-half the D_{50} rock size, with the dump height limited to twice the gravel protection layer thickness.
- Align apron with receiving stream and keep straight throughout its length. If a curve is needed to fit site conditions, place it in the upper section of the apron.
- Outlets on slopes steeper than 10 percent should have additional protection.

Pipe Diameter (in)	Discharge (ft ³ /s)	Apron Length (ft)	Min. Riprap D_{50} Diameter (in)
12	5	10	4
	10	13	6
18	10	10	8
	20	16	12
	30	23	16
	40	26	8
24	30	16	8
	40	26	12
	50	26	16
	60	30	8

Maintenance and Inspection

- Inspect velocity dissipation devices prior to and after each rain event, and daily during extended rain events throughout the construction activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Inspect BMPs subject to non-storm water discharges daily while the discharges occur. Minimize standing water by removing sediment blockages and filling depressions.
- Inspect apron for displacement of the riprap and damage to the underlying fabric. Repair fabric and replace riprap that has washed away. If riprap continues to wash away, consider using larger material.
- Inspect for scour beneath the riprap and around the outlet. Repair damage to slopes or underlying filter fabric immediately.
- Temporary devices should be completely removed as soon as the surrounding drainage area has been stabilized or at the completion of construction.

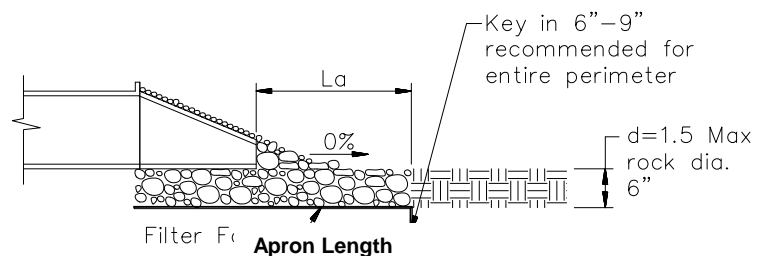
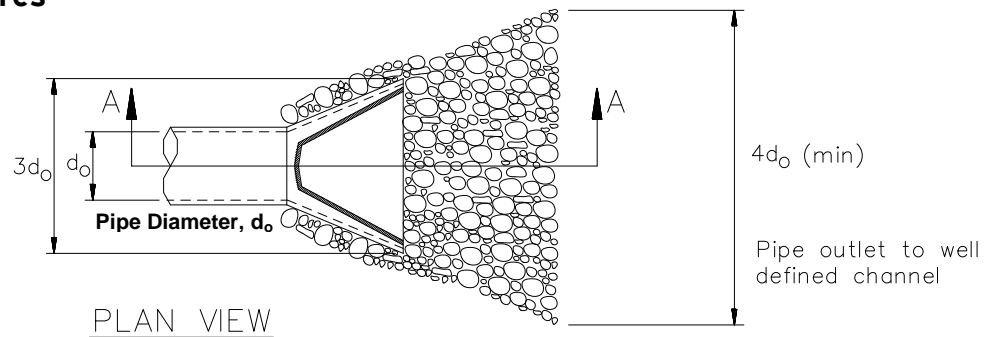
EROSION CONTROL AND SOIL STABILIZATION

Velocity Dissipation Devices

BMP 4-10



Pictures



**Corresponding
CASQA
Fact Sheet**

Fact Sheet EC-10



What A slope drain is a pipe used to intercept and direct surface runoff or groundwater into a stabilized watercourse, trapping device, or stabilized area. Slope drains are typically used with diversion berms and drainage ditches to intercept and direct surface flow away from slope areas to protect cut or fill slopes. Slope drains prevent storm water from flowing directly down the slope by confining the runoff into an enclosed pipe or channel. The slope drain may be installed as a rigid pipe, such as corrugated metal, a flexible conduit, or a lined terrace drain with a top of a slope inlet and a bottom of a slope outlet.

Limitations:

- Slope drain sizing, installation, and maintenance is critical to minimize the potential for failure. Severe erosion may result when slope drains fail by overtopping, pipe separation, or other signs of erosion.
- Dissipation of high flow velocities at the pipe outlet is required to avoid erosion.
- Sediment accumulation, scour depression, and/or persistent non-storm water discharges can result in standing water suitable for mosquito production.

When Slope drains are suitable when:

- Concentrated runoff flow must be conveyed down a slope.
- Drainage is needed for top of slope diversion dikes or swales.
- Drainage is needed for top of cut and fill slopes where water can accumulate.
- Emergency spillway is required for a sediment basin.

Where Slope drains should be considered where:

- The drainage area is less than 10 acres per slope drain. For larger areas, use a rock-lined channel, or subdivide into areas of 10 acres or less, with each area is treated as a separate drainage.
- Drainage areas exceeding 10 acres must be designed by a California Registered Civil Engineer and approved by the agency that issued the grading permit.

How

- Permanent structures included in the project plans can often serve as construction BMPs if implemented early. However, the permanent structure must meet or exceed the criteria for the temporary structure.
- Slope drains and inlets must be securely attached to the slope and must be adequately sized to carry the capacity of the design storm and associated forces.
- Outlets must be stabilized with riprap, concrete, or other type of energy dissipater, or directed into a stable sediment trap or basin.
- Debris racks are recommended at the inlet. Debris racks are barriers used to collect debris that is too large to pass through the inlet. Debris racks located several feet upstream of the inlet can usually be larger than racks at the inlet, and thus provide enhanced debris protection and less plugging.



How (cont.)

- Safety racks are also recommended at the inlet and outlet of pipes to prevent a human body or animal from washing into the pipe and/or becoming trapped.
- Size to convey at least the peak flow of a 10-year storm. The design storm is conservative due to the potential impact of system failures. The pipe size may be computed using the Rational Method or a method established by a local municipality. Higher flows must be safely stored or routed to prevent any offsite concentration of flow or erosion. Maximum slope generally limited to 1:2 (vertical: horizontal) as energy dissipation below steeper slopes is difficult.
- Direct surface runoff to slope drains with interceptor dikes. Top of interceptor dikes should be 12 inches higher than the top of the slope drain.
- Slope drains can be placed on or buried beneath the slope surface.
- As a guide, temporary slope drains should not be sized smaller than shown in the following table:

Minimum Pipe Diameter (inches)	Maximum Drainage Area (Acres)
12	1.0
18	3.0
21	5.0
24	7.0
30	10.0

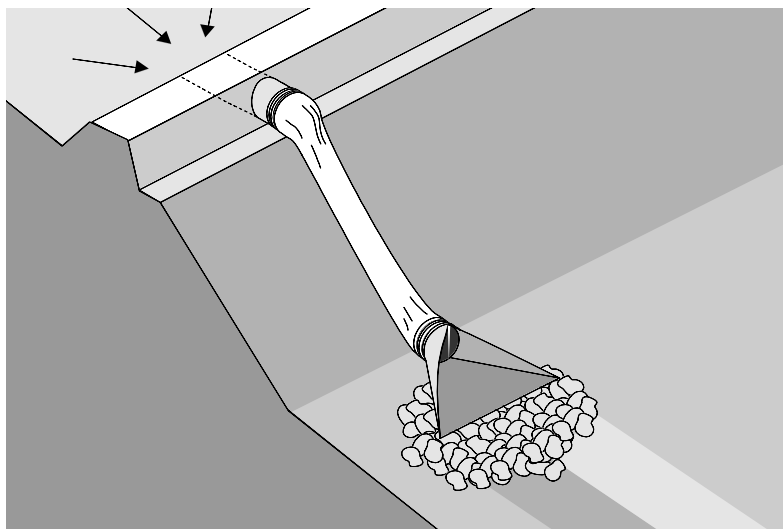
- Recommended materials include metal, plastic, or concrete pipe, either corrugated or smooth wall. The following types of slope drains are common:
 - Rigid Pipe: Also known as a pipe drop, the pipe usually consists of corrugated metal pipe or rigid plastic pipe. The pipe is placed on undisturbed or compacted soil and secured to the slope surface or buried in a trench. Concrete thrust blocks must be used when warranted by the calculated thrust forces. Collars should be properly installed and secured with straps or watertight collars.
 - Flexible Pipe: The pipe consists of a flexible tube of heavy duty plastic, rubber, or composite material. The tube material is securely anchored to the slope surface. The tube should be securely fastened to the metal inlet and outlet conduit sections with metal straps or watertight collars.
 - Section Downdrains: The section downdrain consists of a pre-fabricated, section conduit of half round or third round material, and performs similar to a flume or chute. The pipe must be placed on undisturbed or compacted soil and secured into the slope.
 - Concrete-Lined Terrace Drain: This concrete channel drains water from a slope terrace to the next level. These drains are typically specified as permanent structures and should be designed according to local criteria. If installed early, they can be construction slope drains.



How (cont.)	<p>When installing slope drains:</p> <ul style="list-style-type: none"> • Install perpendicular to slope contours. • Compact soil around and under entrance, outlet, and along length of pipe. • Securely anchor and stabilize pipe appurtenances into soil. • Check to ensure that pipe connections are watertight. • Protect areas around inlet with filter fabric. A flared end section installed at the inlet will improve flow into the slope drain and prevent erosion at the pipe entrance. Use a flared section with a 6-inch minimum toe plate to help prevent undercutting. The flared section should slope towards the pipe inlet. • Protect outlet with riprap or other energy dissipation device. Protect outlet of slope drains using a flared end section when outlet discharges to a flexible energy dissipation device.
Maintenance and Inspection	<ul style="list-style-type: none"> • Inspect slope drains prior to and after each storm event, and daily during extended rain events throughout the construction activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP. • Inspect BMPs subject to non-storm water discharges daily while the discharges occur. Minimize standing water by removing sediment blockages and filling depressions. • Inspect outlet for erosion and downstream scour. If eroded, repair damage and install additional energy dissipation measures. If downstream scour is occurring, it may be necessary to reduce flows being discharged into the channel unless other preventative measures are implemented. • Insert inlet for clogging or undercutting. Remove debris from inlet to maintain flows. Repair undercutting at inlet, and if needed, install flared section or riprap around the inlet to prevent further undercutting. • Inspect pipes for leakage. Repair leaks and restore damaged slopes. • Inspect slope drainage for accumulations of debris and sediment. Remove sediment from entrances and outlets as required. Flush drains as necessary; capture and settle out sediment from discharge. • Ensure water is not ponding onto inappropriate areas (e.g. active traffic lanes, material storage areas, etc.). • Pipe anchors must be checked to ensure that the pipe remains anchored to the slope. Install additional anchors if pipe movement is detected.



Pictures



**Corresponding
CASQA
Fact Sheet**

Fact Sheet EC-11



What Streambank stabilization includes measures to reduce the discharge of sediment from streambanks with exposed or disturbed soil, or unstable banks. Streambank stabilization measures include preservation of existing vegetation, hydraulic mulch, hydroseeding, soil binders, straw mulch, geotextiles and mats, berms, and drainage swales, velocity dissipation devices, and slope drains. Streambank sediment controls include silt fences, fiber rolls, gravel bag berms, rock filters, and K-rail barriers, and padding. Each of these measures have different applications, limitations, and maintenance requirements for use as streambank stabilization.

Stream channels, streambanks, and associated riparian areas are dynamic and sensitive ecosystems that respond to changes in land use. Streams on the 303(d) list and listed for sediment may require numerous measures to prevent any increases in sediment load to the stream.

General streambank stabilization limitations:



- **Specific permit requirements or mitigation measures such as RWQCB 401 Certification, U.S. Army Corps of Engineers 404 permit and approval by the California Department of Fish and Game supersede the guidance in this BMP.**
- If numerical water quality standards are mentioned in any of these and other related permits, testing and sampling may be required. Soil disturbance activities in watersheds having streams listed as 303(d) impaired for sediment, silt, or turbidity, may require sampling to verify that there is no net increase in sediment load.

When When construction or operations and maintenance activities occur within stream channels and associated riparian areas.

Where Streambank stabilization procedures apply to all construction projects and operations and maintenance activities that disturb or occur within stream channels and their associated riparian areas.

How Planning should account for: scheduling; avoidance of wet in-stream construction; minimizing disturbance and construction time period; selecting crossing location; and selecting equipment.



- **Construction and operation and maintenance activities should be scheduled according to the relative sensitivity of the environmental concerns and will be different when working near perennial streams vs. ephemeral streams.**
- Minimize disturbance by using pre-disturbed areas, selecting the narrowest crossing location, limiting vehicle crossing trips, and minimizing the number and size of work areas. Plan work areas at least 50 feet from the stream channel.
- Avoid steep and unstable banks, highly erodible or saturated soils, or highly fractured rock.
- Select a project or work site that minimizes disturbance to aquatic species or habitat.
- Select equipment that reduces the amount of pressure exerted on the ground surface (less than 5 or 6 pounds per square inch where possible).

EROSION CONTROL AND SOIL STABILIZATION

Streambank Stabilization

BMP 4-12



Maintenance and Inspection

- Inspect streambank stabilization BMPs prior to and after each storm event, and daily during extended rain events throughout the construction activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Inspect BMPs subject to non-storm water discharges daily while the discharges occur.
- Inspect and repair equipment (for damaged hoses, fittings, and gaskets, etc.).

Pictures



Cobble or gravel armor used for streambank stabilization.

Corresponding CASQA Fact Sheet

Fact Sheet EC-12



What Soil preparation/roughening involves assessment and preparation of surface soils for BMP installation. This includes soil testing (for seed base, soil characteristics, or nutrients), or roughening surface soils by mechanical methods (including sheepsfoot rolling, track walking, scarifying, stair stepping, and imprinting) to prepare soils for additional BMPs or to break up sheet flow. Soil preparation can also involve tilling topsoil to prepare a seed bed and/or incorporation of soil amendments to enhance vegetative establishment. Various roughening techniques on slopes can result in a significant erosion reduction as compared to smooth slopes.

Limitations:

- Preparation and roughening must take place prior to installing other erosion controls (such as hydraulically applied stabilizers) or sediment controls (such as fiber rolls) on slope faces.
- In cases where slope preparation is minimal, erosion control/revegetation BMPs that do not require extensive soil preparation (such as hydraulic mulching and seeding applications) should be employed.
- Consideration should be given to the type of erosion control BMP that follows surface preparation, as some BMPs are not designed to be installed over various types of tillage/roughening.

When

- Soil preparation is most effective when used in combination with erosion controls. Soil preparation (i.e. tilling, raking, and amendment) is essential to proper vegetative establishment, and suitable in combination with any soil stabilization method, including rolled erosion control products (RECPs) or sod.
- Soil roughening is suitable for use as a complementary process to soil preparation for controlling erosion, and is not intended to be used as a stand-alone BMP. Soil roughening should be used with perimeter controls, additional erosion control measures, grade breaks, and vegetative establishment for maximum effectiveness. Soil roughening is referred to as track walking (sometimes called imprinting) a slope, where treads from heavy equipment run parallel to the slope contours and create terraces. Roughening is intended to only affect surface soils and should not compromise slope stability or overall compaction.

Where Soil preparation should be considered:

- Where vegetation is desired.

Soil roughening should be considered:

- Along any disturbed slopes, including temporary stockpiles, sediment basins, or compacted soil diversion berms and swales.
- Roughening should be used in combination with hydraulically applied stabilization methods, compost blankets, or straw mulch; but should not be used in combination with RECPs or sod because roughening is intended to leave terraces on the slope.

How Minimal materials are required unless amendments and/or seed are added to the soil. Most soil roughening/preparation can be done with standard construction equipment.



How (cont.)

Soil Preparation

- Where appropriate, soil should be prepared to receive the seed by disking or scarifying the surface to eliminate crust, improve air and water infiltration and create a more favorable environment for germination and growth.
- Based on soil testing, apply additional soil amendments (e.g. fertilizers, additional seed) to the soil to help with germination.

Cut Slope Roughening

- Stair-step grade or groove the cut slopes steeper than 1:3 (vertical: horizontal).
- Use stair-step grading on any erodible material soft enough to be ripped with a bulldozer. Slopes consisting of soft rock with some subsoil are well suited to stair-step grading.
- Make the vertical cut distance less than the horizontal distance, and slightly slope the horizontal position of the "step" in toward the vertical wall.
- Do not make individual vertical cuts more than 2 feet or 3 feet high in soft or rock materials, respectively.
- Groove the slope using machinery to create a series of ridges and depressions that run across the slope on the contour.

Fill Slope Roughening

- Place on fill slopes with inclinations steeper than 1:3 (vertical: horizontal) in lifts not to exceed 8 inches, and ensure that each lift is properly compacted.
- Ensure that the slope face consists of loose, uncompacted fill 4 to 6 inches deep.
- Use grooving or tracking to roughen the face of slopes, if necessary.
- Do not blade or scrape the final slope face.

Roughening for Slopes to be Mowed

- Slopes which require mowing should be flatter than 1:3 (vertical: horizontal).
- Roughen these areas to shallow grooves by track walking, scarifying, sheepsfoot rolling, or imprinting. Excessive roughness is undesirable when mowing is planned.
- Space grooves less than 10 inches apart, and not less than 1 inch deep, and perpendicular to the direction of runoff (parallel to the slope contours).

Roughening with Tracked Machinery

- Limit roughening with tracked machinery to soils with a sandy textural component to avoid undue compaction of the soil surface.
- Operate tracked machinery up and down the slope to leave horizontal depressions in the soil. Do not back-blade during the final grading operation.



**How
(cont.)
Maintenance
and
Inspection**

- Seed and mulch roughened areas as soon as possible to obtain optimum seed germination and growth.
- Inspect BMPs prior to and after each storm event, and daily during extended rain events throughout the construction activity (e.g., weekly, or in compliance with the frequency specified in the project specific SWPPP, if applicable). Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as possible but prior to the next predicted storm event, per the CGP.
- Check the seeded slopes for signs of erosion such as rills and gullies. Fill these areas slightly above original grade, then reseed and mulch as soon as possible.

Pictures



Sheepsfoot used for soil preparation

**Corresponding
CASQA
Fact Sheet**

Fact Sheet EC-15

REFERENCES

CASQA, 2009. California Stormwater Quality Association Stormwater Best Management Practice Handbook Portal: Construction, November 2009. <https://www.casqa.org>.

Sempra Energy, December 2002. Water Quality Construction Best Management Practices Manual.

ATS	Active Treatment Systems
Base	Construction and Operations Center
BFM	Bonded Fiber Matrix
BMP	Best Management Practices
Caltrans	California Department of Transportation
CASQA	California Stormwater Quality Association
CGP	California Construction General Permit
ES	Environmental Standard
ESA	Environmentally Sensitive Area
gpm	Gallons per minute
lb/acre	Pounds per acre
LID	Low Impact Development
NPDES	National Pollutant Discharge Elimination System
RWQCB	Regional Water Quality Control Board – there are nine Water Boards located throughout California that are responsible for enforcing water quality standards within their individual boundaries.
SDG&E	San Diego Gas & Electric
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board – The State Board is responsible for protecting and preserving water quality and water rights in California.
Watershed	The total land area that contributes water to a river, stream, lake, or other body of water. Synonymous with drainage basin.
WDR	Waste Discharge Requirements

[illegible]

[illegible]

Local Government Tribal Consultation List Request

Native American Heritage Commission

1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahe@nahe.ca.gov

Type of List Requested

☒ CEQA Tribal Consultation List (AB 52) – *Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2*

☐ General Plan (SB 18) - *Per Government Code § 65352.3.*

Local Action Type:

___ General Plan ___ General Plan Element ___ General Plan Amendment

___ Specific Plan ___ Specific Plan Amendment ___ Pre-planning Outreach Activity

Required Information

Project Title: Tie Line 649 Wood-to-Steel Replacement Project

Local Government/Lead Agency: California Public Utilities Commission

Contact Person: Janis Offermann / Horizon Water and Environment

Street Address: 555 Capitol Mall, Suite 800

City: Sacramento, CA Zip: 95814

Phone: 916.553.4923 Fax: 916.443.9017

Email: janis@horizonh2o.com

Specific Area Subject to Proposed Action

County: San Diego City/Community: _____

Project Description:

The project is located in the southeastern portion of San Diego County, California, approximately 12 miles southeast of downtown San Diego and 1.5 miles north of the U.S./Mexican border. The project proposes to replace existing wood power poles with poles made of steel along approximately 7 miles of the line. About 132 existing wood poles will be replaced by 117 galvanized steel poles, typically within 10 feet of the existing wood pole locations. The power line belongs to San Diego Gas & Electric.

Additional Request

☒ Sacred Lands File Search - *Required Information:*

USGS Quadrangle Name(s): Imperial Beach USGS 7.5'; T18S, R1 and 2W

Otay Mesa USGS 7.5'; T18s, R1W and R1E

Township: see above Range: see above Section(s): see attached maps

Z:\Projects\SDGE_TL649\MXD\PEAPD\Fig_3_1_Project_Location.mxd 1/16/2015



Figure 3-1: Project Location Map

Tie Line 649 Wood-to-Steel Replacement Project

Proposed Project (TL 649)

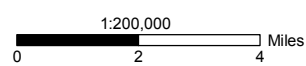
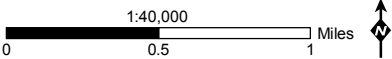


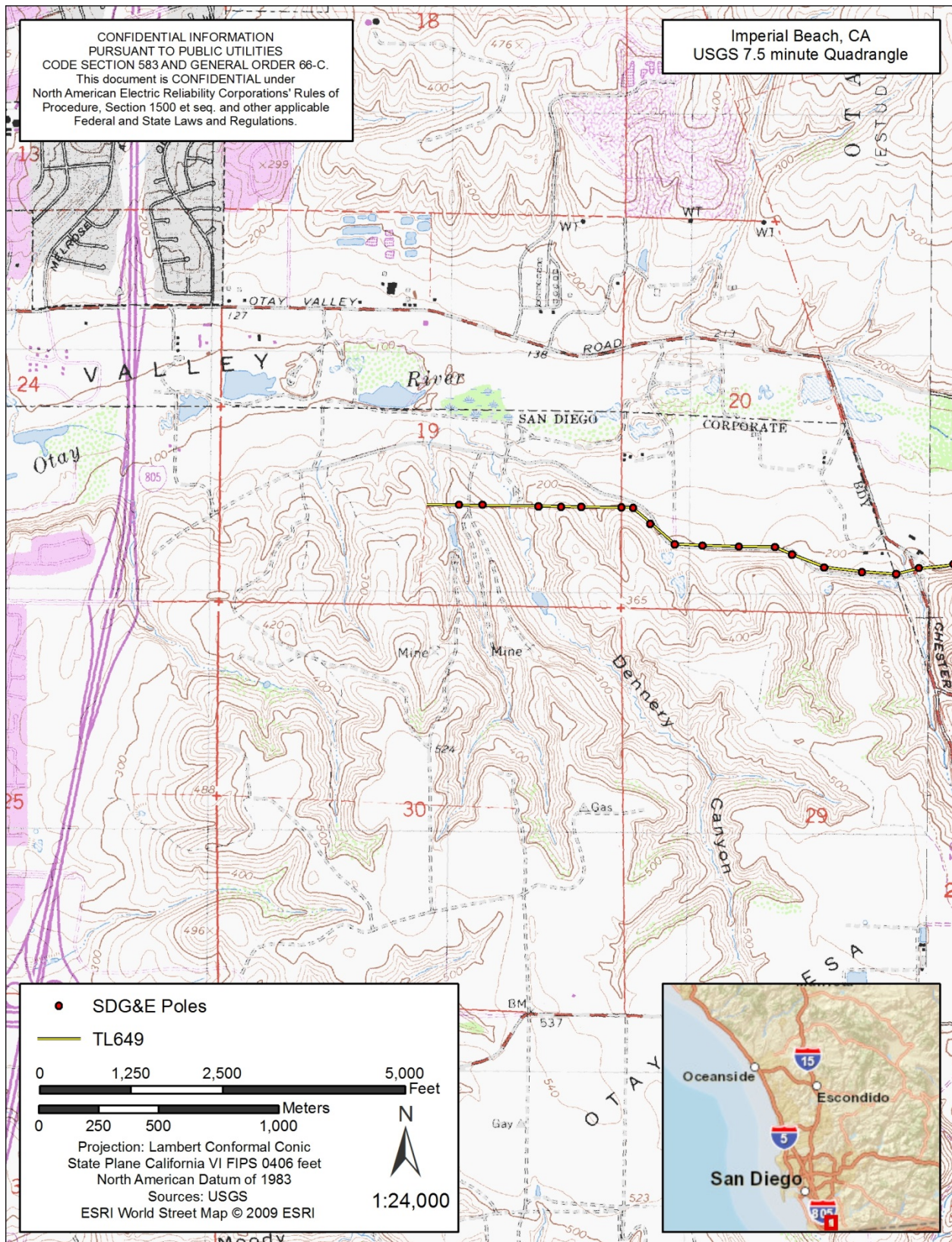


Figure 3-4: Project Components Map

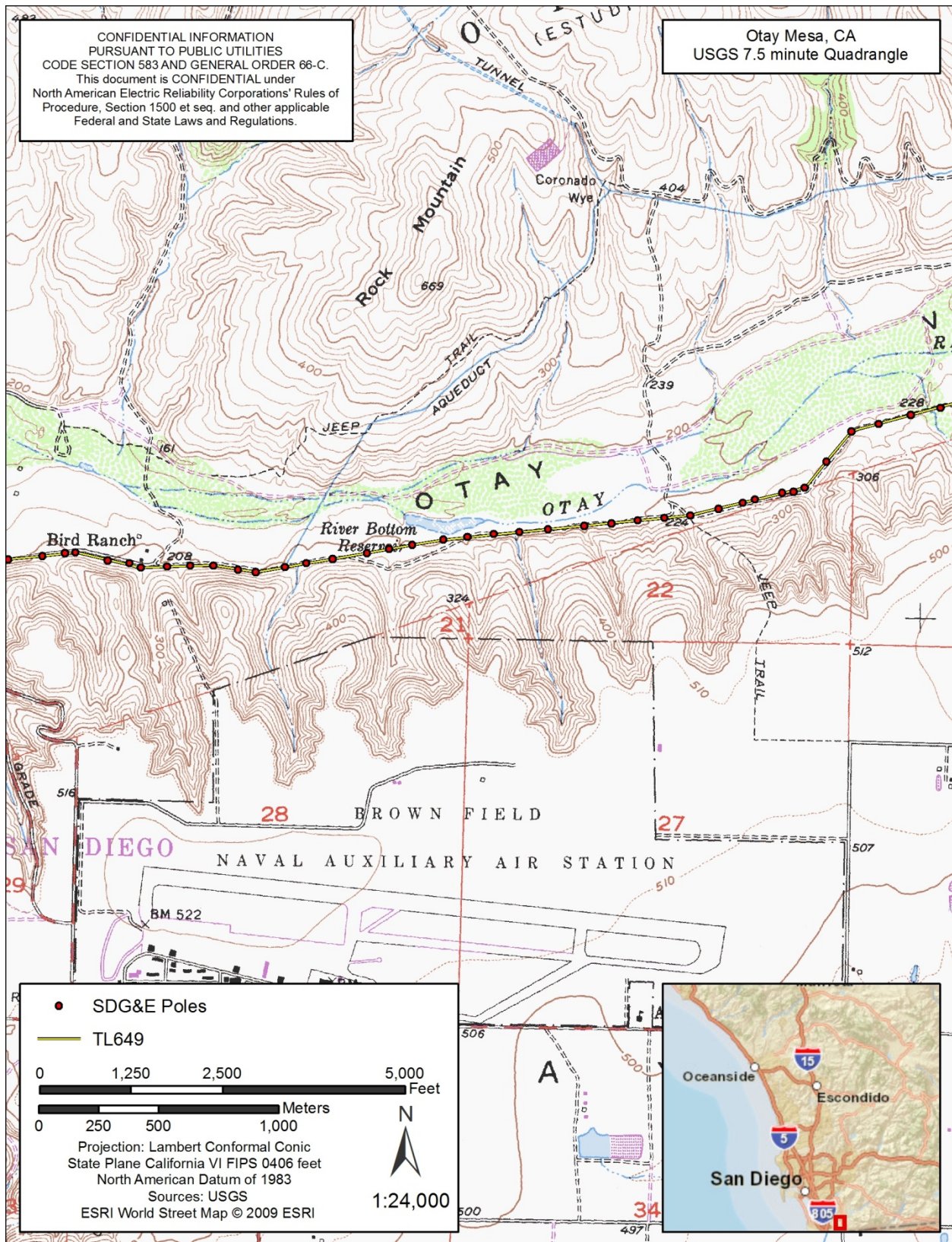
Tie Line 649 Wood-to-Steel Replacement Project

- Wood-to-Steel Replacement
- Wood-to-Steel Replacement with Distribution Underbuild
- Distribution Line Removal
- Wood-to-Steel Replacement Distribution Only
- Underground to Overhead Conversion with Distribution Underbuild
- Underground Distribution Intercept
- Access Road Modification
- Staging Yard
- Municipal Boundary

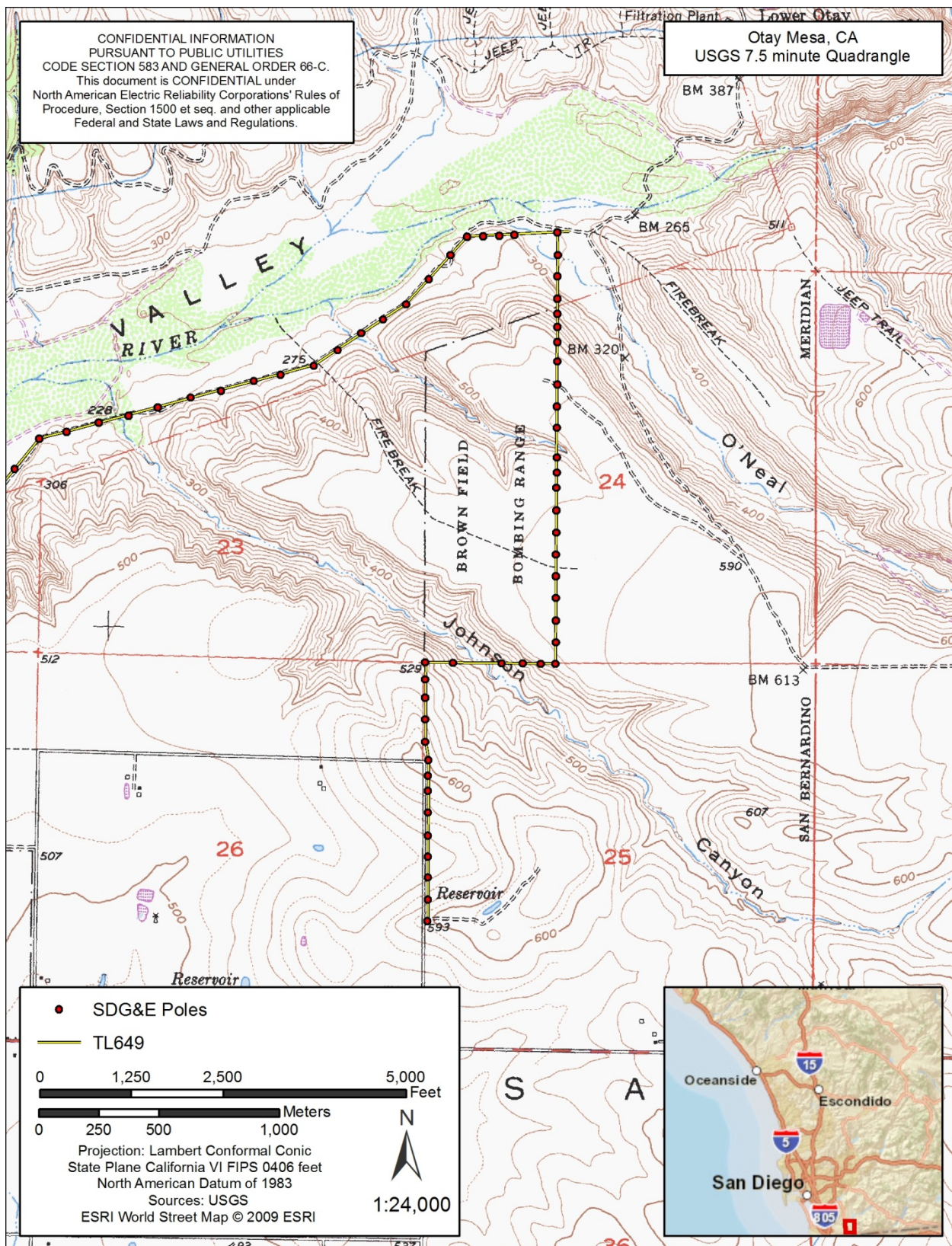




Project APE



Project APE (continued)



Project APE (continued)

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX



March 14, 2016

Janis Offermann
Horizon Water and Environment

Sent via e-mail: Janis@horizonh2o.com

Number of pages: 3

RE: Proposed Tie Line 649 Wood-to-Steel Replacement Project, City of Chula Vista, Imperial Beach and Otay Mesa USGS Quadrangles, San Diego County, California

Dear Ms. Offermann:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent above reference codes is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 require public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A search of the SFL was completed for the USGS quadrangle information provided with negative results.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

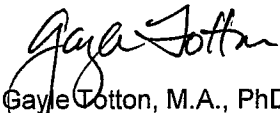
Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,



Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

**Native American Heritage Commission
Tribal Consultation List
San Diego County
March 14, 2016**

Sycuan Band of the Kumeyaay Nation

Cody J. Martinez, Chairperson

1 Kwaaypaay Court

El Cajon , CA 92019

ssilva@sycuan-nsn.gov

(619) 445-2613

Diegueno/Kumeyaay

Iipay Nation of Santa Ysabel

Clint Linton, Director of Cultural Resources

P.O. Box 507

Santa Ysabel , CA 92070

cjlinton73@aol.com

(760) 803-5694

Diegueno/Kumeyaay

Viejas Band of Kumeyaay Indians

Robert J. Welch, Sr., Chairperson

1 Viejas Grade Road

Alpine , CA 91901

jhagen@viejas-nsn.gov

(619) 445-3810

Diegueno/Kumeyaay

Iipay Nation of Santa Ysabel

Virgil Perez, Chairperson

P.O. Box 130

Santa Ysabel , CA 92070

(760) 765-0845

Diegueno/Kumeyaay

Campo Band of Mission Indians

Ralph Goff, Chairperson

36190 Church Road, Suite 1

Campo , CA 91906

rgoff@campo-nsn.gov

(619) 478-9046

Diegueno/Kumeyaay

Jamul Indian Village

Erica Pinto, Chairperson

P.O. Box 612

Jamul , CA 91935

(619) 669-4785

Diegueno/Kumeyaay

Kwaaymii Laguna Band of Mission Indians

Carmen Lucas

P.O. Box 775

Pine Valley , CA 91962

(619) 709-4207

Diegueno-Kwaaymii

Kumeyaay

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Tie Line 649 Wood-to-steel Replacement Project, City of Chula Vista, Imperial Beach and Otay Mesa USGS Quadrangles, San Diego County, California.

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



March 21, 2016

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Ralph Goff, Chairperson
Campo Band of Mission Indians
36190 Church Road, Suite 1
Campo, California 91906

Re: AB 52 Consultation Notice - CPUC Review of San Diego Gas and Electric Tie Line 649 Wood-to-Steel Replacement Project

Dear Chairperson Goff:

The State of California Public Utilities Commission (CPUC) is undertaking review of San Diego Gas and Electric's (SDG&E) Tie Line (TL) 649 Wood-to-Steel Replacement Project, described below. SDG&E filed a CPUC application (A.15-08-006) on August 10, 2015, seeking a permit to construct the Project. Consideration of the proposed Project is subject to the California Environmental Quality Act (CEQA). Assembly Bill 52 (AB52), approved in September of 2014, codified specific consultation requirements and established "tribal cultural resources" (Public Resources Code [PRC] Section 21074) as a new category of resource that must be considered under CEQA. AB 52 establishes that any project that will have a substantial adverse change to a tribal cultural resource is a project that will have a significant effect on the environment. Pursuant to AB 52, lead agencies must consult with all California Native American tribes that have traditional and cultural affiliation with the geographic area of the proposed project, and that have previously requested consultation (PRC Section 21080.3.1).

CPUC is sending this notice pursuant to provisions of PRC 21080.3.1(b) to inquire whether you wish to consult under AB 52 regarding possible significant effects that the proposed project may have on tribal cultural resources as defined by CEQA. The consultation may include discussion concerning the type of environmental review necessary; the significance of tribal cultural resources; the significance of the Project's impacts on tribal cultural resources; and, if necessary, project alternatives or the appropriate measures for preservation or mitigation (PRC Section 21082.3.2(a)). Please note that AB 52 and existing state law protect the confidentiality of sensitive cultural resources information, including that contained in tribal comment letters (PRC Section 21082.3(c)(1)).

The project location is as follows:

The Proposed Project would be located in the southeastern portion of San Diego County, California, approximately 12 miles southeast of downtown San Diego and approximately 1.5 miles north of the United States/Mexico border, as depicted in attached Figure 1. The Proposed Project traverses the City of Chula Vista, the City of San Diego, and unincorporated San Diego County. The portion of TL 649 that would be replaced is approximately seven miles in length. TL 649 extends farther than the proposed Project alignment; however, wood-to-steel replacement will only occur on this portion of the power line.

A brief description of the Project is as follows:

The Project would remove approximately 132 existing wood power and distribution line poles and replace them with approximately 117 galvanized steel poles, typically within 10 feet of the existing wood poles locations. In addition to transferring the existing distribution lines from the wood poles to the steel poles, work would also include conversion

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298



of approximately 430 feet of underground power line cable under State Route 125 to an overhead configuration, limited trenching at two locations, and widening the existing access roads by approximately 5 feet at selected locations. Figures 2, 3, and 4 depict the various elements of the project and pole locations, respectively. Construction staging areas, and stringing and turn-around areas will also be required.

A Phase I cultural resources study has been prepared for the Project. The study included records searches, a Sacred Lands File search through the Native American Heritage Commission, and pedestrian archaeological survey of the entire Project area. Phase II test excavations were conducted at a number of sites identified during the archaeological survey. None of the sites subject to evaluation were determined eligible for the California Register of Historical Resources (CRHR). Test excavations were not conducted at one previously recorded site that had been determined eligible for the CRHR at an earlier date. Further details of the study would be made available for discussion during the consultation process, if a consultation request is received.

If you wish to request consultation on the proposed Project, please respond in writing within 30 calendar days of the receipt of this letter. In your written response, please indicate a lead contact person. Please mail your written request for consultation referencing the Project title indicated above, to:

Connie Chen
California Public Utilities Commission
Energy Division, Infrastructure Permitting and CEQA
505 Van Ness Avenue
San Francisco, CA 94102-3298

Please do not hesitate to call me at (415) 703-2168 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Connie Chen", followed by a horizontal line.

Connie Chen, Project Manager
Energy Division
Infrastructure Permitting and CEQA

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



March 21, 2016

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Clint Linton, Director of Cultural Resources
Iipay Nation of Santa Ysabel
P.O. Box 507
Santa Ysabel, California 92070

Re: AB 52 Consultation Notice - CPUC Review of San Diego Gas and Electric Tie Line 649 Wood-to-Steel Replacement Project

Dear Mr. Linton:

The State of California Public Utilities Commission (CPUC) is undertaking review of San Diego Gas and Electric's (SDG&E) Tie Line (TL) 649 Wood-to-Steel Replacement Project, described below. SDG&E filed a CPUC application (A.15-08-006) on August 10, 2015, seeking a permit to construct the Project. Consideration of the proposed Project is subject to the California Environmental Quality Act (CEQA). Assembly Bill 52 (AB52), approved in September of 2014, codified specific consultation requirements and established "tribal cultural resources" (Public Resources Code [PRC] Section 21074) as a new category of resource that must be considered under CEQA. AB 52 establishes that any project that will have a substantial adverse change to a tribal cultural resource is a project that will have a significant effect on the environment. Pursuant to AB 52, lead agencies must consult with all California Native American tribes that have traditional and cultural affiliation with the geographic area of the proposed project, and that have previously requested consultation (PRC Section 21080.3.1).

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A brief description of the Project is as follows:

The Project would remove approximately 132 existing wood power and distribution line poles and replace them with approximately 117 galvanized steel poles, typically within 10 feet of the existing wood poles locations. In addition to transferring the existing distribution lines from the wood poles to the steel poles, work would also include conversion

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of approximately 430 feet of underground power line cable under State Route 125 to an overhead configuration, limited trenching at two locations, and widening the existing access roads by approximately 5 feet at selected locations. Figures 2, 3, and 4 depict the various elements of the project and pole locations, respectively. Construction staging areas, and stringing and turn-around areas will also be required.

A Phase I cultural resources study has been prepared for the Project. The study included records searches, a Sacred Lands File search through the Native American Heritage Commission, and pedestrian archaeological survey of the entire Project area. Phase II test excavations were conducted at a number of sites identified during the archaeological survey. None of the sites subject to evaluation were determined eligible for the California Register of Historical Resources (CRHR). Test excavations were not conducted at one previously recorded site that had been determined eligible for the CRHR at an earlier date. Further details of the study would be made available for discussion during the consultation process, if a consultation request is received.

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Connie Chen
California Public Utilities Commission
Energy Division, Infrastructure Permitting and CEQA
505 Van Ness Avenue
San Francisco, CA 94102-3298

Please do not hesitate to call me at (415) 703-2168 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Connie Chen", followed by a horizontal line.

Connie Chen, Project Manager
Energy Division
Infrastructure Permitting and CEQA

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



March 21, 2016

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Ms. Carmen Lucas
Kwaaymii Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, California 91962

Re: AB 52 Consultation Notice - CPUC Review of San Diego Gas and Electric Tie Line 649 Wood-to-Steel Replacement Project

Dear Ms. Lucas:

The State of California Public Utilities Commission (CPUC) is undertaking review of San Diego Gas and Electric's (SDG&E) Tie Line (TL) 649 Wood-to-Steel Replacement Project, described below. SDG&E filed a CPUC application (A.15-08-006) on August 10, 2015, seeking a permit to construct the Project. Consideration of the proposed Project is subject to the California Environmental Quality Act (CEQA). Assembly Bill 52 (AB52), approved in September of 2014, codified specific consultation requirements and established "tribal cultural resources" (Public Resources Code [PRC] Section 21074) as a new category of resource that must be considered under CEQA. AB 52 establishes that any project that will have a substantial adverse change to a tribal cultural resource is a project that will have a significant effect on the environment. Pursuant to AB 52, lead agencies must consult with all California Native American tribes that have traditional and cultural affiliation with the geographic area of the proposed project, and that have previously requested consultation (PRC Section 21080.3.1).

CPUC is sending this notice pursuant to provisions of PRC 21080.3.1(b) to inquire whether you wish to consult under AB 52 regarding possible significant effects that the proposed project may have on tribal cultural resources as defined by CEQA. The consultation may include discussion concerning the type of environmental review necessary; the significance of tribal cultural resources; the significance of the Project's impacts on tribal cultural resources; and, if necessary, project alternatives or the appropriate measures for preservation or mitigation (PRC Section 21082.3.2(a)). Please note that AB 52 and existing state law protect the confidentiality of sensitive cultural resources information, including that contained in tribal comment letters (PRC Section 21082.3(c)(1)).

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A brief description of the Project is as follows:

The Project would remove approximately 132 existing wood power and distribution line poles and replace them with approximately 117 galvanized steel poles, typically within 10 feet of the existing wood poles locations. In addition to transferring the existing distribution lines from the wood poles to the steel poles, work would also include conversion

PUBLIC UTILITIES COMMISSION

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If you wish to request consultation on the proposed Project, please respond in writing within 30 calendar days of the receipt of this letter. In your written response, please indicate a lead contact person. Please mail your written request for consultation referencing the Project title indicated above, to:

Connie Chen
California Public Utilities Commission
Energy Division, Infrastructure Permitting and CEQA
505 Van Ness Avenue
San Francisco, CA 94102-3298

Please do not hesitate to call me at (415) 703-2168 if you have any questions.

Sincerely,

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Connie Chen, Project Manager
Energy Division
Infrastructure Permitting and CEQA

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



March 21, 2016

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Cody J. Martinez, Chairperson
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, California 92019

Re: AB 52 Consultation Notice - CPUC Review of San Diego Gas and Electric Tie Line 649 Wood-to-Steel Replacement Project

Dear Chairperson Martinez:

The State of California Public Utilities Commission (CPUC) is undertaking review of San Diego Gas and Electric's (SDG&E) Tie Line (TL) 649 Wood-to-Steel Replacement Project, described below. SDG&E filed a CPUC application (A.15-08-006) on August 10, 2015, seeking a permit to construct the Project. Consideration of the proposed Project is subject to the California Environmental Quality Act (CEQA). Assembly Bill 52 (AB52), approved in September of 2014, codified specific consultation requirements and established "tribal cultural resources" (Public Resources Code [PRC] Section 21074) as a new category of resource that must be considered under CEQA. AB 52 establishes that any project that will have a substantial adverse change to a tribal cultural resource is a project that will have a significant effect on the environment. Pursuant to AB 52, lead agencies must consult with all California Native American tribes that have traditional and cultural affiliation with the geographic area of the proposed project, and that have previously requested consultation (PRC Section 21080.3.1).

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PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298



of approximately 430 feet of underground power line cable under State Route 125 to an overhead configuration, limited trenching at two locations, and widening the existing access roads by approximately 5 feet at selected locations. Figures 2, 3, and 4 depict the various elements of the project and pole locations, respectively. Construction staging areas, and stringing and turn-around areas will also be required.

A Phase I cultural resources study has been prepared for the Project. The study included records searches, a Sacred Lands File search through the Native American Heritage Commission, and pedestrian archaeological survey of the entire Project area. Phase II test excavations were conducted at a number of sites identified during the archaeological survey. None of the sites subject to evaluation were determined eligible for the California Register of Historical Resources (CRHR). Test excavations were not conducted at one previously recorded site that had been determined eligible for the CRHR at an earlier date. Further details of the study would be made available for discussion during the consultation process, if a consultation request is received.

If you wish to request consultation on the proposed Project, please respond in writing within 30 calendar days of the receipt of this letter. In your written response, please indicate a lead contact person. Please mail your written request for consultation referencing the Project title indicated above, to:

Connie Chen
California Public Utilities Commission
Energy Division, Infrastructure Permitting and CEQA
505 Van Ness Avenue
San Francisco, CA 94102-3298

Please do not hesitate to call me at (415) 703-2168 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Connie Chen", followed by a horizontal line.

Connie Chen, Project Manager
Energy Division
Infrastructure Permitting and CEQA

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



March 21, 2016

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Virgil Perez, Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, California 92070

Re: AB 52 Consultation Notice - CPUC Review of San Diego Gas and Electric Tie Line 649 Wood-to-Steel Replacement Project

Dear Chairperson Perez:

The State of California Public Utilities Commission (CPUC) is undertaking review of San Diego Gas and Electric's (SDG&E) Tie Line (TL) 649 Wood-to-Steel Replacement Project, described below. SDG&E filed a CPUC application (A.15-08-006) on August 10, 2015, seeking a permit to construct the Project. Consideration of the proposed Project is subject to the California Environmental Quality Act (CEQA). Assembly Bill 52 (AB52), approved in September of 2014, codified specific consultation requirements and established "tribal cultural resources" (Public Resources Code [PRC] Section 21074) as a new category of resource that must be considered under CEQA. AB 52 establishes that any project that will have a substantial adverse change to a tribal cultural resource is a project that will have a significant effect on the environment. Pursuant to AB 52, lead agencies must consult with all California Native American tribes that have traditional and cultural affiliation with the geographic area of the proposed project, and that have previously requested consultation (PRC Section 21080.3.1).

CPUC is sending this notice pursuant to provisions of PRC 21080.3.1(b) to inquire whether you wish to consult under AB 52 regarding possible significant effects that the proposed project may have on tribal cultural resources as defined by CEQA. The consultation may include discussion concerning the type of environmental review necessary; the significance of tribal cultural resources; the significance of the Project's impacts on tribal cultural resources; and, if necessary, project alternatives or the appropriate measures for preservation or mitigation (PRC Section 21082.3.2(a)). Please note that AB 52 and existing state law protect the confidentiality of sensitive cultural resources information, including that contained in tribal comment letters (PRC Section 21082.3(c)(1)).

The project location is as follows:

The Proposed Project would be located in the southeastern portion of San Diego County, California, approximately 12 miles southeast of downtown San Diego and approximately 1.5 miles north of the United States/Mexico border, as depicted in attached Figure 1. The Proposed Project traverses the City of Chula Vista, the City of San Diego, and unincorporated San Diego County. The portion of TL 649 that would be replaced is approximately seven miles in length. TL 649 extends farther than the proposed Project alignment; however, wood-to-steel replacement will only occur on this portion of the power line.

A brief description of the Project is as follows:

The Project would remove approximately 132 existing wood power and distribution line poles and replace them with approximately 117 galvanized steel poles, typically within 10 feet of the existing wood poles locations. In addition to transferring the existing distribution lines from the wood poles to the steel poles, work would also include conversion

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505 VAN NESS AVENUE

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of approximately 430 feet of underground power line cable under State Route 125 to an overhead configuration, limited trenching at two locations, and widening the existing access roads by approximately 5 feet at selected locations. Figures 2, 3, and 4 depict the various elements of the project and pole locations, respectively. Construction staging areas, and stringing and turn-around areas will also be required.

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Connie Chen, Project Manager
Energy Division
Infrastructure Permitting and CEQA

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505 VAN NESS AVENUE
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March 21, 2016

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Ms. Erica Pinto, Chairperson
Jamul Indian Village
P.O. Box 612
Jamul, California 91935

Re: AB 52 Consultation Notice - CPUC Review of San Diego Gas and Electric Tie Line 649 Wood-to-Steel Replacement Project

Dear Chairperson Pinto:

The State of California Public Utilities Commission (CPUC) is undertaking review of San Diego Gas and Electric's (SDG&E) Tie Line (TL) 649 Wood-to-Steel Replacement Project, described below. SDG&E filed a CPUC application (A.15-08-006) on August 10, 2015, seeking a permit to construct the Project. Consideration of the proposed Project is subject to the California Environmental Quality Act (CEQA). Assembly Bill 52 (AB52), approved in September of 2014, codified specific consultation requirements and established "tribal cultural resources" (Public Resources Code [PRC] Section 21074) as a new category of resource that must be considered under CEQA. AB 52 establishes that any project that will have a substantial adverse change to a tribal cultural resource is a project that will have a significant effect on the environment. Pursuant to AB 52, lead agencies must consult with all California Native American tribes that have traditional and cultural affiliation with the geographic area of the proposed project, and that have previously requested consultation (PRC Section 21080.3.1).

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Connie Chen
California Public Utilities Commission
Energy Division, Infrastructure Permitting and CEQA
505 Van Ness Avenue
San Francisco, CA 94102-3298

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Connie Chen, Project Manager
Energy Division
Infrastructure Permitting and CEQA

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

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March 21, 2016

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Robert J. Welch, Sr., Chairperson
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, California 91901

Re: AB 52 Consultation Notice - CPUC Review of San Diego Gas and Electric Tie Line 649 Wood-to-Steel Replacement Project

Dear Chairperson Welch:

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Connie Chen
California Public Utilities Commission
Energy Division, Infrastructure Permitting and CEQA
505 Van Ness Avenue
San Francisco, CA 94102-3298

Please do not hesitate to call me at (415) 703-2168 if you have any questions.

Sincerely,


A handwritten signature in cursive script, appearing to read "Connie Chen", followed by a horizontal line.

Connie Chen, Project Manager
Energy Division
Infrastructure Permitting and CEQA



Figure 1: Project Vicinity Map

Tie Line 649 Wood-to-Steel Replacement Project

 Proposed Project (TL 649)

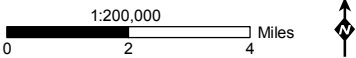
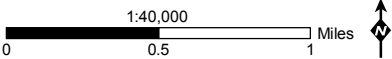




Figure 2: Project Components Map

Tie Line 649 Wood-to-Steel Replacement Project

- Wood-to-Steel Replacement
- Wood-to-Steel Replacement with Distribution Underbuild
- Distribution Line Removal
- Wood-to-Steel Replacement Distribution Only
- Underground to Overhead Conversion with Distribution Underbuild
- Underground Distribution Intercept
- Access Road Modification
- Staging Yard
- Municipal Boundary



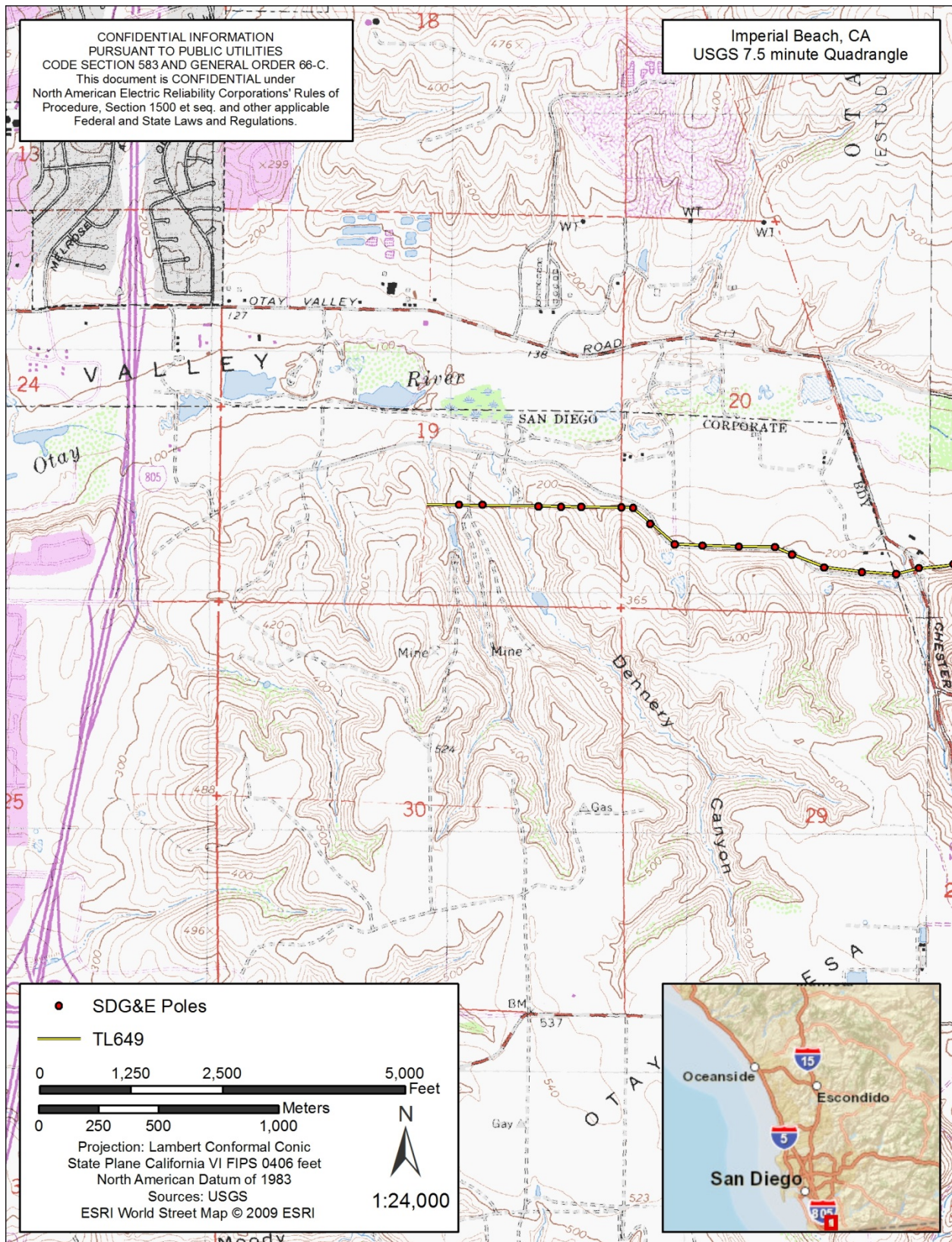
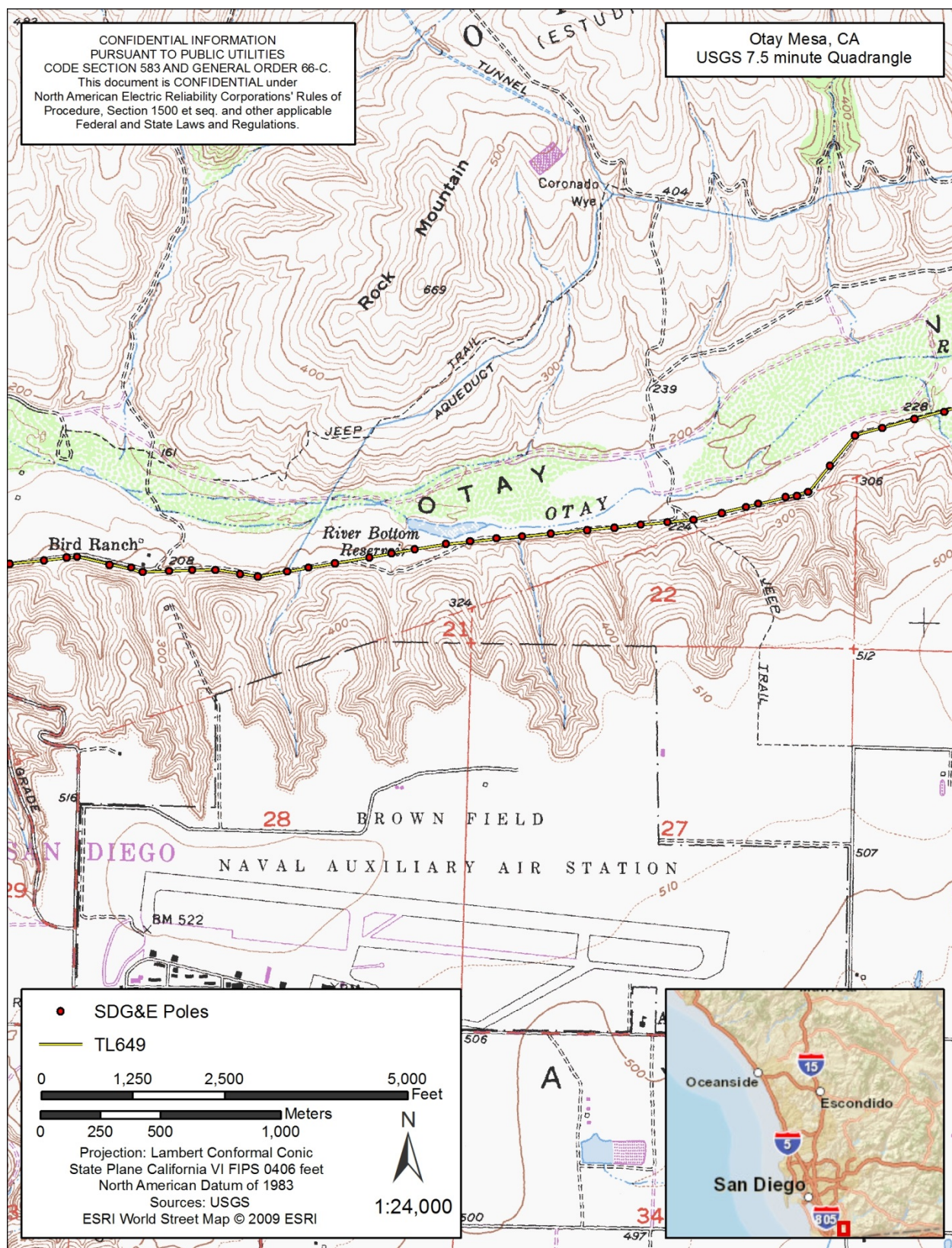


Figure 3: Project Location



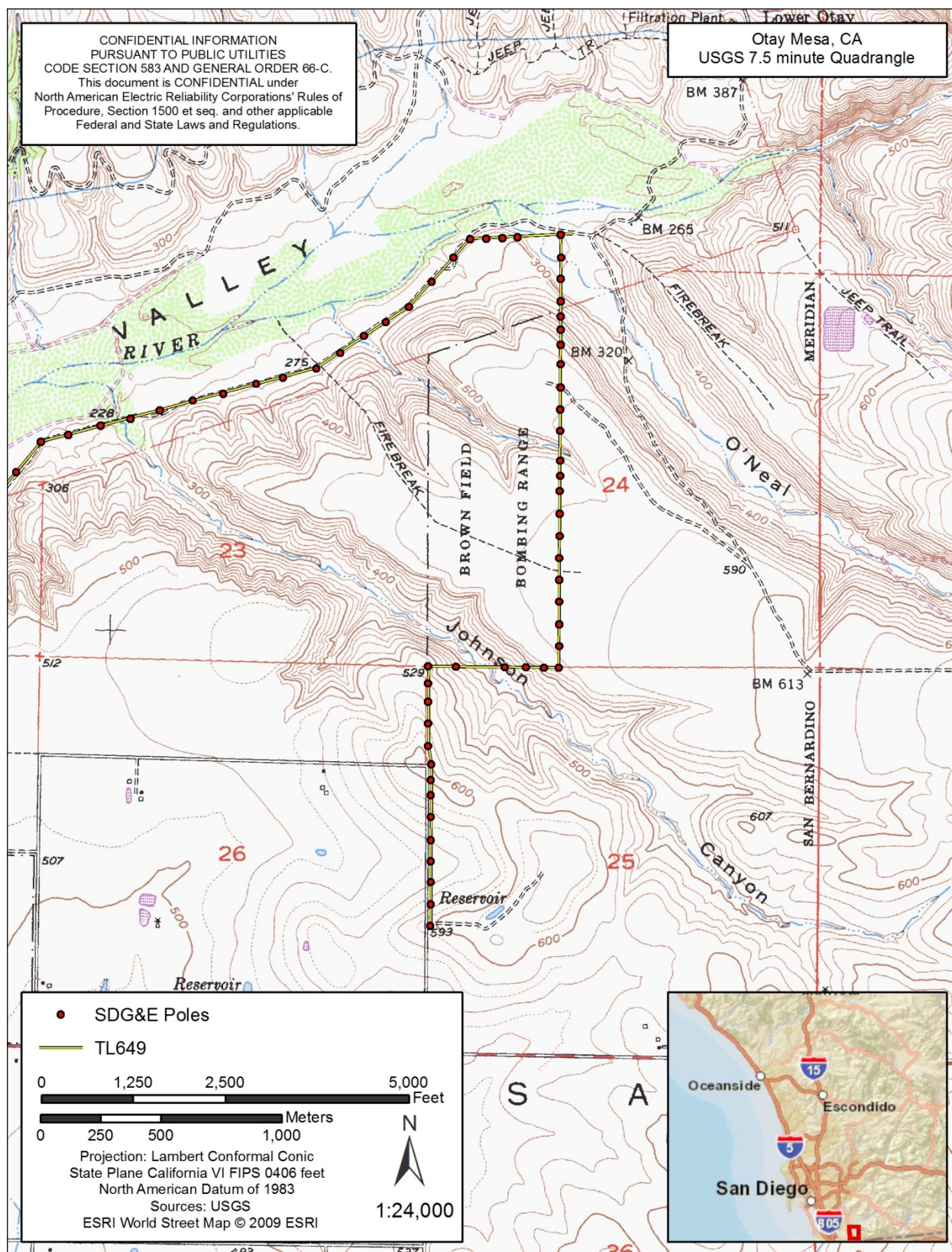
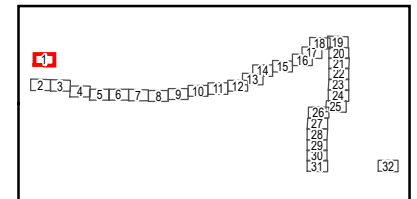




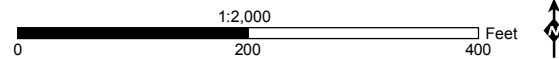
Figure 4: Detailed Route Map 1 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



* Area is equivalent to the total estimated square footage of disturbance at each pole, but the actual shape of the work area will be determined during the final design.



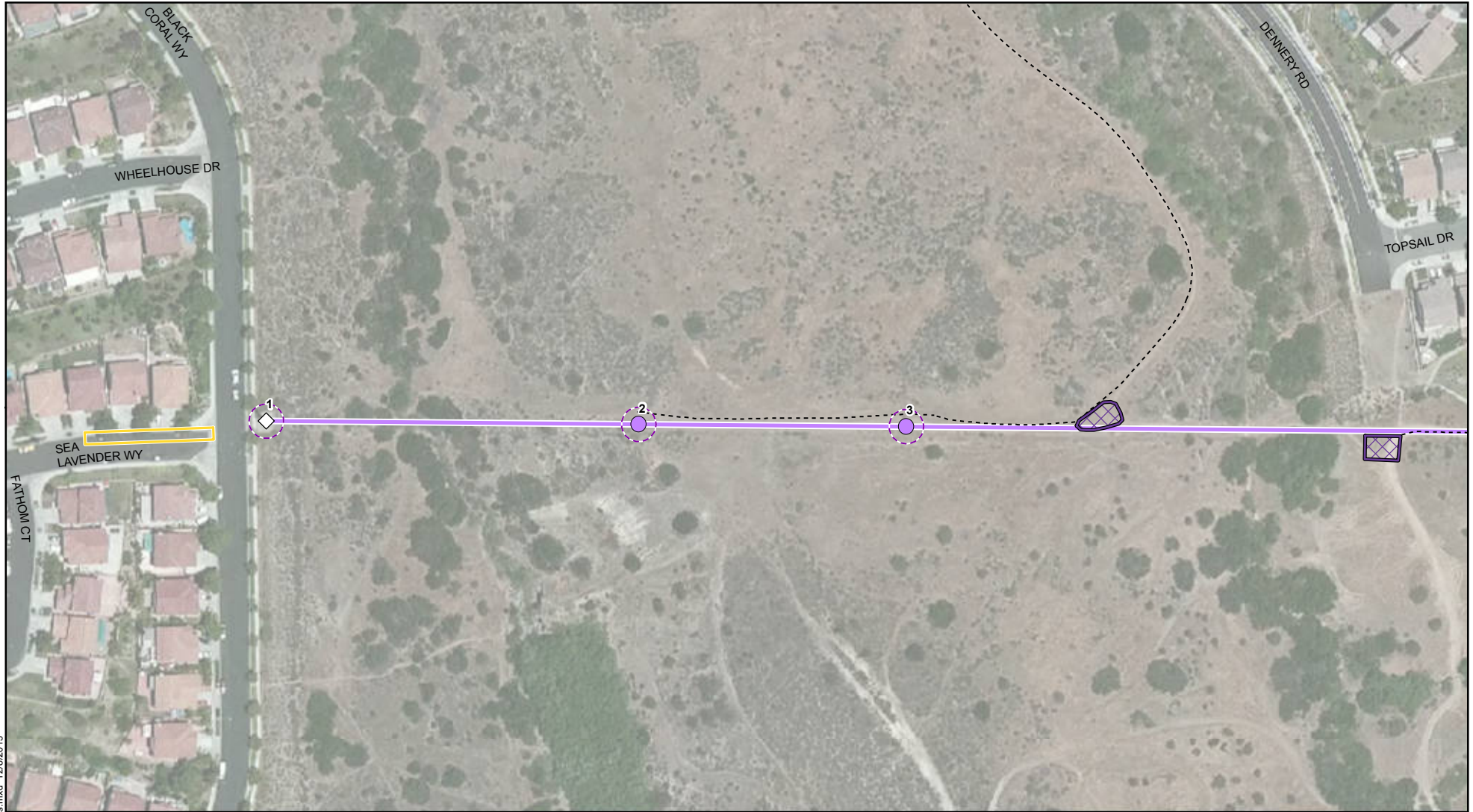
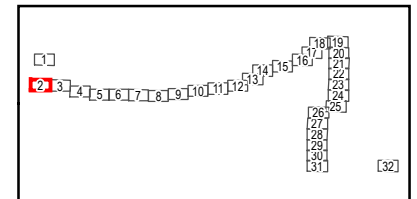


Figure 4: Detailed Route Map 2 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
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| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
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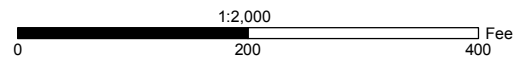
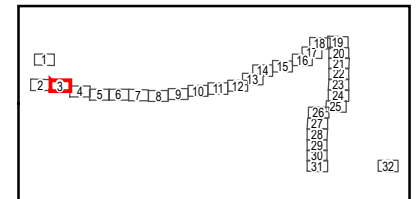




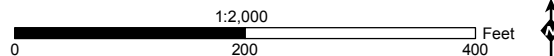
Figure 4: Detailed Route Map 3 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
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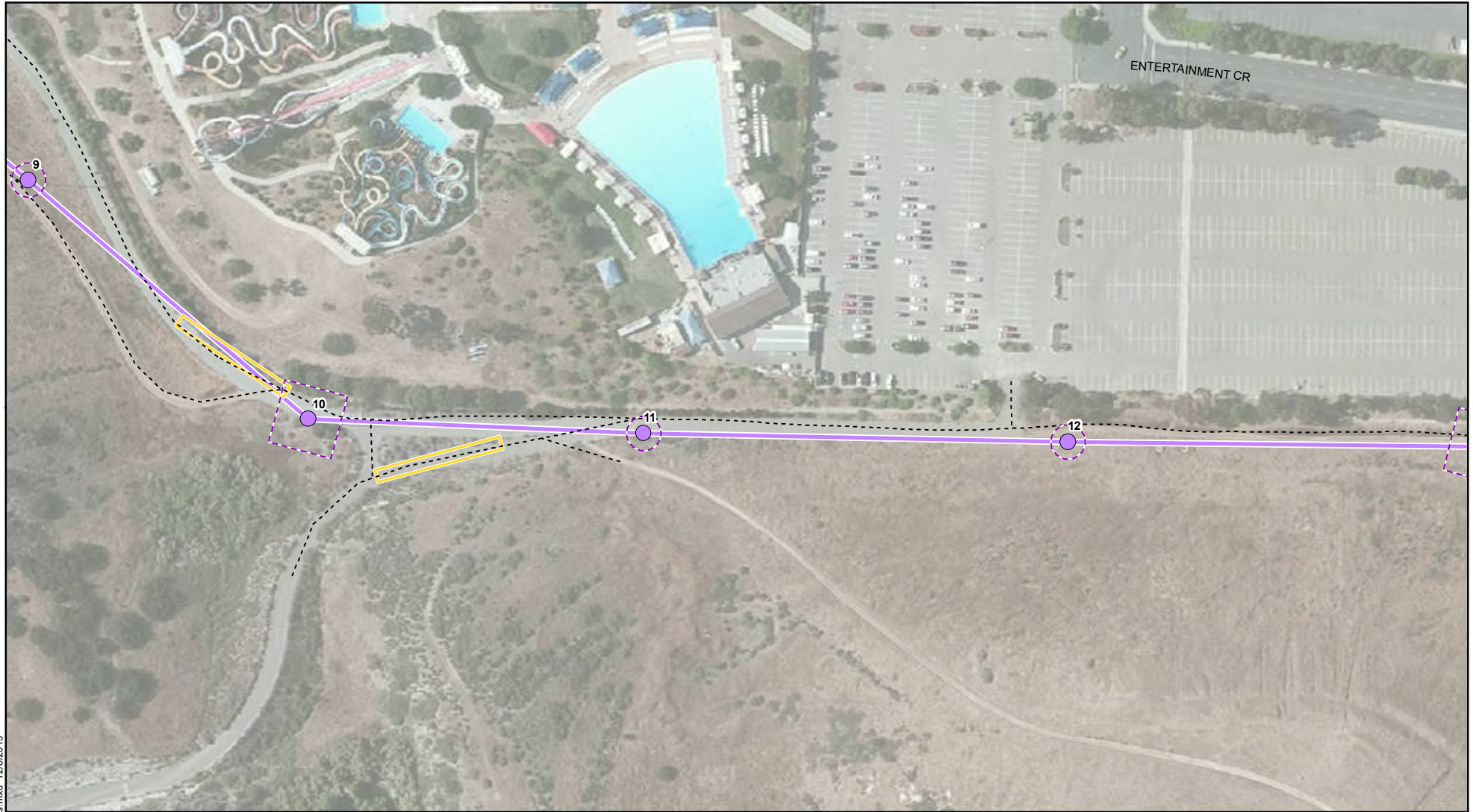
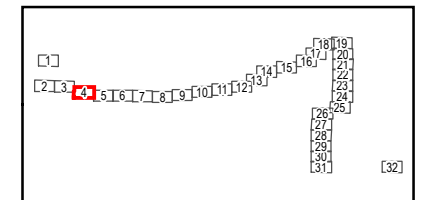


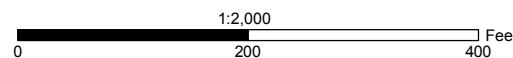
Figure 4: Detailed Route Map 4 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
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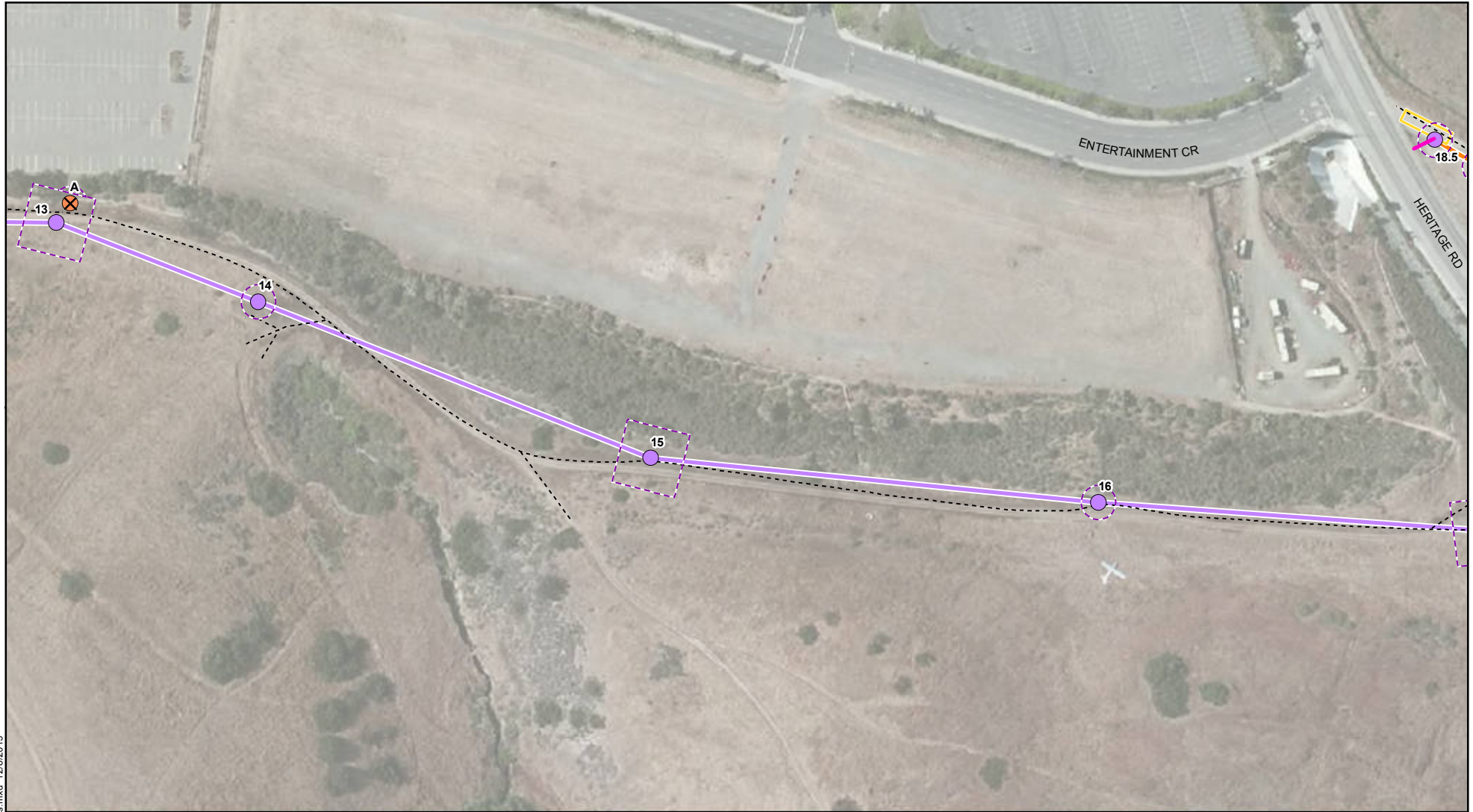
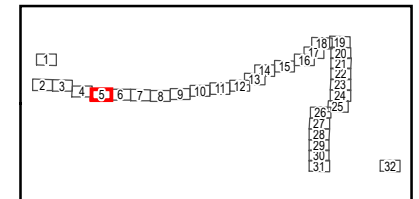


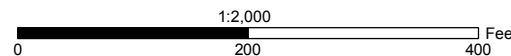
Figure 4: Detailed Route Map 5 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
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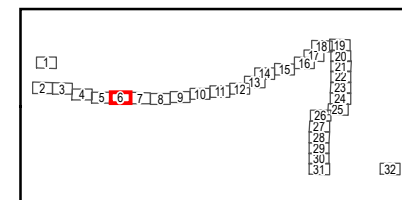
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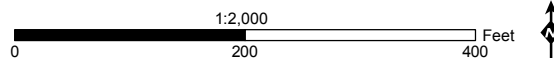
Figure 4: Detailed Route Map 6 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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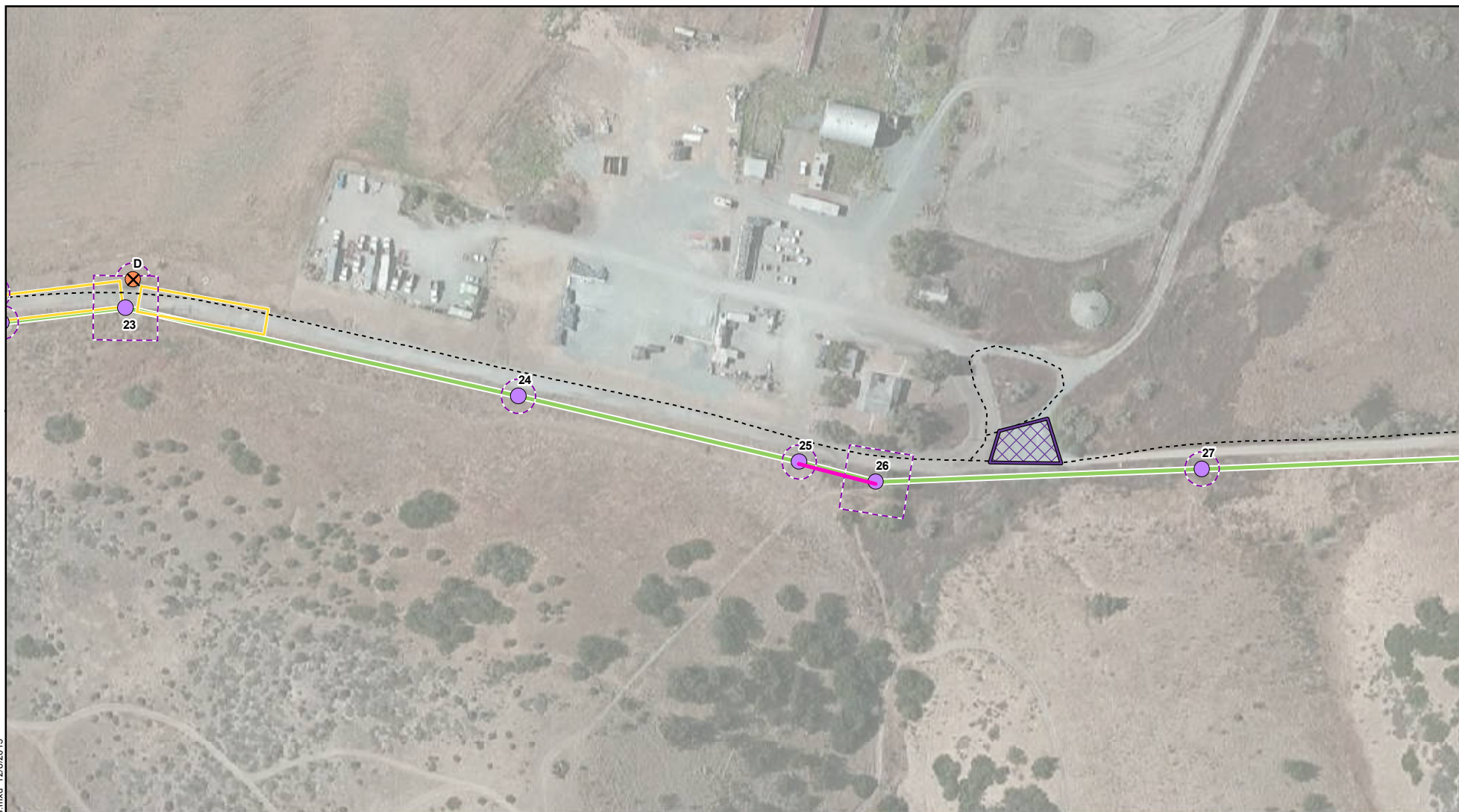
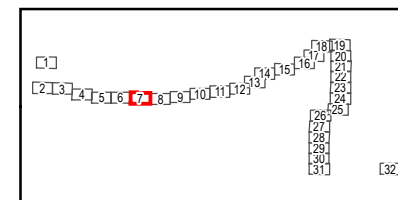


Figure 4: Detailed Route Map 7 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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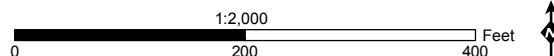
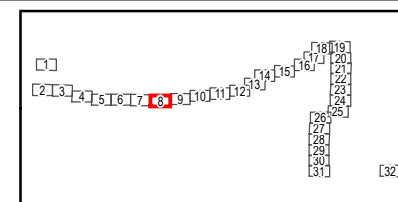




Figure 4: Detailed Route Map 8 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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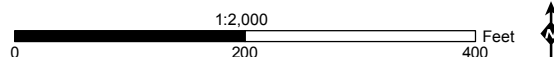
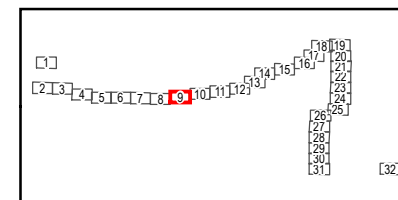




Figure 4: Detailed Route Map 9 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
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| Guard Structure | Underground Distribution Intercept | | |



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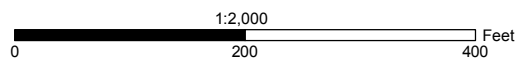
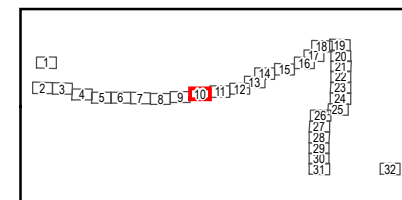




Figure 4: Detailed Route Map 10 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



* Area is equivalent to the total estimated square footage of disturbance at each pole, but the actual shape of the work area will be determined during the final design.

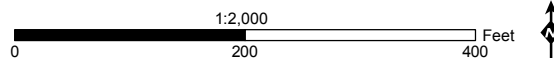
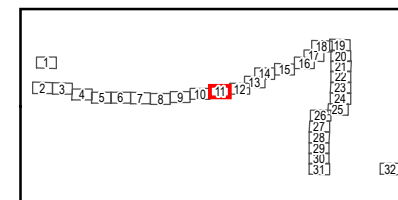




Figure 4: Detailed Route Map 11 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



* Area is equivalent to the total estimated square footage of disturbance at each pole, but the actual shape of the work area will be determined during the final design.

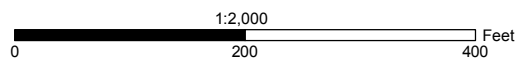
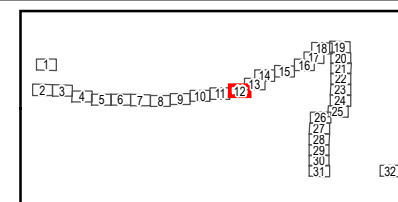




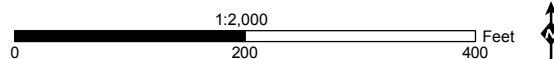
Figure 4: Detailed Route Map 12 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



* Area is equivalent to the total estimated square footage of disturbance at each pole, but the actual shape of the work area will be determined during the final design.



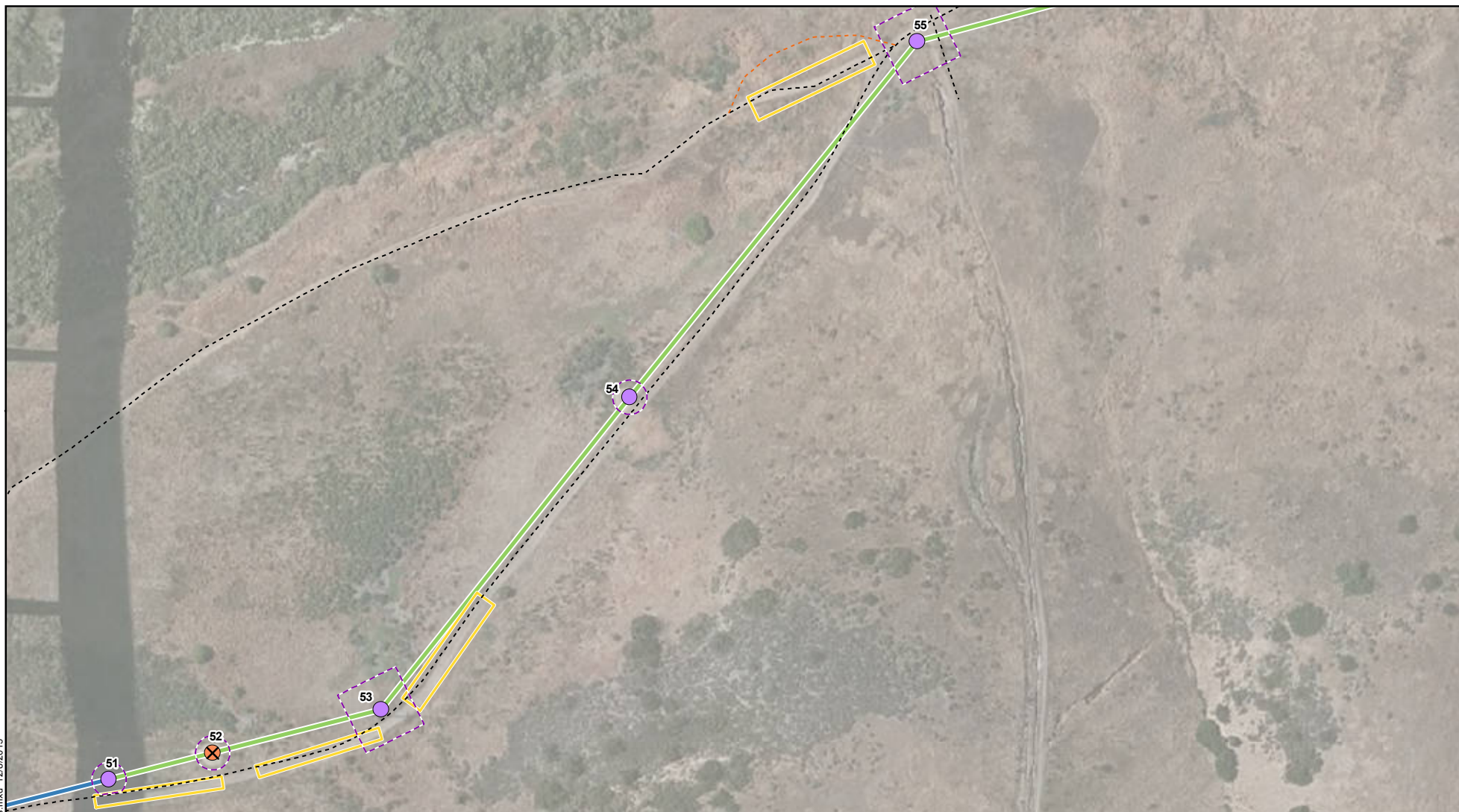
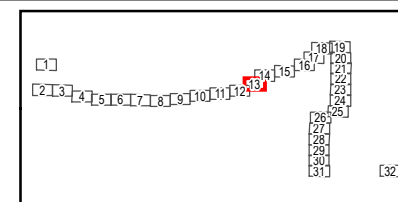


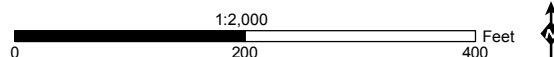
Figure 4: Detailed Route Map 13 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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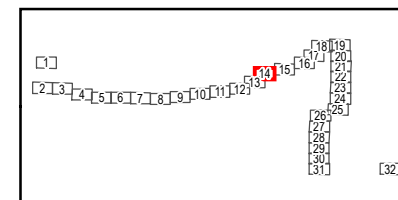
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Figure 4: Detailed Route Map 14 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



* Area is equivalent to the total estimated square footage of disturbance at each pole, but the actual shape of the work area will be determined during the final design.

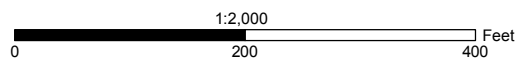
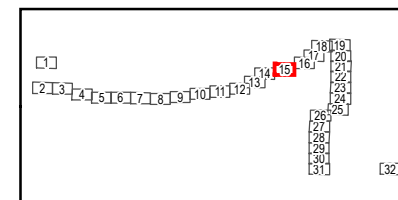




Figure 4: Detailed Route Map 15 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



* Area is equivalent to the total estimated square footage of disturbance at each pole, but the actual shape of the work area will be determined during the final design.

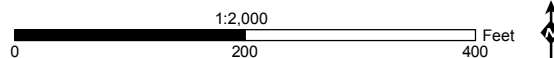
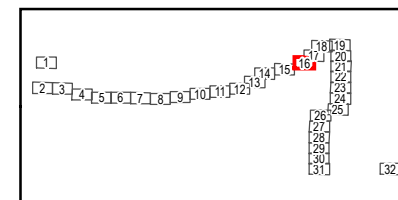




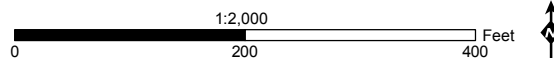
Figure 4: Detailed Route Map 16 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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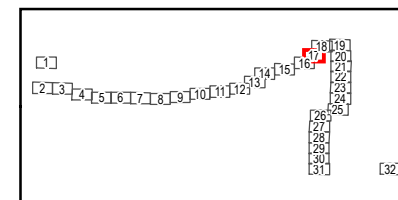
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Figure 4: Detailed Route Map 17 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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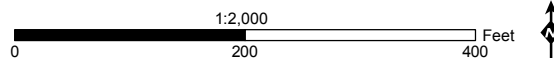
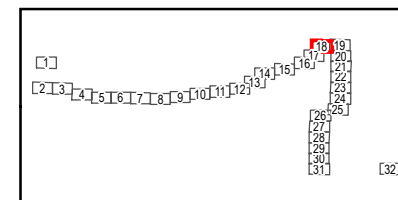




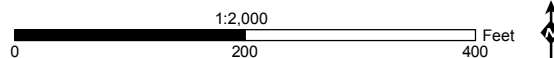
Figure 4: Detailed Route Map 18 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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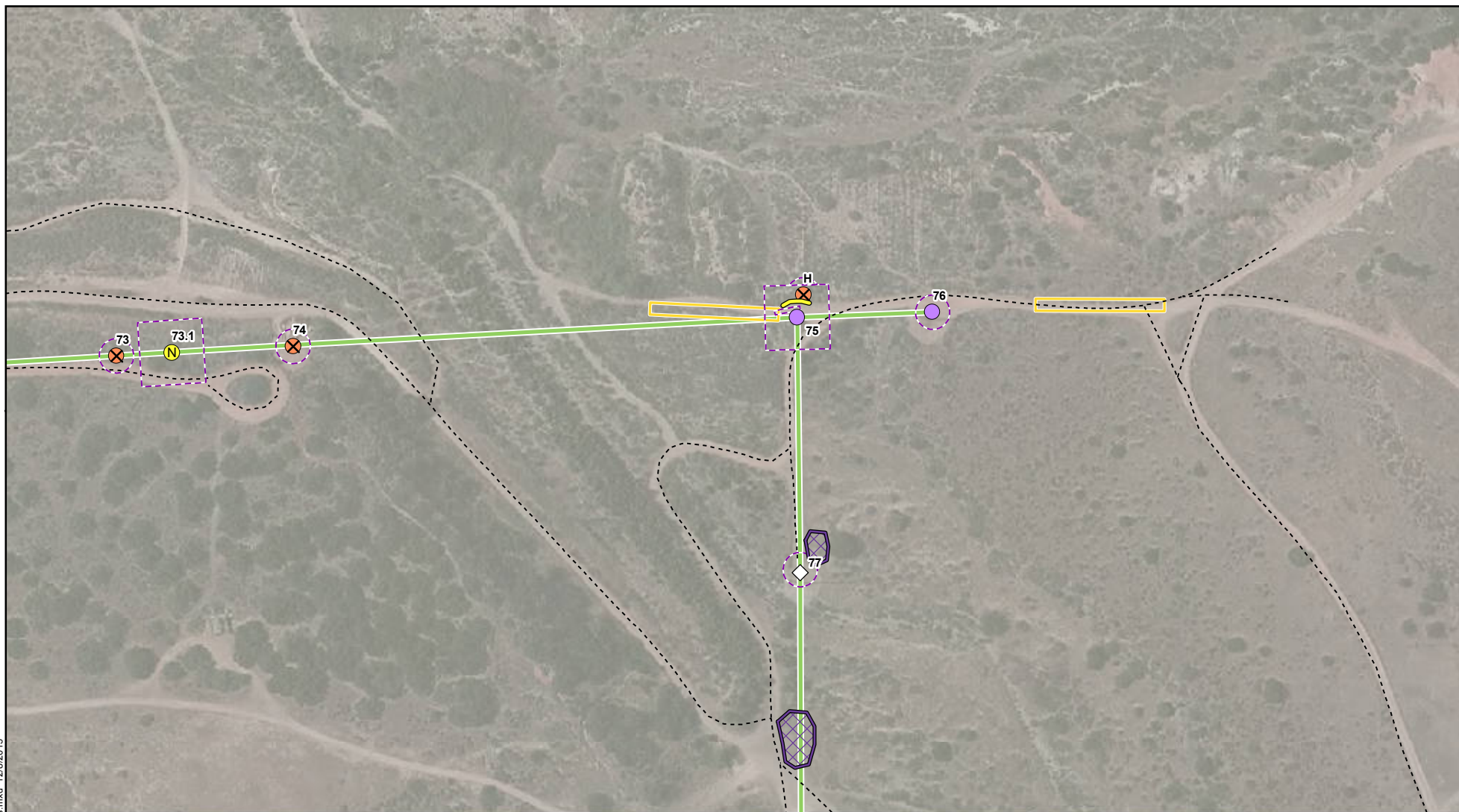
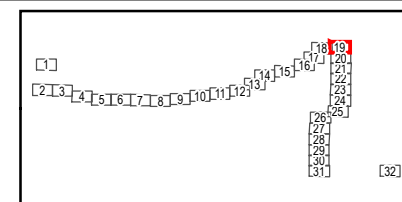


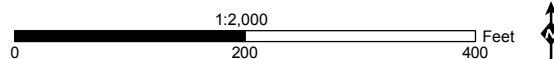
Figure 4: Detailed Route Map 19 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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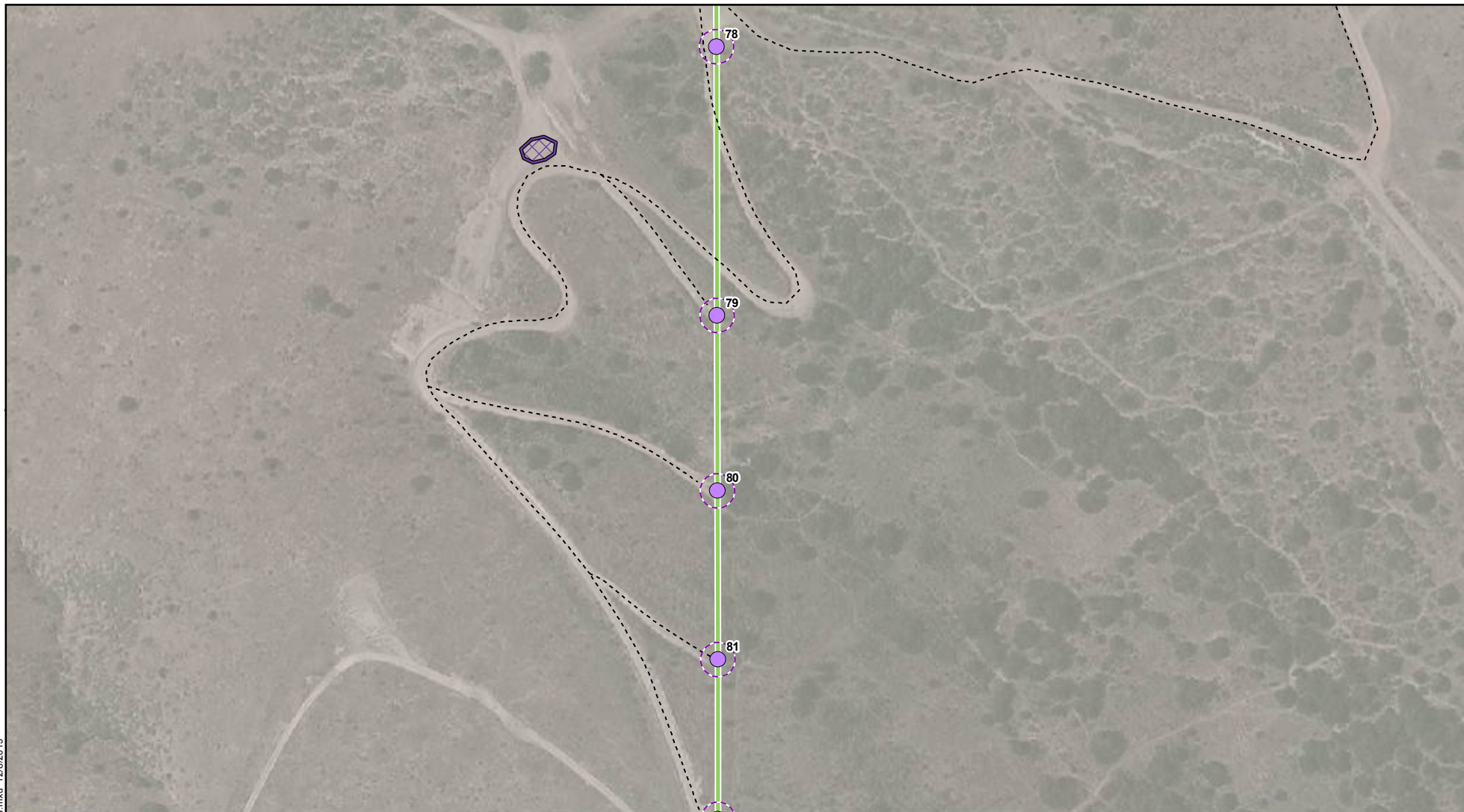
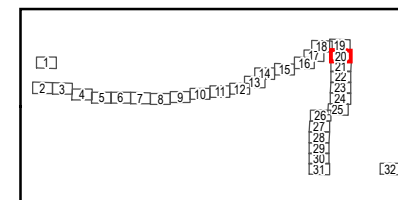


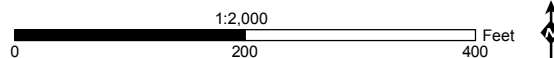
Figure 4: Detailed Route Map 20 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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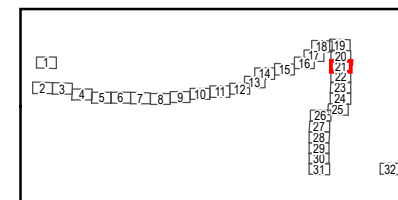
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Figure 4: Detailed Route Map 21 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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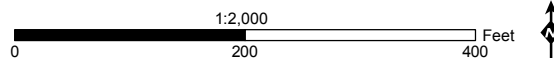
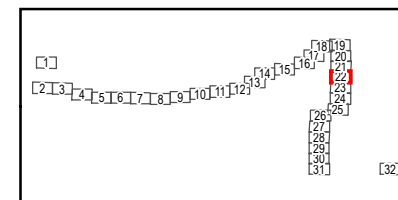




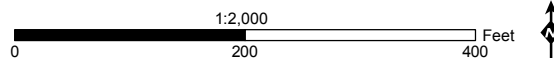
Figure 4: Detailed Route Map 22 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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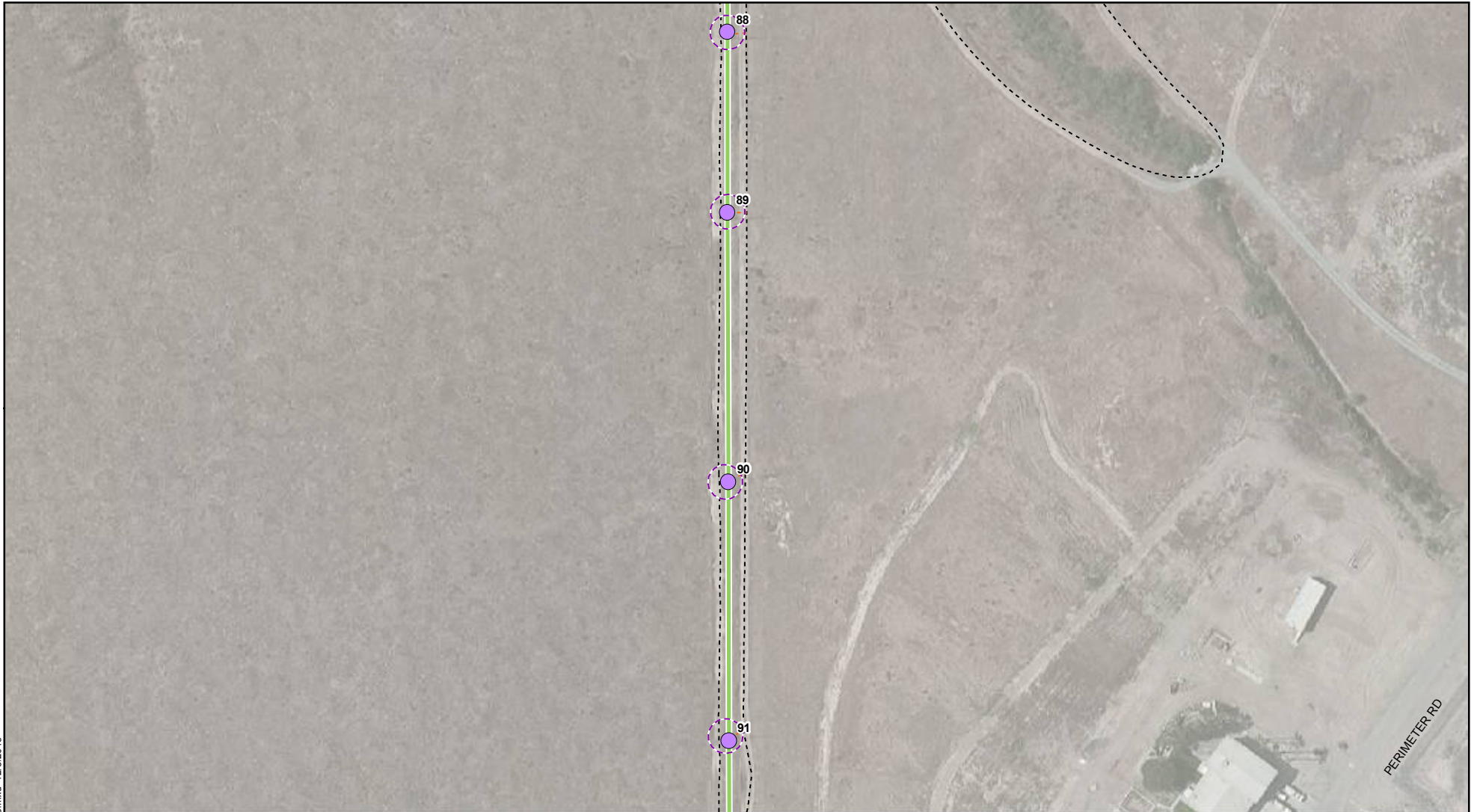
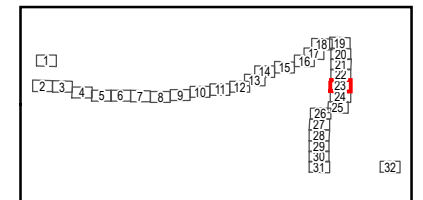


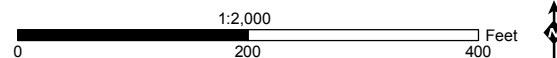
Figure 4: Detailed Route Map 23 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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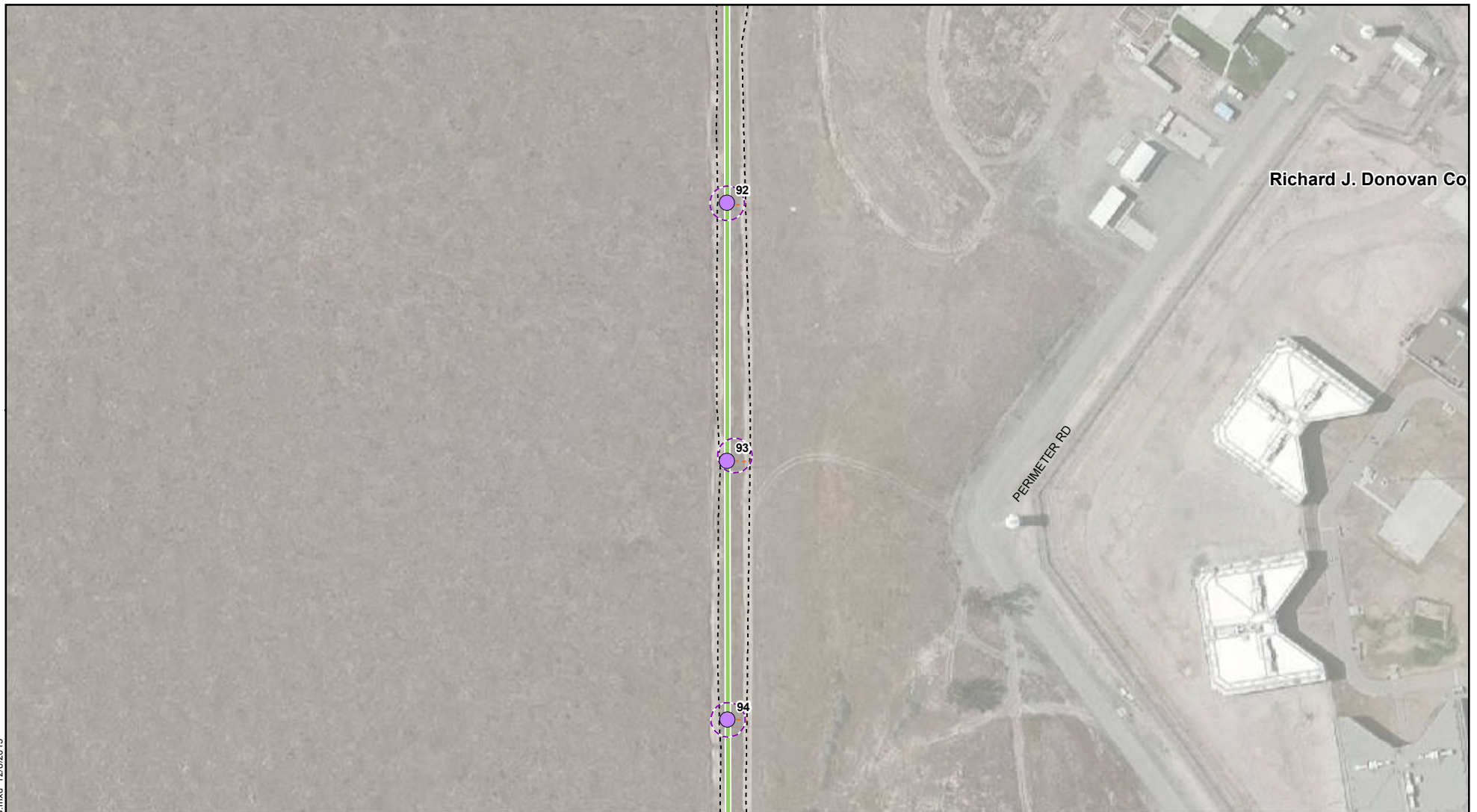
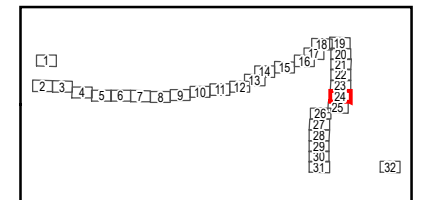


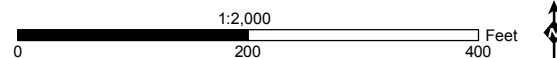
Figure 4: Detailed Route Map 24 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
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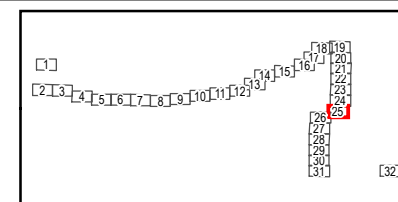
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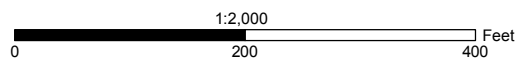
Figure 4: Detailed Route Map 25 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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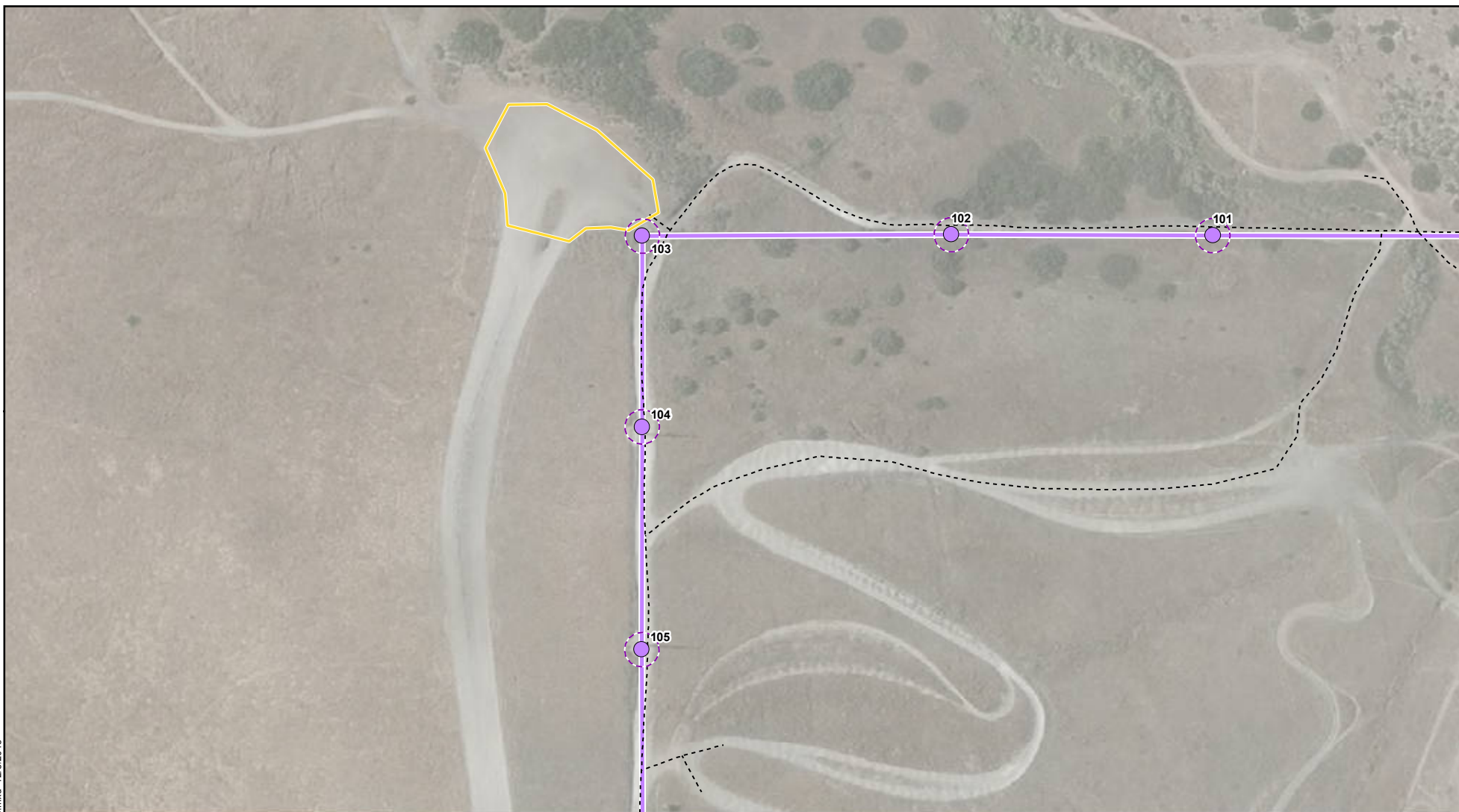
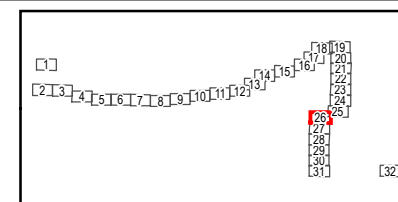


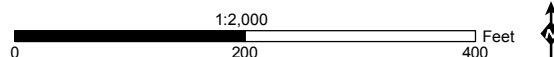
Figure 4: Detailed Route Map 26 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



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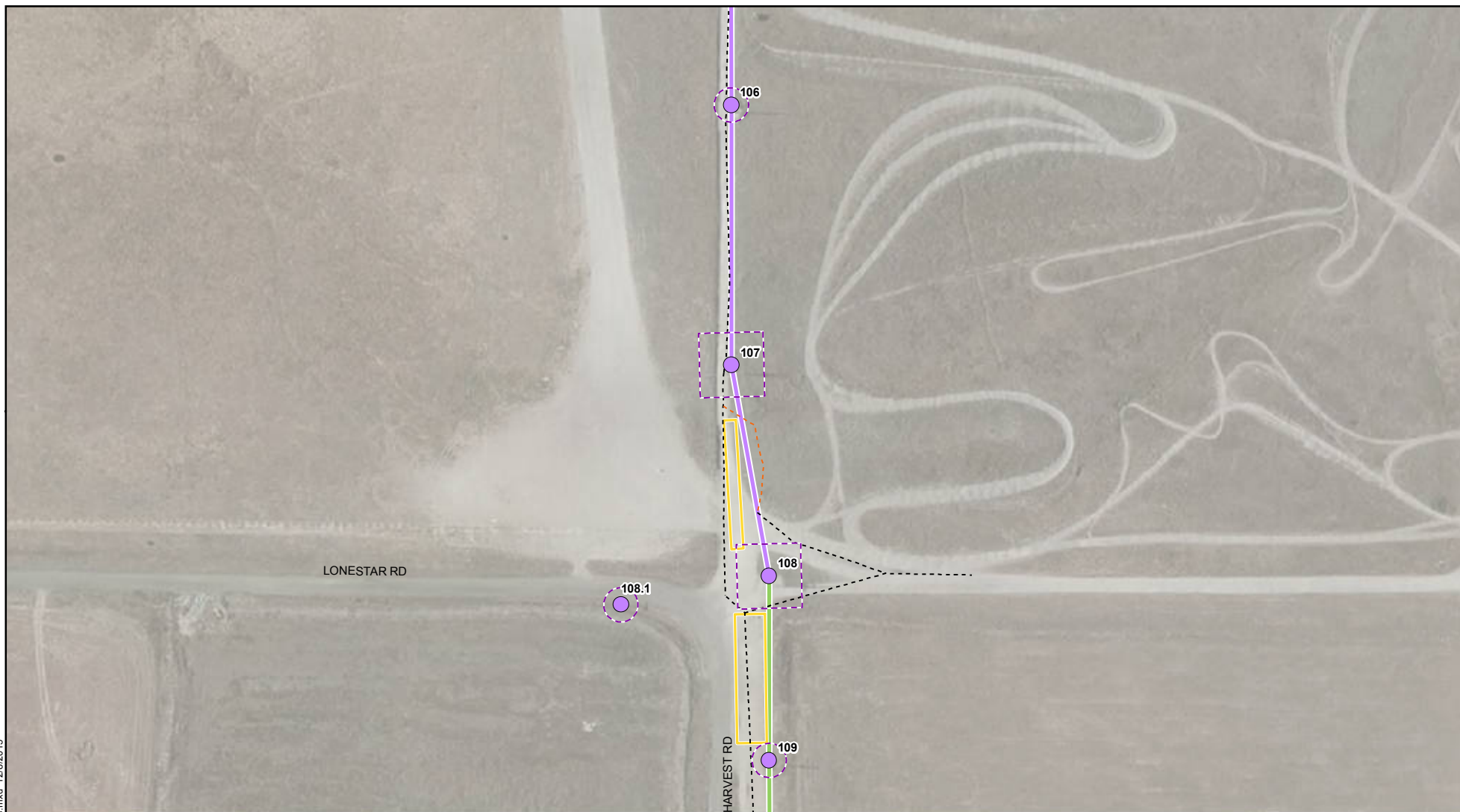
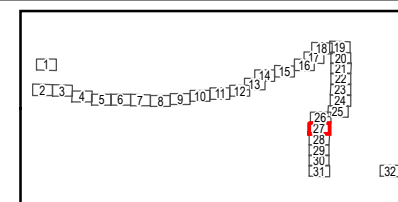


Figure 4: Detailed Route Map 27 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
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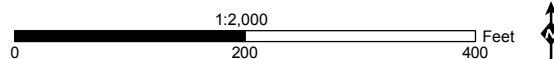
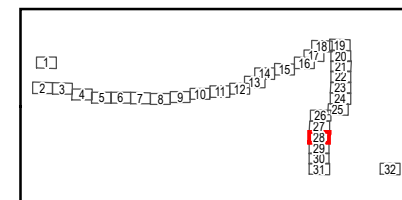




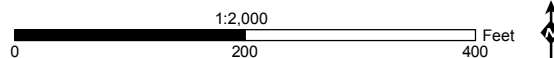
Figure 4: Detailed Route Map 28 of 32

Tie Line 649 Wood-to-Steel Replacement Project

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|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
| Guard Structure | Underground Distribution Intercept | | |



* Area is equivalent to the total estimated square footage of disturbance at each pole, but the actual shape of the work area will be determined during the final design.



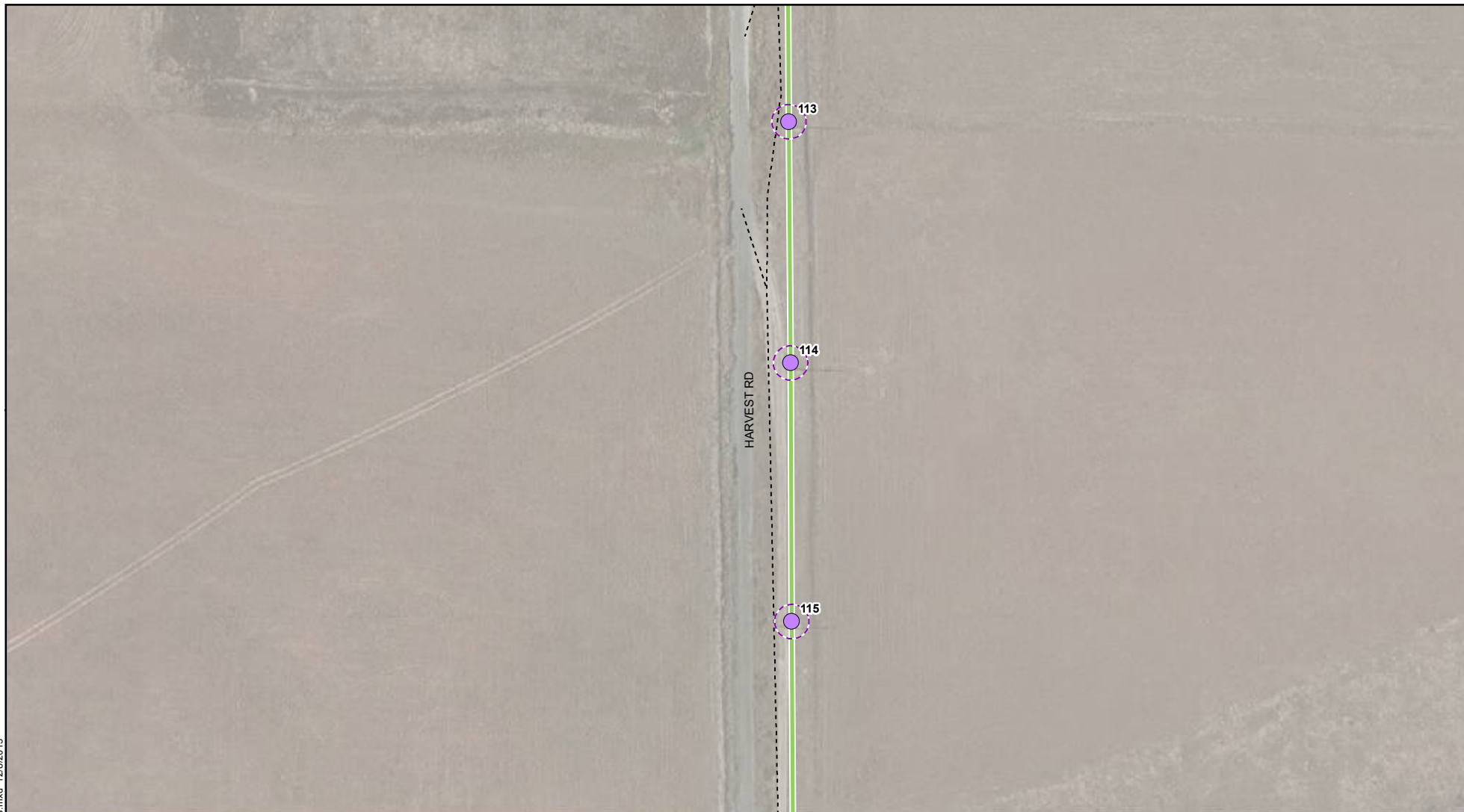
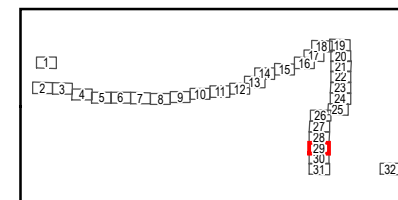


Figure 4: Detailed Route Map 29 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
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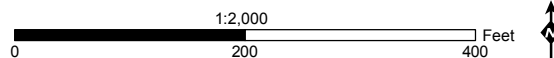
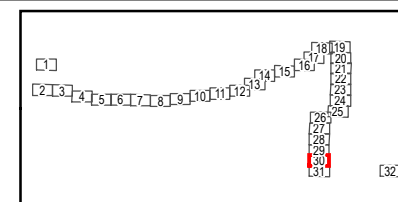




Figure 4: Detailed Route Map 30 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
| New Steel Pole | Wood-to-Steel Replacement with Distribution Underbuild | Staging Yard | Overland Travel Route |
| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
| Overhead Work Only | Distribution Removal | Pulling Site | |
| Pole Removal | Underground to Overhead Conversion with Distribution Underbuild | Stringing Site | |
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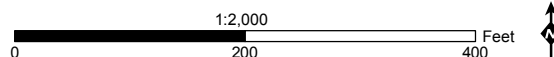
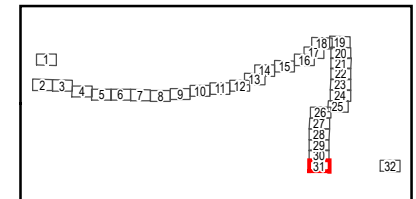




Figure 4: Detailed Route Map 31 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
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| Wood-to-Steel Replacement Pole | Wood-to-Steel Replacement Distribution Only | Access Road Turnaround/Staging Yard | Access Road Modification |
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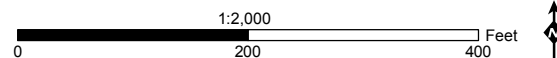
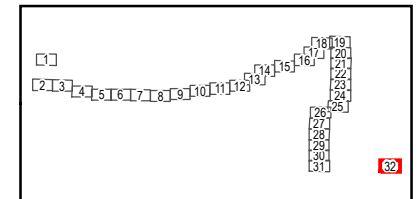




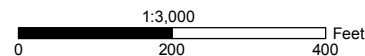
Figure 4: Detailed Route Map 32 of 32

Tie Line 649 Wood-to-Steel Replacement Project

- | | | | |
|--------------------------------|---|-------------------------------------|--------------------------|
| New Stub Pole | Wood-to-Steel Replacement | Approximate Disturbance Area* | Existing Access Road |
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* Area is equivalent to the total estimated square footage of disturbance at each pole, but the actual shape of the work area will be determined during the final design.



VIEJAS

TRIBAL GOVERNMENT

P.O. Box 908
Alpine, CA 91903
#1 Viejas Grade Road
Alpine, CA 91901

Phone: 6194453810
Fax: 6194455337
viejass.com

April 5, 2016

Connie Chen
505 Van Ness Ave.
San Francisco, CA 94102

RE: CPUC SDG&E Tie Line

Dear Ms. Chen,

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that we would like to consult on AB-52. Viejas Band request a copy of the Cultural Resource Report, in order to make an informed decision/recommendation on the matter. Thank you

Sincerely,

VIEJAS BAND OF KUMEYAAY INDIANS

NOTES
SDG&E TL 649 Project Conference Call with Viejas Band of Kumeyaay Indians
October 25, 2017

Participants

Ray Teran, Viejas Band of Kumeyaay Indians
Tom Engels, Horizon Water and Environment
Carley Dutra, Horizon Water and Environment
Janis Offermann, Horizon Water and Environment

Notes

The meeting began with introductions. Ray noted that Julie Hagen was no longer involved in the cultural resources program for the tribe and that the new Tribal Historic Preservation Officer is Ernest Pingleton. Mr. Pingleton could not attend this call and asked Ray to participate on his behalf. Ray is the Grants Administrator for the tribe and is very familiar with the concerns about cultural resources and the tribe's approach for treating cultural resources. Furthermore, Ray had reviewed the materials provided by Tom (originally submitted to Julie Hagen in May 2016).

Because it had been more than a year since the last discussion with the Viejas Band about the project, and because Ray was new to the Project, Tom briefly described the Proposed Project.

Ray stated that it is the tribe's preference that a Native American monitor be present during all ground disturbing activities, particularly because there are so many known Native American sites in the project area. He also noted that all of the Viejas tribal monitors have gone through archaeological monitoring training.

Ray further pointed out that the Jamul Tribe is actually closer to the project area than the Viejas Band, and that Viejas would first offer monitoring positions to Jamul community members. The Viejas Band often finds itself in the position of watching out for projects that could impact cultural resources and working on behalf of the Kumeyaay peoples.

When asked specifically about whether the tribe had any concerns about tribal cultural resources within the project area, Ray said that he was not aware of any.



CLIMATE ACTION PLAN CONSISTENCY CHECKLIST INTRODUCTION

In December 2015, the City adopted a Climate Action Plan (CAP) that outlines the actions that City will undertake to achieve its proportional share of State greenhouse gas (GHG) emission reductions. The purpose of the Climate Action Plan Consistency Checklist (Checklist) is to, in conjunction with the CAP, provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).¹

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP.

This Checklist is part of the CAP and contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this Checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

The Checklist may be updated to incorporate new GHG reduction techniques or to comply with later amendments to the CAP or local, State, or federal law.

¹ Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.

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CAP CONSISTENCY CHECKLIST SUBMITTAL APPLICATION

- ❖ The Checklist is required only for projects subject to CEQA review.²
- ❖ If required, the Checklist must be included in the project submittal package. Application submittal procedures can be found in [Chapter 11: Land Development Procedures](#) of the City's Municipal Code.
- ❖ The requirements in the Checklist will be included in the project's conditions of approval.
- ❖ The applicant must provide an explanation of how the proposed project will implement the requirements described herein to the satisfaction of the Planning Department.

Application Information

Contact Information

Project No./Name: Tie Line 649 Wood-to-Steel Replacement Project

Property Address: Unincorporated San Diego County, City of Chula Vista, City of San Diego, California

Applicant Name/Co.: Brad Carter, P.E., of San Diego Gas & Electric (SDG&E)

Contact Phone: 858-654-1269 Contact Email: bcarter@semprautilities.com

Was a consultant retained to complete this checklist? ☒ Yes ☐ No If Yes, complete the following

Consultant Name: Megan Giglini Contact Phone: 9164658073

Company Name: Horizon Water and Environment Contact Email: megan@horizonh2o.com

Project Information

1. What is the size of the project (acres)? 27 acres (maximum) (actual disturbance area would be much less)
2. Identify all applicable proposed land uses:
- ☐ Residential (indicate # of single-family units): _____
 - ☐ Residential (indicate # of multi-family units): _____
 - ☐ Commercial (total square footage): _____
 - ☐ Industrial (total square footage): _____
 - ☒ Other (describe): Replacement of wooden utility poles to steel utility poles.
3. Is the project or a portion of the project located in a Transit Priority Area? ☐ Yes ☒ No

4. Provide a brief description of the project proposed:

Replacement of wooden utility poles to steel utility poles.

² Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.



CAP CONSISTENCY CHECKLIST QUESTIONS

Step 1: Land Use Consistency

The first step in determining CAP consistency for discretionary development projects is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the City to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide explanation and supporting documentation for your answer)	Yes	No
<p>A. Is the proposed project consistent with the existing General Plan and Community Plan land use and zoning designations?³ <u>OR</u></p> <div style="border: 1px solid black; padding: 5px;"> <p>Yes. The proposed project would primarily occur within an existing utility easement and involve improvements to an existing utility alignment. These improvements would not conflict with applicable zoning designations or land uses, as detailed in Section 2.10, Land Use and Planning of the IS/MND.</p> </div>		
<p>B. If the proposed project is not consistent with the existing land use plan and zoning designations, and includes a land use plan and/or zoning designation amendment, would the proposed amendment result in an increased density within a Transit Priority Area (TPA) and implement CAP Strategy 3 actions, as determined in Step 3 to the satisfaction of the Development Services Department?; <u>OR</u></p> <div style="border: 1px solid black; padding: 5px;"> <p>The project is consistent with existing land use plan and zoning designations, and no land use plan and/or zoning amendments would be required.</p> </div>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>C. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations?</p> <div style="border: 1px solid black; padding: 5px;"> <p>The project is consistent with existing land use plan and zoning designations, and no land use plan and/or zoning amendments would be required.</p> </div>		

If **"Yes,"** proceed to Step 2 of the Checklist. For question B above, complete Step 3. For question C above, provide estimated project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation.

If **"No,"** in accordance with the City's Significance Determination Thresholds, the project's GHG impact is significant. The project must nonetheless incorporate each of the measures identified in Step 2 to mitigate cumulative GHG emissions impacts unless the decision maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091. Proceed and complete Step 2 of the Checklist.

³ This question may also be answered in the affirmative if the project is consistent with SANDAG Series 12 growth projections, which were used to determine the CAP projections, as determined by the Planning Department.

Step 2: CAP Strategies Consistency

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable strategies and actions of the CAP. Step 2 only applies to development projects that involve permits that would require a certificate of occupancy from the Building Official or projects comprised of one and two family dwellings or townhouses as defined in the California Residential Code and their accessory structures.⁴ All other development projects that would not require a certificate of occupancy from the Building Official shall implement Best Management Practices for construction activities as set forth in the [Greenbook](#) (for public projects).

Step 2: CAP Strategies Consistency			
Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A
Strategy 1: Energy & Water Efficient Buildings			
<p>1. <i>Cool/Green Roofs.</i></p> <ul style="list-style-type: none"> • Would the project include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under California Green Building Standards Code (Attachment A)?; <u>OR</u> • Would the project roof construction have a thermal mass over the roof membrane, including areas of vegetated (green) roofs, weighing at least 25 pounds per square foot as specified in the voluntary measures under California Green Building Standards Code?; <u>OR</u> • Would the project include a combination of the above two options? <p>Check "N/A" only if the project does not include a roof component.</p> <div style="border: 1px solid black; padding: 5px;"> <p>The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.</p> </div>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁴ Actions that are not subject to Step 2 would include, for example: a) discretionary map actions that do not propose specific development, b) permits allowing wireless communication facilities, c) special events permits, d) use permits or other permits that do not result in the expansion or enlargement of a building (e.g., decks, garages, etc.), and e) non-building infrastructure projects such as roads and pipelines. Because such actions would not result in new occupancy buildings from which GHG emissions reductions could be achieved, the items contained in Step 2 would not be applicable.

2. *Plumbing fixtures and fittings*

With respect to plumbing fixtures or fittings provided as part of the project, would those low-flow fixtures/appliances be consistent with each of the following:

Residential buildings:

- Kitchen faucets: maximum flow rate not to exceed 1.5 gallons per minute at 60 psi;
- Alternate nonpotable water sources are used for indoor potable water reduction and installed per A4.303.2 of the California Green Building Standards Code and the California Plumbing Code;
- At least one qualified ENERGY STAR dishwasher or clothes washer is installed per A4.303.3 of the California Green Building Standards Code;
- Nonwater supplied urinals or waterless toilets are installed per A4.303.4 of the California Green Building Standards Code; and
- One- and two-family dwellings are be equipped with a demand hot water recirculation system per A4.303.5 of the California Green Building Standards Code?

Nonresidential buildings:

- Plumbing fixtures and fittings that do not exceed the maximum flow rate specified in Table A5.303.2.3.1 (voluntary measures) of the California Green Building Standards Code (See Attachment A); and
- Appliances and fixtures for commercial applications that meet the provisions of Section A5.303.3 (voluntary measures) of the California Green Building Standards Code (See Attachment A)?

Check "N/A" only if the project does not include any plumbing fixtures or fittings.



The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.

Strategy 2: Clean & Renewable Energy

3. Energy Performance Standard / Renewable Energy

Is the project designed to have an energy budget that meets the following performance standards when compared to the Title 24, Part 6 Energy Budget for the Standard Design Building as calculated by [Compliance Software certified by the California Energy Commission](#) (percent improvement over current code):

- Low-rise residential – 85% of the Title 24, Part 6 Energy Budget or 15% reduction from the Standard Design Building?
- Nonresidential with indoor lighting OR mechanical system, but not both – 95% of the Title 24, Part 6 Energy Budget or 5% reduction from the Standard Design Building?
- Nonresidential with both indoor lighting AND mechanical systems – 90% of the Title 24, Part 6 Energy Budget or 10% reduction from the Standard Design Building?⁵

The demand reduction may be provided through on-site renewable energy generation, such as solar, or by designing the project to have an energy budget that meets the above-mentioned performance standards, when compared to the Title 24, Part 6 Energy Budget for the Proposed Design Building (percent improvement over current code).

Note: For Energy Budget calculations, high-rise residential and hotel/motel buildings are considered non-residential buildings.

Check "N/A" only if the project does not contain any residential or non-residential buildings.



The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.

⁵ CALGreen defines mechanical systems as equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

Strategy 3: Bicycling, Walking, Transit & Land Use

4. Electric Vehicle Charging

- Multiple-family projects of 17 dwelling units or less: Would 5% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide electric vehicle charging stations at such time as it is needed for use by residents?
- Multiple-family projects of more than 17 dwelling units: Would 5% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official? Of the total listed cabinets, boxes or enclosures provided, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use by residents?
- Non-residential projects: If the project includes new commercial, industrial, or other uses with the building or land area, capacity, or numbers of employees listed in Attachment A, would 6% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official? Of the total listed cabinets, boxes or enclosures provided, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use?

Check "N/A" only if the project is does not include new commercial, industrial, or other uses with the building or land area, capacity, or numbers of employees listed in Attachment A.

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.



Strategy 3: Bicycling, Walking, Transit & Land Use

(Complete this section if project includes non-residential or mixed uses)

5. Bicycle Parking Spaces

Would the project provide more short- and long-term bicycle parking spaces than required in the City's Municipal Code ([Chapter 14, Article 2, Division 5](#))?⁶

Check "N/A" only if the project is a residential project.

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.

**6. Shower facilities**

If the project includes nonresidential development that would accommodate over 10 tenant occupants (employees), would the project include changing/shower facilities in accordance with the voluntary measures under the [California Green Building Standards Code](#) as shown in the table below?

Number of Tenant Occupants (Employees)	Shower/Changing Facilities Required	Two-Tier (12" X 15" X 72") Personal Effects Lockers Required
0-10	0	0
11-50	1 shower stall	2
51-100	1 shower stall	3
101-200	2 shower stalls	4
Over 200	2 shower stalls plus 2 additional shower stall for each 200 additional tenant-occupants	1 two-tier locker plus 1 two-tier locker for each 50 additional tenant-occupants

Check "N/A" only if the project is a residential project, or if it does not include nonresidential development that would accommodate over 10 tenant occupants (employees).

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.



⁶ Non-portable bicycle corrals within 600 feet of project frontage can be counted towards the project's bicycle parking requirements.

7. Designated Parking Spaces

If the project includes nonresidential use, would the project provide designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles in accordance with the following table?

Number of Nonresidential Parking Spaces Required by the Permit	Number of Designated Parking Spaces
0-9	0
10-25	2
26-50	4
51-75	6
76-100	9
101-150	11
151-200	18
201 and over	At least 10% of total

This measure does not cover electric vehicles. See Question 4 for electric vehicle parking requirements.

Note: Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces. The required designated parking spaces are to be provided within the overall minimum parking requirement, not in addition to it.

Check "N/A" only if the project is a residential project.

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.



8. *Transportation Demand Management Program*

If the project would accommodate over 50 tenant-occupants (employees), would it include a transportation demand management program that would be applicable to existing tenants and future tenants that includes:

At least one of the following components:

- Parking cash out program
- Parking management plan that includes charging employees market-rate for single-occupancy vehicle parking and providing reserved, discounted, or free spaces for registered carpools or vanpools
- Unbundled parking whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development

And at least three of the following components:

- Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees
- On-site carsharing vehicle(s) or bikesharing
- Flexible or alternative work hours
- Telework program
- Transit, carpool, and vanpool subsidies
- Pre-tax deduction for transit or vanpool fares and bicycle commute costs
- Access to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare, either onsite or within 1,320 feet (1/4 mile) of the structure/use?

Check "N/A" only if the project is a residential project or if it would not accommodate over 50 tenant-occupants (employees).

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.



Step 3: Project CAP Conformance Evaluation (if applicable)

The third step of the CAP consistency review only applies if Step 1 is answered in the affirmative under option B. The purpose of this step is to determine whether a project that is located in a TPA but that includes a land use plan and/or zoning designation amendment is nevertheless consistent with the assumptions in the CAP because it would implement CAP Strategy 3 actions. In general, a project that would result in a reduction in density inside a TPA would not be consistent with Strategy 3. The following questions must each be answered in the affirmative and fully explained.

1. Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?

Considerations for this question:

- Does the proposed land use and zoning designation associated with the project provide capacity for transit-supportive residential densities within the TPA?
- Is the project site suitable to accommodate mixed-use village development, as defined in the General Plan, within the TPA?
- Does the land use and zoning associated with the project increase the capacity for transit-supportive employment intensities within the TPA?

2. Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?

Considerations for this question:

- Does the proposed project support/incorporate identified transit routes and stops/stations?
- Does the project include transit priority measures?

3. Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?

Considerations for this question:

- Does the proposed project circulation system provide multiple and direct pedestrian connections and accessibility to local activity centers (such as transit stations, schools, shopping centers, and libraries)?
- Does the proposed project urban design include features for walkability to promote a transit supportive environment?

4. Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?

Considerations for this question:

- Does the proposed project circulation system include bicycle improvements consistent with the Bicycle Master Plan?
- Does the overall project circulation system provide a balanced, multimodal, "complete streets" approach to accommodate mobility needs of all users?

5. Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?

Considerations for this question:

- Does the proposed project include new or expanded urban public spaces such as plazas, pocket parks, or urban greens in the TPA?
- Does the land use and zoning associated with the proposed project increase the potential for jobs within the TPA?
- Do the zoning/implementing regulations associated with the proposed project support the efficient use of parking through mechanisms such as: shared parking, parking districts, unbundled parking, reduced parking, paid or time-limited parking, etc.?

6. Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?

Considerations for this question:

- Does the proposed project provide at least three different species for the primary, secondary and accent trees in order to accommodate varying parkway widths?
- Does the proposed project include policies or strategies for preserving existing trees?
- Does the proposed project incorporate tree planting that will contribute to the City's 20% urban canopy tree coverage goal?



CLIMATE ACTION PLAN CONSISTENCY CHECKLIST ATTACHMENT A

This attachment provides performance standards for applicable Climate Action Plan (CAP) Consistency Checklist measures.

Table 1 Roof Design Values for Question 1: Cool/Green Roofs supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan				
Land Use Type	Roof Slope	Minimum 3-Year Aged Solar Reflectance	Thermal Emittance	Solar Reflective Index
Low-Rise Residential	≤ 2:12	0.63	0.75	75
	> 2:12	0.20	0.75	16
High-Rise Residential Buildings, Hotels and Motels	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
Non-Residential	≤ 2:12	0.63	0.75	75
	> 2:12	0.20	0.75	16
<p>Source: Adapted from the California Green Building Standards Code (CALGreen) Tier 1 residential and non-residential voluntary measures shown in Tables A4.106.5.1 and A5.106.11.2.2, respectively. Roof installation and verification shall occur in accordance with the CALGreen Code.</p> <p>CALGreen does not include recommended values for low-rise residential buildings with roof slopes of ≤ 2:12 for San Diego's climate zones (7 and 10). Therefore, the values for climate zone 15 that covers Imperial County are adapted here.</p> <p>Solar Reflectance Index (SRI) equal to or greater than the values specified in this table may be used as an alternative to compliance with the aged solar reflectance values and thermal emittance.</p>				

Table 2 Fixture Flow Rates for Non-Residential Buildings related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Fixture Type	Maximum Flow Rate
Showerheads	1.8 gpm @ 80 psi
Lavatory Faucets	0.35 gpm @60 psi
Kitchen Faucets	1.6 gpm @ 60 psi
Wash Fountains	1.6 [rim space(in.)/20 gpm @ 60 psi]
Metering Faucets	0.18 gallons/cycle
Metering Faucets for Wash Fountains	0.18 gallons/cycle 20 [rim space(in.) @ 60 psi]
Gravity Tank-type Water Closets	1.12 gallons/flush
Flushometer Tank Water Closets	1.12 gallons/flush
Flushometer Valve Water Closets	1.12 gallons/flush
Electromechanical Hydraulic Water Closets	1.12 gallons/flush
Floor-mounted Urinals or Wall-mounted Urinals	0.44 or 0.11 gallons/flush

Source: Adapted from the [California Green Building Standards Code \(CALGreen\)](#) Tier 1 non-residential voluntary measures shown in Tables A5.303.2.3.1 and A5.106.11.2.2, respectively. See the [California Plumbing Code](#) for definitions of each fixture type.

Where complying faucets are unavailable, aerators rated at 0.35 gpm or other means may be used to achieve reduction.

Acronyms:

gpm = gallons per minute

psi = pounds per square inch (unit of pressure)

in. = inch

Table 3 Standards for Appliances and Fixtures for Commercial Application related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Appliance/Fixture Type	Standard	
Clothes Washers	Maximum Water Factor (WF) that will reduce the use of water by 10 percent below the California Energy Commissions' WF standards for commercial clothes washers located in Title 20 of the California Code of Regulations.	
Single Tank Conveyor Dishwashers	0.70 maximum gallons per rack (2.6 L) (High-Temperature)	0.79 maximum gallons per rack (4.4 L) (Low-Temperature)
Multiple Tank Conveyor Dishwashers	0.54 maximum gallons per rack (2 L) (High-Temperature)	0.54 maximum gallons per rack (2 L) (Low-Temperature)
Stationary Single Tank Door Dishwashers	0.89 maximum gallons per rack (3.4 L) (High-Temperature)	1.18 maximum gallons per rack (4.5 L) (Low-Temperature)
Undercounter-type Dishwashers	0.86 maximum gallons per rack (3.3 L) (High-Temperature)	1.19 maximum gallons per rack (4.5 L) (Low-Temperature)
Pot, Pan, and Utensil Dishwashers	0.58 maximum gallons per square foot of rack	
Single Tank Flight Type Dishwashers	$GPH \leq 2.975x + 55.00$	
Multiple Tank Flight Type Dishwashers	$GPH \leq 4.96x + 17.00$	
Combination Ovens	Consume no more than 1.5 gallons per hour per pan, including condensate water.	
Commercial Pre-rinse Spray Valves (manufactured on or after January 1, 2006)	<div>Function at equal to or less than 1.6 gallons per minute (0.10 L/s) at 60 psi (414 kPa) and<ul style="list-style-type: none">Be capable of cleaning 60 plates in an average time of not more than 30 seconds per plate.Be equipped with an integral automatic shutoff.Operate at static pressure of at least 30 psi (207 kPa) when designed for a flow rate of 1.3 gallons per minute (0.08 L/s) or less.</div>	

Source: Adapted from the [California Green Building Standards Code \(CALGreen\)](#) Tier 1 non-residential voluntary measures shown in Section A5.303.3. See the [California Plumbing Code](#) for definitions of each appliance/fixture type.

Acronyms:
L = liter
GPH = gallons per hour
X = square feet of conveyor belt/minute (max conveyor speed sf/min as tested and certified to NSF/ANSI Standard 3)
L/h = liters per hour
L/s = liters per second
psi = pounds per square inch (unit of pressure)
kPa = kilopascal (unit of pressure)

Table 4 **Size-based Trigger Levels for Electric Vehicle Charging Requirements for Non-Residential Buildings related to Question 4: Electric Vehicle Charging supporting Strategy 3: Bicycling, Walking, Transit & Land Use of the Climate Action Plan**

Land Use Type	Size-based Trigger Level
Hospital	500 or more beds OR Expansion of a 500+ bed hospital by 20%
College	3,000 or more students OR Expansion of a 3,000+ student college by 20%
Hotels/Motels	500 or more rooms
Industrial, Manufacturing or Processing Plants or Industrial Parks	1,000 or more employees OR 40 acres or more of land area OR 650,000 square feet or more of gross floor area
Office buildings or Office Parks	1,000 or more employees OR 250,000 square feet or more of gross floor area
Shopping centers or Trade Centers	1,000 or more employees OR 500,000 square feet or more of gross floor area
Sports, Entertainment or Recreation Facilities	Accommodate at least 4,000 persons per performance OR Contain 1,500 or more fixed seats
Transit Projects (including, but not limited to, transit stations and park and ride lots).	All
Source: Adapted from the Governor's Office of Planning and Research's (OPR's) Model Building Code for Plug-in Electric Vehicle Charging	



CLIMATE ACTION PLAN CONSISTENCY CHECKLIST INTRODUCTION

In December 2015, the City adopted a Climate Action Plan (CAP) that outlines the actions that City will undertake to achieve its proportional share of State greenhouse gas (GHG) emission reductions. The purpose of the Climate Action Plan Consistency Checklist (Checklist) is to, in conjunction with the CAP, provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).¹

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP.

This Checklist is part of the CAP and contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this Checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

The Checklist may be updated to incorporate new GHG reduction techniques or to comply with later amendments to the CAP or local, State, or federal law.

¹ Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.

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CAP CONSISTENCY CHECKLIST SUBMITTAL APPLICATION

- ❖ The Checklist is required only for projects subject to CEQA review.²
- ❖ If required, the Checklist must be included in the project submittal package. Application submittal procedures can be found in [Chapter 11: Land Development Procedures](#) of the City's Municipal Code.
- ❖ The requirements in the Checklist will be included in the project's conditions of approval.
- ❖ The applicant must provide an explanation of how the proposed project will implement the requirements described herein to the satisfaction of the Planning Department.

Application Information

Contact Information

Project No./Name: Tie Line 649 Wood-to-Steel Replacement Project

Property Address: Unincorporated San Diego County, City of Chula Vista, City of San Diego, California

Applicant Name/Co.: Brad Carter, P.E., of San Diego Gas & Electric (SDG&E)

Contact Phone: 858-654-1269 Contact Email: bcarter@semprautilities.com

Was a consultant retained to complete this checklist? ☒ Yes ☐ No If Yes, complete the following

Consultant Name: Megan Giglini Contact Phone: 9164658073

Company Name: Horizon Water and Environment Contact Email: megan@horizonh2o.com

Project Information

- What is the size of the project (acres)? 27 acres (maximum) (actual disturbance area would be much less)
- Identify all applicable proposed land uses:
 - ☐ Residential (indicate # of single-family units): _____
 - ☐ Residential (indicate # of multi-family units): _____
 - ☐ Commercial (total square footage): _____
 - ☐ Industrial (total square footage): _____
 - ☒ Other (describe): Replacement of wooden utility poles to steel utility poles.
- Is the project or a portion of the project located in a Transit Priority Area? ☐ Yes ☒ No

4. Provide a brief description of the project proposed:

Replacement of wooden utility poles to steel utility poles.

² Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.



CAP CONSISTENCY CHECKLIST QUESTIONS

Step 1: Land Use Consistency

The first step in determining CAP consistency for discretionary development projects is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the City to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide explanation and supporting documentation for your answer)	Yes	No
<p>A. Is the proposed project consistent with the existing General Plan and Community Plan land use and zoning designations?³ <u>OR</u></p> <div style="border: 1px solid black; padding: 5px;"> <p>Yes. The proposed project would primarily occur within an existing utility easement and involve improvements to an existing utility alignment. These improvements would not conflict with applicable zoning designations or land uses, as detailed in Section 2.10, Land Use and Planning of the IS/MND.</p> </div>		
<p>B. If the proposed project is not consistent with the existing land use plan and zoning designations, and includes a land use plan and/or zoning designation amendment, would the proposed amendment result in an increased density within a Transit Priority Area (TPA) and implement CAP Strategy 3 actions, as determined in Step 3 to the satisfaction of the Development Services Department?; <u>OR</u></p> <div style="border: 1px solid black; padding: 5px;"> <p>The project is consistent with existing land use plan and zoning designations, and no land use plan and/or zoning amendments would be required.</p> </div>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>C. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations?</p> <div style="border: 1px solid black; padding: 5px;"> <p>The project is consistent with existing land use plan and zoning designations, and no land use plan and/or zoning amendments would be required.</p> </div>		

If **"Yes,"** proceed to Step 2 of the Checklist. For question B above, complete Step 3. For question C above, provide estimated project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation.

If **"No,"** in accordance with the City's Significance Determination Thresholds, the project's GHG impact is significant. The project must nonetheless incorporate each of the measures identified in Step 2 to mitigate cumulative GHG emissions impacts unless the decision maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091. Proceed and complete Step 2 of the Checklist.

³ This question may also be answered in the affirmative if the project is consistent with SANDAG Series 12 growth projections, which were used to determine the CAP projections, as determined by the Planning Department.

Step 2: CAP Strategies Consistency

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable strategies and actions of the CAP. Step 2 only applies to development projects that involve permits that would require a certificate of occupancy from the Building Official or projects comprised of one and two family dwellings or townhouses as defined in the California Residential Code and their accessory structures.⁴ All other development projects that would not require a certificate of occupancy from the Building Official shall implement Best Management Practices for construction activities as set forth in the [Greenbook](#) (for public projects).

Step 2: CAP Strategies Consistency			
Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A
Strategy 1: Energy & Water Efficient Buildings			
<p>1. <i>Cool/Green Roofs.</i></p> <ul style="list-style-type: none"> • Would the project include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under California Green Building Standards Code (Attachment A)?; OR • Would the project roof construction have a thermal mass over the roof membrane, including areas of vegetated (green) roofs, weighing at least 25 pounds per square foot as specified in the voluntary measures under California Green Building Standards Code?; OR • Would the project include a combination of the above two options? <p>Check "N/A" only if the project does not include a roof component.</p> <div style="border: 1px solid black; padding: 5px;"> <p>The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.</p> </div>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁴ Actions that are not subject to Step 2 would include, for example: a) discretionary map actions that do not propose specific development, b) permits allowing wireless communication facilities, c) special events permits, d) use permits or other permits that do not result in the expansion or enlargement of a building (e.g., decks, garages, etc.), and e) non-building infrastructure projects such as roads and pipelines. Because such actions would not result in new occupancy buildings from which GHG emissions reductions could be achieved, the items contained in Step 2 would not be applicable.

2. *Plumbing fixtures and fittings*

With respect to plumbing fixtures or fittings provided as part of the project, would those low-flow fixtures/appliances be consistent with each of the following:

Residential buildings:

- Kitchen faucets: maximum flow rate not to exceed 1.5 gallons per minute at 60 psi;
- Alternate nonpotable water sources are used for indoor potable water reduction and installed per A4.303.2 of the California Green Building Standards Code and the California Plumbing Code;
- At least one qualified ENERGY STAR dishwasher or clothes washer is installed per A4.303.3 of the California Green Building Standards Code;
- Nonwater supplied urinals or waterless toilets are installed per A4.303.4 of the California Green Building Standards Code; and
- One- and two-family dwellings are be equipped with a demand hot water recirculation system per A4.303.5 of the California Green Building Standards Code?

Nonresidential buildings:

- Plumbing fixtures and fittings that do not exceed the maximum flow rate specified in Table A5.303.2.3.1 (voluntary measures) of the California Green Building Standards Code (See Attachment A); and
- Appliances and fixtures for commercial applications that meet the provisions of Section A5.303.3 (voluntary measures) of the California Green Building Standards Code (See Attachment A)?

Check "N/A" only if the project does not include any plumbing fixtures or fittings.



The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.

Strategy 2: Clean & Renewable Energy

3. Energy Performance Standard / Renewable Energy

Is the project designed to have an energy budget that meets the following performance standards when compared to the Title 24, Part 6 Energy Budget for the Standard Design Building as calculated by [Compliance Software certified by the California Energy Commission](#) (percent improvement over current code):

- Low-rise residential – 85% of the Title 24, Part 6 Energy Budget or 15% reduction from the Standard Design Building?
- Nonresidential with indoor lighting OR mechanical system, but not both – 95% of the Title 24, Part 6 Energy Budget or 5% reduction from the Standard Design Building?
- Nonresidential with both indoor lighting AND mechanical systems – 90% of the Title 24, Part 6 Energy Budget or 10% reduction from the Standard Design Building?⁵

The demand reduction may be provided through on-site renewable energy generation, such as solar, or by designing the project to have an energy budget that meets the above-mentioned performance standards, when compared to the Title 24, Part 6 Energy Budget for the Proposed Design Building (percent improvement over current code).

Note: For Energy Budget calculations, high-rise residential and hotel/motel buildings are considered non-residential buildings.

Check "N/A" only if the project does not contain any residential or non-residential buildings.



The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.

⁵ CALGreen defines mechanical systems as equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

Strategy 3: Bicycling, Walking, Transit & Land Use

4. Electric Vehicle Charging

- Multiple-family projects of 17 dwelling units or less: Would 5% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide electric vehicle charging stations at such time as it is needed for use by residents?
- Multiple-family projects of more than 17 dwelling units: Would 5% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official? Of the total listed cabinets, boxes or enclosures provided, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use by residents?
- Non-residential projects: If the project includes new commercial, industrial, or other uses with the building or land area, capacity, or numbers of employees listed in Attachment A, would 6% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official? Of the total listed cabinets, boxes or enclosures provided, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use?

Check "N/A" only if the project is does not include new commercial, industrial, or other uses with the building or land area, capacity, or numbers of employees listed in Attachment A.

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.



Strategy 3: Bicycling, Walking, Transit & Land Use

(Complete this section if project includes non-residential or mixed uses)

5. Bicycle Parking Spaces

Would the project provide more short- and long-term bicycle parking spaces than required in the City's Municipal Code ([Chapter 14, Article 2, Division 5](#))?⁶

Check "N/A" only if the project is a residential project.

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.

**6. Shower facilities**

If the project includes nonresidential development that would accommodate over 10 tenant occupants (employees), would the project include changing/shower facilities in accordance with the voluntary measures under the [California Green Building Standards Code](#) as shown in the table below?

Number of Tenant Occupants (Employees)	Shower/Changing Facilities Required	Two-Tier (12" X 15" X 72") Personal Effects Lockers Required
0-10	0	0
11-50	1 shower stall	2
51-100	1 shower stall	3
101-200	2 shower stalls	4
Over 200	2 shower stalls plus 2 additional shower stall for each 200 additional tenant-occupants	1 two-tier locker plus 1 two-tier locker for each 50 additional tenant-occupants

Check "N/A" only if the project is a residential project, or if it does not include nonresidential development that would accommodate over 10 tenant occupants (employees).

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.



⁶ Non-portable bicycle corrals within 600 feet of project frontage can be counted towards the project's bicycle parking requirements.

7. Designated Parking Spaces

If the project includes nonresidential use, would the project provide designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles in accordance with the following table?

Number of Nonresidential Parking Spaces Required by the Permit	Number of Designated Parking Spaces
0-9	0
10-25	2
26-50	4
51-75	6
76-100	9
101-150	11
151-200	18
201 and over	At least 10% of total

This measure does not cover electric vehicles. See Question 4 for electric vehicle parking requirements.

Note: Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces. The required designated parking spaces are to be provided within the overall minimum parking requirement, not in addition to it.

Check "N/A" only if the project is a residential project.

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.



8. *Transportation Demand Management Program*

If the project would accommodate over 50 tenant-occupants (employees), would it include a transportation demand management program that would be applicable to existing tenants and future tenants that includes:

At least one of the following components:

- Parking cash out program
- Parking management plan that includes charging employees market-rate for single-occupancy vehicle parking and providing reserved, discounted, or free spaces for registered carpools or vanpools
- Unbundled parking whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development

And at least three of the following components:

- Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees
- On-site carsharing vehicle(s) or bikesharing
- Flexible or alternative work hours
- Telework program
- Transit, carpool, and vanpool subsidies
- Pre-tax deduction for transit or vanpool fares and bicycle commute costs
- Access to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare, either onsite or within 1,320 feet (1/4 mile) of the structure/use?

Check "N/A" only if the project is a residential project or if it would not accommodate over 50 tenant-occupants (employees).

The Proposed Project would involve the replacement of utility poles from wooden to steel and would not involve the construction of any buildings or parking facilities. Therefore, this checklist item strategy would not be applicable.



Step 3: Project CAP Conformance Evaluation (if applicable)

The third step of the CAP consistency review only applies if Step 1 is answered in the affirmative under option B. The purpose of this step is to determine whether a project that is located in a TPA but that includes a land use plan and/or zoning designation amendment is nevertheless consistent with the assumptions in the CAP because it would implement CAP Strategy 3 actions. In general, a project that would result in a reduction in density inside a TPA would not be consistent with Strategy 3. The following questions must each be answered in the affirmative and fully explained.

1. Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?

Considerations for this question:

- Does the proposed land use and zoning designation associated with the project provide capacity for transit-supportive residential densities within the TPA?
- Is the project site suitable to accommodate mixed-use village development, as defined in the General Plan, within the TPA?
- Does the land use and zoning associated with the project increase the capacity for transit-supportive employment intensities within the TPA?

2. Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?

Considerations for this question:

- Does the proposed project support/incorporate identified transit routes and stops/stations?
- Does the project include transit priority measures?

3. Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?

Considerations for this question:

- Does the proposed project circulation system provide multiple and direct pedestrian connections and accessibility to local activity centers (such as transit stations, schools, shopping centers, and libraries)?
- Does the proposed project urban design include features for walkability to promote a transit supportive environment?

4. Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?

Considerations for this question:

- Does the proposed project circulation system include bicycle improvements consistent with the Bicycle Master Plan?
- Does the overall project circulation system provide a balanced, multimodal, "complete streets" approach to accommodate mobility needs of all users?

5. Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?

Considerations for this question:

- Does the proposed project include new or expanded urban public spaces such as plazas, pocket parks, or urban greens in the TPA?
- Does the land use and zoning associated with the proposed project increase the potential for jobs within the TPA?
- Do the zoning/implementing regulations associated with the proposed project support the efficient use of parking through mechanisms such as: shared parking, parking districts, unbundled parking, reduced parking, paid or time-limited parking, etc.?

6. Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?

Considerations for this question:

- Does the proposed project provide at least three different species for the primary, secondary and accent trees in order to accommodate varying parkway widths?
- Does the proposed project include policies or strategies for preserving existing trees?
- Does the proposed project incorporate tree planting that will contribute to the City's 20% urban canopy tree coverage goal?



CLIMATE ACTION PLAN CONSISTENCY CHECKLIST ATTACHMENT A

This attachment provides performance standards for applicable Climate Action Plan (CAP) Consistency Checklist measures.

Table 1 Roof Design Values for Question 1: Cool/Green Roofs supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan				
Land Use Type	Roof Slope	Minimum 3-Year Aged Solar Reflectance	Thermal Emittance	Solar Reflective Index
Low-Rise Residential	≤ 2:12	0.63	0.75	75
	> 2:12	0.20	0.75	16
High-Rise Residential Buildings, Hotels and Motels	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
Non-Residential	≤ 2:12	0.63	0.75	75
	> 2:12	0.20	0.75	16
<p>Source: Adapted from the California Green Building Standards Code (CALGreen) Tier 1 residential and non-residential voluntary measures shown in Tables A4.106.5.1 and A5.106.11.2.2, respectively. Roof installation and verification shall occur in accordance with the CALGreen Code.</p> <p>CALGreen does not include recommended values for low-rise residential buildings with roof slopes of ≤ 2:12 for San Diego's climate zones (7 and 10). Therefore, the values for climate zone 15 that covers Imperial County are adapted here.</p> <p>Solar Reflectance Index (SRI) equal to or greater than the values specified in this table may be used as an alternative to compliance with the aged solar reflectance values and thermal emittance.</p>				

Table 2 Fixture Flow Rates for Non-Residential Buildings related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Fixture Type	Maximum Flow Rate
Showerheads	1.8 gpm @ 80 psi
Lavatory Faucets	0.35 gpm @60 psi
Kitchen Faucets	1.6 gpm @ 60 psi
Wash Fountains	1.6 [rim space(in.)/20 gpm @ 60 psi]
Metering Faucets	0.18 gallons/cycle
Metering Faucets for Wash Fountains	0.18 gallons/cycle 20 [rim space(in.) @ 60 psi]
Gravity Tank-type Water Closets	1.12 gallons/flush
Flushometer Tank Water Closets	1.12 gallons/flush
Flushometer Valve Water Closets	1.12 gallons/flush
Electromechanical Hydraulic Water Closets	1.12 gallons/flush
Floor-mounted Urinals or Wall-mounted Urinals	0.44 or 0.11 gallons/flush

Source: Adapted from the [California Green Building Standards Code \(CALGreen\)](#) Tier 1 non-residential voluntary measures shown in Tables A5.303.2.3.1 and A5.106.11.2.2, respectively. See the [California Plumbing Code](#) for definitions of each fixture type.

Where complying faucets are unavailable, aerators rated at 0.35 gpm or other means may be used to achieve reduction.

Acronyms:

gpm = gallons per minute

psi = pounds per square inch (unit of pressure)

in. = inch

Table 3 Standards for Appliances and Fixtures for Commercial Application related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Appliance/Fixture Type	Standard	
Clothes Washers	Maximum Water Factor (WF) that will reduce the use of water by 10 percent below the California Energy Commissions' WF standards for commercial clothes washers located in Title 20 of the <i>California Code of Regulations</i> .	
Single Tank Conveyor Dishwashers	0.70 maximum gallons per rack (2.6 L) (High-Temperature)	0.79 maximum gallons per rack (4.4 L) (Low-Temperature)
Multiple Tank Conveyor Dishwashers	0.54 maximum gallons per rack (2 L) (High-Temperature)	0.54 maximum gallons per rack (2 L) (Low-Temperature)
Stationary Single Tank Door Dishwashers	0.89 maximum gallons per rack (3.4 L) (High-Temperature)	1.18 maximum gallons per rack (4.5 L) (Low-Temperature)
Undercounter-type Dishwashers	0.86 maximum gallons per rack (3.3 L) (High-Temperature)	1.19 maximum gallons per rack (4.5 L) (Low-Temperature)
Pot, Pan, and Utensil Dishwashers	0.58 maximum gallons per square foot of rack	
Single Tank Flight Type Dishwashers	$GPH \leq 2.975x + 55.00$	
Multiple Tank Flight Type Dishwashers	$GPH \leq 4.96x + 17.00$	
Combination Ovens	Consume no more than 1.5 gallons per hour per pan, including condensate water.	
Commercial Pre-rinse Spray Valves (manufactured on or after January 1, 2006)	<div>Function at equal to or less than 1.6 gallons per minute (0.10 L/s) at 60 psi (414 kPa) and<ul style="list-style-type: none">Be capable of cleaning 60 plates in an average time of not more than 30 seconds per plate.Be equipped with an integral automatic shutoff.Operate at static pressure of at least 30 psi (207 kPa) when designed for a flow rate of 1.3 gallons per minute (0.08 L/s) or less.</div>	

Source: Adapted from the [California Green Building Standards Code \(CALGreen\)](#) Tier 1 non-residential voluntary measures shown in Section A5.303.3. See the [California Plumbing Code](#) for definitions of each appliance/fixture type.

Acronyms:
L = liter
GPH = gallons per hour
X = square feet of conveyor belt/ minute (max conveyor speed sf/ min as tested and certified to NSF/ANSI Standard 3)
L/h = liters per hour
L/s = liters per second
psi = pounds per square inch (unit of pressure)
kPa = kilopascal (unit of pressure)

Table 4 **Size-based Trigger Levels for Electric Vehicle Charging Requirements for Non-Residential Buildings related to Question 4: Electric Vehicle Charging supporting Strategy 3: Bicycling, Walking, Transit & Land Use of the Climate Action Plan**

Land Use Type	Size-based Trigger Level
Hospital	500 or more beds OR Expansion of a 500+ bed hospital by 20%
College	3,000 or more students OR Expansion of a 3,000+ student college by 20%
Hotels/Motels	500 or more rooms
Industrial, Manufacturing or Processing Plants or Industrial Parks	1,000 or more employees OR 40 acres or more of land area OR 650,000 square feet or more of gross floor area
Office buildings or Office Parks	1,000 or more employees OR 250,000 square feet or more of gross floor area
Shopping centers or Trade Centers	1,000 or more employees OR 500,000 square feet or more of gross floor area
Sports, Entertainment or Recreation Facilities	Accommodate at least 4,000 persons per performance OR Contain 1,500 or more fixed seats
Transit Projects (including, but not limited to, transit stations and park and ride lots).	All
Source: Adapted from the Governor's Office of Planning and Research's (OPR's) Model Building Code for Plug-in Electric Vehicle Charging	

Tie Line 649

San Diego, CA 92154

Inquiry Number: 3956709.5s

May 31, 2014

EDR DataMap™ Corridor Study

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

SAN DIEGO, CA 92154
SAN DIEGO, CA 92154

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

FEDERAL RECORDS

NPL.....	National Priority List
Proposed NPL.....	Proposed National Priority List Sites
Delisted NPL.....	National Priority List Deletions
NPL LIENS.....	Federal Superfund Liens
CERCLIS.....	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP.....	CERCLIS No Further Remedial Action Planned
LIENS 2.....	CERCLA Lien Information
CORRACTS.....	Corrective Action Report
RCRA-TSDF.....	RCRA - Treatment, Storage and Disposal
RCRA-SQG.....	RCRA - Small Quantity Generators
RCRA-CESQG.....	RCRA - Conditionally Exempt Small Quantity Generator
RCRA NonGen / NLR.....	RCRA - Non Generators
US ENG CONTROLS.....	Engineering Controls Sites List
US INST CONTROL.....	Sites with Institutional Controls
ERNS.....	Emergency Response Notification System
HMIRS.....	Hazardous Materials Information Reporting System
DOT OPS.....	Incident and Accident Data
US CDL.....	Clandestine Drug Labs
US BROWNFIELDS.....	A Listing of Brownfields Sites
DOD.....	Department of Defense Sites
FUDS.....	Formerly Used Defense Sites
LUCIS.....	Land Use Control Information System
CONSENT.....	Superfund (CERCLA) Consent Decrees
ROD.....	Records Of Decision
UMTRA.....	Uranium Mill Tailings Sites
DEBRIS REGION 9.....	Torres Martinez Reservation Illegal Dump Site Locations
ODI.....	Open Dump Inventory
US MINES.....	Mines Master Index File
TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS.....	Section 7 Tracking Systems
ICIS.....	Integrated Compliance Information System

EXECUTIVE SUMMARY

PADS.....	PCB Activity Database System
MLTS.....	Material Licensing Tracking System
RADINFO.....	Radiation Information Database
FINDS.....	Facility Index System/Facility Registry System
RAATS.....	RCRA Administrative Action Tracking System
RMP.....	Risk Management Plans
FEMA UST.....	Underground Storage Tank Listing
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
FEDERAL FACILITY.....	Federal Facility Site Information listing
US FIN ASSUR.....	Financial Assurance Information
PCB TRANSFORMER.....	PCB Transformer Registration Database
US HIST CDL.....	National Clandestine Laboratory Register
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
LEAD SMELTERS.....	Lead Smelter Sites
PRP.....	Potentially Responsible Parties
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
COAL ASH DOE.....	Steam-Electric Plant Operation Data

STATE AND LOCAL RECORDS

HIST Cal-Sites.....	Historical Calsites Database
CA BOND EXP. PLAN.....	Bond Expenditure Plan
SCH.....	School Property Evaluation Program
Toxic Pits.....	Toxic Pits Cleanup Act Sites
SWF/LF.....	Solid Waste Information System
WDS.....	Waste Discharge System
WMUDS/SWAT.....	Waste Management Unit Database
UIC.....	UIC Listing
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
HIST CORTESE.....	Hazardous Waste & Substance Site List
SWRCY.....	Recycler Database
LUST.....	Geotracker's Leaking Underground Fuel Tank Report
CA FID UST.....	Facility Inventory Database
SLIC.....	Statewide SLIC Cases
UST.....	Active UST Facilities
HIST UST.....	Hazardous Substance Storage Container Database
LIENS.....	Environmental Liens Listing
CUPA Listings.....	CUPA Resources List
SWEEPS UST.....	SWEEPS UST Listing
CHMIRS.....	California Hazardous Material Incident Report System
LDS.....	Land Disposal Sites Listing
MCS.....	Military Cleanup Sites Listing
AST.....	Aboveground Petroleum Storage Tank Facilities
Notify 65.....	Proposition 65 Records
DEED.....	Deed Restriction Listing
VCP.....	Voluntary Cleanup Program Properties
DRYCLEANERS.....	Cleaner Facilities
WIP.....	Well Investigation Program Case List
CDL.....	Clandestine Drug Labs
ENF.....	Enforcement Action Listing
RESPONSE.....	State Response Sites
ENVIROSTOR.....	EnviroStor Database
HAULERS.....	Registered Waste Tire Haulers Listing

EXECUTIVE SUMMARY

PROC.....	Certified Processors Database
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank
MWMP.....	Medical Waste Management Program Listing
RGA LF.....	Recovered Government Archive Solid Waste Facilities List

TRIBAL RECORDS

INDIAN RESERV.....	Indian Reservations
INDIAN ODI.....	Report on the Status of Open Dumps on Indian Lands
INDIAN LUST.....	Leaking Underground Storage Tanks on Indian Land
INDIAN UST.....	Underground Storage Tanks on Indian Land
INDIAN VCP.....	Voluntary Cleanup Priority Listing

EDR PROPRIETARY RECORDS

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat.....	EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners.....	EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/11/2014 has revealed that there is 1 RCRA-LQG site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<i>FORMER OTAY SKEET AND TRAP SHO</i>	<i>5350 HERITAGE ROAD</i>	<i>4</i>	<i>8</i>

STATE AND LOCAL RECORDS

NPDES: A listing of NPDES permits, including stormwater.

A review of the NPDES list, as provided by EDR, and dated 05/19/2014 has revealed that there is 1

EXECUTIVE SUMMARY

NPDES site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
AQSD ATTRACTION 2013	2052 ENTERTAINMENT CIRC	2	5

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, and dated 12/31/2012 has revealed that there are 3 HAZNET sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
PARDEE HOMES	5228 TOPSAIL DR	1	4
B W CARTER PAINTING INC	5228 TOPSAIL DR	1	4
FORMER OTAY SKEET AND TRAP SHO	5350 HERITAGE ROAD	4	8

EMI: Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies

A review of the EMI list, as provided by EDR, and dated 12/31/2012 has revealed that there are 2 EMI sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
HANSON AGGREGATES PACIFIC SOUT	5330 OTAY VALLEY RD	5	11
NELSON & SLOAN - OTAY QUARRY	5330 OTAY VALLEY RD	5	13

EXECUTIVE SUMMARY

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Total Plotted</u>
<u>FEDERAL RECORDS</u>	
NPL	0
Proposed NPL	0
Delisted NPL	0
NPL LIENS	0
CERCLIS	0
CERC-NFRAP	0
LIENS 2	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	1
RCRA-SQG	0
RCRA-CESQG	0
RCRA NonGen / NLR	0
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
HMIRS	0
DOT OPS	0
US CDL	0
US BROWNFIELDS	0
DOD	0
FUDS	0
LUCIS	0
CONSENT	0
ROD	0
UMTRA	0
DEBRIS REGION 9	0
ODI	0
US MINES	0
TRIS	0
TSCA	0
FTTS	0
HIST FTTS	0
SSTS	0
ICIS	0
PADS	0
MLTS	0
RADINFO	0
FINDS	0
RAATS	0
RMP	0
FEMA UST	0
COAL ASH EPA	0
FEDERAL FACILITY	0
US FIN ASSUR	0
PCB TRANSFORMER	0
US HIST CDL	0
EPA WATCH LIST	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Total Plotted</u>
2020 COR ACTION	0
LEAD SMELTERS	0
PRP	0
US AIRS	0
SCRD DRYCLEANERS	0
COAL ASH DOE	0
 <u>STATE AND LOCAL RECORDS</u>	
HIST Cal-Sites	0
CA BOND EXP. PLAN	0
SCH	0
Toxic Pits	0
SWF/LF	0
NPDES	1
WDS	0
WMUDS/SWAT	0
UIC	0
Cortese	0
HIST CORTESE	0
SWRCY	0
LUST	0
CA FID UST	0
SLIC	0
UST	0
HIST UST	0
LIENS	0
CUPA Listings	0
SWEEPS UST	0
CHMIRS	0
LDS	0
MCS	0
AST	0
Notify 65	0
DEED	0
VCP	0
DRYCLEANERS	0
WIP	0
CDL	0
ENF	0
RESPONSE	0
HAZNET	3
EMI	2
ENVIROSTOR	0
HAULERS	0
PROC	0
HWP	0
HWT	0
RGA LUST	0
MWMP	0
RGA LF	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Total Plotted</u>
<u>TRIBAL RECORDS</u>	
INDIAN RESERV	0
INDIAN ODI	0
INDIAN LUST	0
INDIAN UST	0
INDIAN VCP	0
<u>EDR PROPRIETARY RECORDS</u>	
EDR MGP	0
EDR US Hist Auto Stat	0
EDR US Hist Cleaners	0

NOTES:

Sites may be listed in more than one database

MAP FINDINGS

Map ID			EDR ID Number
Direction			
Distance			
Distance (ft.)		Database(s)	EPA ID Number
Site			

1	PARDEE HOMES 5228 TOPSAIL DR SAN DIEGO, CA 92154	HAZNET	S112937635 N/A
---	---	--------	-------------------

HAZNET:

Year:	2004
Gepaid:	CAC002577702
Contact:	THEODORE CULLAN
Telephone:	3104753525
Mailing Name:	Not reported
Mailing Address:	10880 WILSHIRE BLVD STE 1900
Mailing City,St,Zip:	LOS ANGELES, CA 90024
Gen County:	Not reported
TSD EPA ID:	CAT080033681
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler
Tons:	0.45
Facility County:	San Diego

1	B W CARTER PAINTING INC 5228 TOPSAIL DR SAN DIEGO, CA 92154	HAZNET	S113126587 N/A
---	--	--------	-------------------

HAZNET:

Year:	2008
Gepaid:	CAL000270622
Contact:	MARCI HAUSER/OFFICE MANAGER
Telephone:	6192581006
Mailing Name:	Not reported
Mailing Address:	10965 HARTLEY RD STE M
Mailing City,St,Zip:	SANTEE, CA 92071
Gen County:	Not reported
TSD EPA ID:	CAT080013352
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.935
Facility County:	San Diego

Year:	2008
Gepaid:	CAL000270622
Contact:	MARCI HAUSER/OFFICE MANAGER
Telephone:	6192581006
Mailing Name:	Not reported
Mailing Address:	10965 HARTLEY RD STE M
Mailing City,St,Zip:	SANTEE, CA 92071
Gen County:	Not reported
TSD EPA ID:	ARD981057870
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Fuel Blending Prior To Energy Recovery At Another Site
Tons:	0.187
Facility County:	San Diego

Year:	2005
Gepaid:	CAL000270622
Contact:	JENNIFER CLEMISON/SEC
Telephone:	6192581006

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

B W CARTER PAINTING INC (Continued)

S113126587

Mailing Name: Not reported
Mailing Address: 10965 HARTLEY RD STE M
Mailing City,St,Zip: SANTEE, CA 92071
Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: 1.1
Facility County: San Diego

Year: 2005
Gepaid: CAL000270622
Contact: JENNIFER CLEMISON/SEC
Telephone: 6192581006
Mailing Name: Not reported
Mailing Address: 10965 HARTLEY RD STE M
Mailing City,St,Zip: SANTEE, CA 92071
Gen County: Not reported
TSD EPA ID: CAT080013352
TSD County: Not reported
Waste Category: Unspecified aqueous solution
Disposal Method: Recycler
Tons: 0.87
Facility County: San Diego

Year: 2005
Gepaid: CAL000270622
Contact: JENNIFER CLEMISON/SEC
Telephone: 6192581006
Mailing Name: Not reported
Mailing Address: 10965 HARTLEY RD STE M
Mailing City,St,Zip: SANTEE, CA 92071
Gen County: Not reported
TSD EPA ID: ARD981057870
TSD County: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Not reported
Tons: 0.22
Facility County: San Diego

[Click this hyperlink](#) while viewing on your computer to access
6 additional CA_HAZNET: record(s) in the EDR Site Report.

2

AQSD ATTRACTION 2013
2052 ENTERTAINMENT CIRCLE
CHULA VISTA, CA 91911

NPDES S109279433
San Diego Co. HMMD N/A

NPDES:
Npdes Number: CAS000002
Facility Status: Terminated
Agency Id: 0
Region: 9
Regulatory Measure Id: 432899
Order No: 2009-0009-DWQ
Regulatory Measure Type: Enrollee
Place Id: Not reported
WDID: 9 37C365550

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

AQSD ATTRACTION 2013 (Continued)

S109279433

Program Type: Construction
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 01/30/2013
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: 07/01/2013
Discharge Name: SeaWorld Parks and Entertainment
Discharge Address: 500 Sea World Drive
Discharge City: San Diego
Discharge State: California
Discharge Zip: 92109

SAN DIEGO CO. HMMD:

Facility Id: 137178
Business Type: 6HK70
EPA Id Number: Not reported
APN: 645-020-17-00
Last HMMD Inspection: 06/18/2012
Permit Status: OPEN
Permit Expiration: 05/31/2013
Facility Owner: KNOTT'S SOAK CITY USA
Facility Address: 2052 ENTERTAINMENT CIR
Facility City: CHULA VISTA
Facility State: CA
Facility Zip: 91911-
UST Owner: Not reported
Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Not reported
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

Active Permits:

Facility Id: 137178
Update Date: 11/02/2012
Case Number: 68476-85-7
Name: PROPANE (LPG)
Other Information: FOR FORKLIFT
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: PRESSURE RELEASE

Facility Id: 137178
Update Date: 11/02/2012
Case Number: 7681-52-9
Name: SODIUM HYPOCHLORITE
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: ACUTE
Hazardous Categories 2: Not reported

Facility Id: 137178
Update Date: 11/02/2012
Case Number: 124-38-9
Name: CARBON DIOXIDE
Other Information: Not reported
Material Waste: Material

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

AQSD ATTRACTION 2013 (Continued)

S109279433

Hazardous Categories 1: PRESSURE RELEASE
Hazardous Categories 2: Not reported

Facility Id: 137178
Update Date: 11/02/2012
Case Number: 68476-34-6
Name: DIESEL FUEL
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Facility Id: 137178
Update Date: 11/02/2012
Case Number: 7647-01-0
Name: MURIATIC ACID: HYDROCHLORIC ACID, 17-39%
Other Information: Not reported
Material Waste: Material
Hazardous Categories 1: FIRE
Hazardous Categories 2: Not reported

Violations Active Permits:

Facility Id: 137178
Update Date: 11/02/2012
Inspection Date: 12/04/2007
Violation Code: 6HV0407
Violation: EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation: Employee training program for small quantity generator of hazardous waste is inadequate. CFR 262.34(d)(5)(iii)
Activity: ACTIVE

Facility Id: 137178
Update Date: 11/02/2012
Inspection Date: 12/04/2007
Violation Code: 6HV1013
Violation: HMBP NOT AVAILABLE FOR REVIEW
Violation Citation: Copy of HMBP not onsite for inspector's review. 25505(e)
Activity: ACTIVE

Facility Id: 137178
Update Date: 11/02/2012
Inspection Date: 09/24/2009
Violation Code: 6HV1004
Violation: HMBP NOT SUBMITTED TO HMD
Violation Citation: Hazardous Materials Handler has not submitted a completed Business Plan to the HMMD. HSC 25505(a)
Activity: ACTIVE

Facility Id: 137178
Update Date: 11/02/2012
Inspection Date: 12/04/2007
Violation Code: 6HV1015
Violation: EMPLOYEE TRAINING NOT ADEQUATE
Violation Citation: Did not have adequate employee training program 2732 &/or 25504(c)
Activity: ACTIVE

Facility Id: 137178

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

AQSD ATTRACTION 2013 (Continued)

S109279433

Update Date: 11/02/2012
Inspection Date: 12/04/2007
Violation Code: 6HV0216
Violation: HAZMATS WITHOUT PROPER LABELS
Violation Citation: Hazardous materials have not been adequately labeled within 10 days & are now declared hazardous waste. HSC 25124(b)(3)(A) & 66262.34(f)
Activity: ACTIVE

Facility Id: 137178
Update Date: 11/02/2012
Inspection Date: 12/04/2007
Violation Code: 6HV0227
Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE
Violation Citation: Failed to properly label/date hazardous waste container &/or tank. 66262.34(f)
Activity: ACTIVE

3

**KASLER CORPORATION
5330 E OTAY VALLEY RD
CHULA VISTA, CA 91911**

**San Diego Co. HMMD S100736754
N/A**

SAN DIEGO CO. HMMD:

Facility Id: 133202
Business Type: 6HK70
EPA Id Number: Not reported
APN: DEH-133202
Last HMMD Inspection: 01/04/1996
Permit Status: INAC
Permit Expiration: 01/04/1996
Facility Owner: KASLER CORPORATION
Facility Address: PO BOX 387
Facility City: SAN BERNARDINO
Facility State: CA
Facility Zip: 92402-
UST Owner: Not reported
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

4

**FORMER OTAY SKEET AND TRAP SHOOTING
5350 HERITAGE ROAD
CHULA VISTA, CA 91913**

**RCRA-LQG 1008402406
HAZNET CAR000164863**

RCRA-LQG:

Date form received by agency: 07/29/2005
Facility name: FORMER OTAY SKEET AND TRAP SHOOTING
Facility address: 5350 HERITAGE ROAD
CHULA VISTA, CA 91913
EPA ID: CAR000164863
Mailing address: 1903 WRIGHT PLACE
FLAT ROCK LAND CO STE 220
CARLSBAD, CA 92008

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

FORMER OTAY SKEET AND TRAP SHOOTING (Continued)

1008402406

Contact: BOB PENNER
Contact address: 1903 WRIGHT PLACE FLAT ROCK LAND CO STE 220
CARLSBAD, CA 92008
Contact country: US
Contact telephone: 760-602-3766
Contact email: BPENNER@HFC-CA.COM
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: FLAT ROCK LAND CO LLC
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 12/10/2003
Owner/Op end date: Not reported

Owner/operator name: FLAT ROCK LAND CO LLC
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 12/10/2003
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

FORMER OTAY SKEET AND TRAP SHOOTING (Continued)

1008402406

Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:

Waste code: D008
Waste name: LEAD

Violation Status: No violations found

HAZNET:

Year: 2006
Gepaid: CAR000164863
Contact: BOB PENNER
Telephone: 7606023766
Mailing Name: Not reported
Mailing Address: 1903 WRIGHT PL
Mailing City,St,Zip: CARLSBAD, CA 920085526
Gen County: Not reported
TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Transfer Station
Tons: 0.4
Facility County: San Diego

Year: 2006
Gepaid: CAR000164863
Contact: BOB PENNER
Telephone: 7606023766
Mailing Name: Not reported
Mailing Address: 1903 WRIGHT PL
Mailing City,St,Zip: CARLSBAD, CA 920085526
Gen County: Not reported
TSD EPA ID: CAT080033681
TSD County: Not reported
Waste Category: Aqueous solution with metals (< restricted levels and (Alkaline solution (pH >= 12.5) with metals))
Disposal Method: Treatment, Tank
Tons: 0.62
Facility County: San Diego

Year: 2006
Gepaid: CAR000164863
Contact: BOB PENNER
Telephone: 7606023766
Mailing Name: Not reported
Mailing Address: 1903 WRIGHT PL
Mailing City,St,Zip: CARLSBAD, CA 920085526
Gen County: Not reported
TSD EPA ID: CAT080033681
TSD County: Not reported
Waste Category: Aqueous solution with metals (< restricted levels and (Alkaline solution (pH >= 12.5) with metals))
Disposal Method: Treatment, Tank
Tons: 2.06
Facility County: San Diego

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

5 HANSON AGGREGATES PACIFIC SOUTHWEST INC San Diego Co. HMMD S106063420
5330 OTAY VALLEY RD EMI N/A
CHULA VISTA, CA 91911

SAN DIEGO CO. HMMD:

Facility Id: 132067
Business Type: 6HK70
EPA Id Number: CAD981983513
APN: 644-060-06-00
Last HMMD Inspection: 03/02/2006
Permit Status: INAC
Permit Expiration: 09/30/2007
Facility Owner: HANSON AGGREGATES
Facility Address: PO BOX 639069
Facility City: SAN DIEGO
Facility State: CA
Facility Zip: 92163-9069
UST Owner: Not reported
Handle Regulated Hazmat: Y
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

EMI:

Year: 2005
County Code: 37
Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 78.28708488013590889
Part. Matter 10 Micrometers & Smllr Tons/Yr: 41.13

Year: 2006
County Code: 37
Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 102.71
Part. Matter 10 Micrometers & Smllr Tons/Yr: 47.04

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

HANSON AGGREGATES PACIFIC SOUTHWEST INC (Continued)

S106063420

Year: 2007
County Code: 37
Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 102.71
Part. Matter 10 Micrometers & Smlr Tons/Yr: 47.04

Year: 2008
County Code: 37
Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 102.71
Part. Matter 10 Micrometers & Smlr Tons/Yr: 47.04

Year: 2009
County Code: 37
Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 102.79000000000001
Part. Matter 10 Micrometers & Smlr Tons/Yr: 47.109999999999999

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

5 **TYCO ELECTRONICS POWER SYSTEMS** San Diego Co. HMMD S106065429
5330 OTAY VALLEY RD N/A
CHULA VISTA, CA 91911

SAN DIEGO CO. HMMD:

Facility Id: 137904
Business Type: 6HK18
EPA Id Number: Not reported
APN: DEH-137904
Last HMMD Inspection: 05/22/1998
Permit Status: INAC
Permit Expiration: 07/31/1999
Facility Owner: TYCO ELECTRONICS POWER SYSTEMS
Facility Address: PO BOX 370178
Facility City: SAN DIEGO
Facility State: CA
Facility Zip: 91911-
UST Owner: Not reported
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported
Generate Medical Waste: Not reported

5 **NELSON & SLOAN - OTAY QUARRY** EMI S104756467
5330 OTAY VALLEY RD N/A
CHULA VISTA, CA 91911

EMI:

Year: 1997
County Code: 37
Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 73
Part. Matter 10 Micrometers & Smllr Tons/Yr: 34

Year: 1998
County Code: 37
Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NELSON & SLOAN - OTAY QUARRY (Continued)

S104756467

SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	73
Part. Matter 10 Micrometers & Smlr Tons/Yr:	34
Year:	1999
County Code:	37
Air Basin:	SD
Facility ID:	5867
Air District Name:	SD
SIC Code:	1429
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	73
Part. Matter 10 Micrometers & Smlr Tons/Yr:	34
Year:	2000
County Code:	37
Air Basin:	SD
Facility ID:	5867
Air District Name:	SD
SIC Code:	1429
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	73
Part. Matter 10 Micrometers & Smlr Tons/Yr:	34
Year:	2001
County Code:	37
Air Basin:	SD
Facility ID:	5867
Air District Name:	SD
SIC Code:	1429
Air District Name:	SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	106
Part. Matter 10 Micrometers & Smlr Tons/Yr:	50
Year:	2002
County Code:	37

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NELSON & SLOAN - OTAY QUARRY (Continued)

S104756467

Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Y
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 106
Part. Matter 10 Micrometers & Smllr Tons/Yr: 50

Year: 2003
County Code: 37
Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 106
Part. Matter 10 Micrometers & Smllr Tons/Yr: 50

Year: 2004
County Code: 37
Air Basin: SD
Facility ID: 5867
Air District Name: SD
SIC Code: 1429
Air District Name: SAN DIEGO COUNTY APCD
Community Health Air Pollution Info System: Y
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 106.0026877
Part. Matter 10 Micrometers & Smllr Tons/Yr: 50.06795416

MAP FINDINGS

Map ID		EDR ID Number
Direction		
Distance		
Distance (ft.)	Site	Database(s) EPA ID Number

5	VERIZON WIRELESS - NOGALES VALLEY	San Diego Co. HMMD	S106071606
	2052 OTAY VALLEY RD		N/A
	CHULA VISTA, CA 91911		

SAN DIEGO CO. HMMD:

Facility Id:	201591
Business Type:	6HK52
EPA Id Number:	Not reported
APN:	DEH-201591
Last HMMD Inspection:	03/29/2012
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Facility Owner:	VERIZON WIRELESS
Facility Address:	15505 SAND CANYON AV #D
Facility City:	IRVINE
Facility State:	CA
Facility Zip:	92618
UST Owner:	Not reported
Handle Regulated Hazmat:	Y
Own Or Operate UST:	Not reported
Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Active Permits:

Facility Id:	201591
Update Date:	11/02/2012
Case Number:	7664-93-9
Name:	SULFURIC ACID, 30%
Other Information:	BATTERY ELECTROLYTE
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Facility Id:	201591
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL FUEL
Other Information:	DIESEL FUEL, OIL #2
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

Facility Id:	201591
Business Type:	6HK52
EPA Id Number:	Not reported
APN:	DEH-201591
Last HMMD Inspection:	03/29/2012
Permit Status:	OPEN
Permit Expiration:	06/30/2013
Facility Owner:	VERIZON WIRELESS
Facility Address:	15505 SAND CANYON AV #D
Facility City:	IRVINE
Facility State:	CA
Facility Zip:	92618
UST Owner:	Not reported
Handle Regulated Hazmat:	Not reported
Own Or Operate UST:	Not reported

MAP FINDINGS

Map ID
 Direction
 Distance
 Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

VERIZON WIRELESS - NOGALES VALLEY (Continued)

S106071606

Subject To APSA:	Not reported
Generate Haz Waste:	Not reported
Treat Haz Waste:	Not reported
Generate Medical Waste:	Not reported

Active Permits:

Facility Id:	201591
Update Date:	11/02/2012
Case Number:	7664-93-9
Name:	SULFURIC ACID, 30%
Other Information:	BATTERY ELECTROLYTE
Material Waste:	Material
Hazardous Categories 1:	ACUTE
Hazardous Categories 2:	Not reported

Facility Id:	201591
Update Date:	11/02/2012
Case Number:	68476-34-6
Name:	DIESEL FUEL
Other Information:	DIESEL FUEL, OIL #2
Material Waste:	Material
Hazardous Categories 1:	FIRE
Hazardous Categories 2:	Not reported

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHULA VISTA	S100179714	BUY RITE	1328 3RD AVE	91911	HIST CORTESE, LUST, SWEEPS US` Notify 65
CHULA VISTA	S112973416	CALTRANS D-11/CONSTR/EA11-258904	RTE 5 NB/SB PM 6.6	91911	HAZNET
CHULA VISTA	S108407154	NEW MILLENIUM-N OF LA MEDIA & LONE STAR	LA MEDIA & LONE STAR	91911	SAN DIEGO CO. SAM
CHULA VISTA	S109277186	NEW MILLENIUM-N OF LA MEDIA & LONE STAR	NONE LA MEDIA & LONE STAR	91911	SLIC
CHULA VISTA	S100279175	PACIFIC RECOVERY CORP	OTAY LANDFILL	91911	CHMIRS, EMI
CHULA VISTA	S113051778	SAN DIEGO WOOD RECYCLING	OTAY VALLEY RD 2MI E HWY 805	91911	HAZNET
IMPERIAL	S113788710	SOUTHWEST TRAILS	HIGHWAY 78 MILE MARKER 53	91915	HAZNET
SAN DIEGO	S114638497	JUNE & MILTON ULLMAN	343 HY 101		RGA LUST
SAN DIEGO	S114660219	NEIGHBOR SAVOR FOOD STORES	1144 HY 101		RGA LUST
SAN DIEGO	S114660230	NEIGHBORHOOD MARKET	1144 HY 101		RGA LUST
SAN DIEGO	S112991467	CALTRANS D-11 / EA11-2E0501	HWY 125 SB PM 3.1 LA MEDIA @ LONE	92154	HAZNET
SAN DIEGO	S114611061	DISABLED AMERICAN VETERAN'S	47TH & HIGHWAY 94		RGA LUST
SAN DIEGO	S113457471	THX TRANSPORT LLC	HIGHWAY 5 AT CANNON RD	92154	HAZNET
SAN DIEGO	S114676592	RF WHITE/CALTRANS HWY I-5 &	HY 5 AT S-78		RGA LUST
SAN DIEGO	S114590640	CALTRANS HY54	HY 54		RGA LUST
SAN DIEGO	S114578239	ASPHALT, INC.	12560 HY 67		RGA LUST
SAN DIEGO	S114698082	T T T CONCRETE INC - SUPERI	12494 HY 67		RGA LUST
SAN DIEGO	S114715029	US DISPOSAL SERVICES	12300 HY 67		RGA LUST
SAN DIEGO	S114674049	RAMONA FOREST FIRE STATION	16310 HY 67		RGA LUST
SAN DIEGO	S114578237	ASPHALT, INC./CHEVRON	12560 HY 67		RGA LUST
SAN DIEGO	S114589587	CAL-MAT LAKESIDE	12060 HY 67		RGA LUST
SAN DIEGO	S114568153	ABBYS MOBIL	681 HY 75		RGA LUST
SAN DIEGO	S114655711	MOBIL	681 HY 75		RGA LUST
SAN DIEGO	S114653932	MOBIL OIL #18-034	4730 HY 76		RGA LUST
SAN DIEGO	S114619630	FENTON, 10331 HY 76, PALA	10331 HY 76		RGA LUST
SAN DIEGO	S114642325	LAKE HENSHAW RESORT	26439 HY 76		RGA LUST
SAN DIEGO	S114667678	PAUMA VALLEY SERVICE STATIO	16220 HY 76		RGA LUST
SAN DIEGO	S114654015	MOBIL OIL CORP.	4730 HY 76		RGA LUST
SAN DIEGO	S114579980	BALL FAMILY TRUST	17348 HY 76		RGA LUST
SAN DIEGO	S114674822	RED BARN	5965 HY 78		RGA LUST
SAN DIEGO	S114683023	SANTA YSABEL SERVICE	30350 HWY 78		RGA LUST
SAN DIEGO	S114607353	COUNTY OF SD-JULIAN ROAD ST	1524 HY 78		RGA LUST
SAN DIEGO	S114638468	JULIAN FOREST FIRE STATION	1587 HY 78		RGA LUST
SAN DIEGO	S114585788	BORRO BEND MOBIL	6001 HY 78		RGA LUST
SAN DIEGO	S114657103	MOUNTAIN PROFLAME GAS	30275 HY 78		RGA LUST
SAN DIEGO	S114590642	CALTRANS HY78	1517 HY 78		RGA LUST
SAN DIEGO	S114683017	SANTA YSABEL (FORMER CHEVRO	30350 HWY 78		RGA LUST
SAN DIEGO	S114590654	CALTRANS JULIAN	1517 HY 78		RGA LUST
SAN DIEGO	S114632428	HIGHWAY MARKET	741 HY 78		RGA LUST
SAN DIEGO	S114680848	SAN DIEGO COUNTY DPW - JULI	1524 HY 78		RGA LUST
SAN DIEGO	S114638464	JULIAN FIRE STATION	1587 HY 78		RGA LUST
SAN DIEGO	S114733235	SUNSHINE SUMMIT BURNSITE	35150 HWY 79		RGA LF

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN DIEGO	S114643280	LAZY R RANCH	7837 HY 79		RGA LUST
SAN DIEGO	S114642289	LAKE CUYAMACA RECREATION PA	15027 HY 79		RGA LUST
SAN DIEGO	S114672770	PUERTA LA CRUZ C C	32363 HY 79		RGA LUST
SAN DIEGO	S114720053	WARNER UNION SCHOOL DISTRIC	30951 HY 79		RGA LUST
SAN DIEGO	S114591457	CAMP CUYUMACA	12561 HY 79		RGA LUST
SAN DIEGO	S114720046	WARNER SPRINGS RANCH	31652 HY 79		RGA LUST
SAN DIEGO	S114642292	LAKE CUYAMACA STORE	15027 HY 79		RGA LUST
SAN DIEGO	S114665335	PACIFIC BELL AT WARNER SPRI	HY 79		RGA LUST
SAN DIEGO	S114628831	GREEN VALLEY CAMP GROUND	12551 HY 79		RGA LUST
SAN DIEGO	S114590645	CALTRANS I-8 & TEXAS ST	HY 8 BET TEXAS ST		RGA LUST
SAN DIEGO	S114643139	LAWRENCE GATES	13684 HY 8 BUSINESS		RGA LUST
SAN DIEGO	S114575067	ARCO 1851	13292 HY 8 BUSINESS		RGA LUST
SAN DIEGO	S114642475	LAKESIDE FIRE PROTECTION DI	14008 HY 8 BUSINESS		RGA LUST
SAN DIEGO	S114692297	SMALL BUSINESS ADMINISTRATI	13685 HY 8 BUSINESS		RGA LUST
SAN DIEGO	S114573572	ARCO #1851	13292 HY 8 BUSINESS		RGA LUST
SAN DIEGO	S114590644	CALTRANS I-8 & TEXAS ST	HY 8 BET TEXAS ST805		RGA LUST
SAN DIEGO	S112992085	CALTRANS D-11/EA11-288804	RTE 905 WB PM 11.0	92154	HAZNET
SAN DIEGO	S114629820	GUS BATTON	13212 HY 94		RGA LUST
SAN DIEGO	S114610969	DILLINGHAM PROPERTY	HY 94		RGA LUST
SAN DIEGO	S114591393	CAMERON CORNER CONV. STORE	31484 HY 94		RGA LUST
SAN DIEGO	S114607351	COUNTY OF SD-JAMACHA PUMP S	9903 HY 94 CAMPO RD		RGA LUST
SAN DIEGO	S114607381	COUNTY OF SD-SPRING VALLEY	11900 HY 94		RGA LUST
SAN DIEGO	S114684191	SDG&E 31115 HY 94, CAMPO	31115 HY 94		RGA LUST
SAN DIEGO	S114588926	CA DEPT OF FORESTRY CAMPO	31577 HY 94		RGA LUST
SAN DIEGO	S114670590	POINSETTIA PROPERTIES (AREA	AVENIDA ENCINAS @		RGA LUST
SAN DIEGO	S114632836	HOEHN HONDA	6800 AVENIDA ENCINAS		RGA LUST
SAN DIEGO	S110166108	ANGEL TIRES CORPORATION	2222 AVENIDA COSTA DEL SOL / OTOY TRUCK STOP	92154	HAULERS
SAN DIEGO	S114569092	AGUA HEDIONDA SEWAGE PUMP S	6200 AVENIDA ENCINAS		RGA LUST
SAN DIEGO	S114683112	SARGENT INDUSTRIES	6020 AVENIDA ENCINAS		RGA LUST
SAN DIEGO	S114697115	SUNNY FRESH CLEANERS	7040 AVENIDA ENCINAS		RGA LUST
SAN DIEGO	S105940258	USMC RECRUIT DEPOT	BARNETT AV @ PACIFIC HWY		EMI
SAN DIEGO	S114694945	SPRINGTIME GROWERS	6302 BLACK MOUNTAIN RD		RGA LUST
SAN DIEGO	S114583621	BLACK MOUNTAIN RANCH PROPER	BLACK MOUNTAIN RD		RGA LUST
SAN DIEGO	S114694943	SPRINGTIME GROWERS, INC.	6858 BLACK MOUNTAIN RD		RGA LUST
SAN DIEGO	S114615528	EVERGREEN NURSERY	7150 BLACK MOUNTAIN RD		RGA LUST
SAN DIEGO	S114615529	EVERGREEN NURSERY	7150 BLACK MOUNTAIN ROAD		RGA LUST
SAN DIEGO	S114592776	CARNATION FIELDS DEVELOPMEN	BLACK RAIL RD		RGA LUST
SAN DIEGO	S114583622	BLACK MOUNTAIN RANCH PROPERTY	BLACK MOUNTAIN RD		RGA LUST
SAN DIEGO	S114694944	SPRINGTIME GROWERS, INC.	6858 BLACK MOUNTAIN ROAD		RGA LUST
SAN DIEGO	S114630136	HADLEY PROPERTIES, 14.7 ACR	BLACK RAIL RD		RGA LUST
SAN DIEGO	S114727697	EVERGREEN NURSERY	7150 BLACK MOUNTAIN ROAD		RGA LF
SAN DIEGO	S114580251	BARGAR WATER TREATMENT PLAN	505 BLACK CANYON PL		RGA LUST
SAN DIEGO	S106800951	BLACK MTN RD TUNNEL REPAIR	BLACK MOUNTAIN RD	0	WDS
SAN DIEGO	S114659091	NAVAL AIR REWORK FACILITY	BLD 66-384 NORTH ISLAND		RGA LUST
SAN DIEGO	S114659092	NAVAL AIR REWORK FACILITY	BLD 66-384NAS NORTH ISLAND		RGA LUST
SAN DIEGO	1016426250	MAG 16 FLIGHT LINE AID STATION	BLDG 9603		FINDS
SAN DIEGO	1016426227	MCAS MIRAMAR VAL LINE	0 BLDG 9100		FINDS

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN DIEGO	S114698717	TANK T1001 NADEP	BLDG 391 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114698744	TANKS 1014-1016 NADEP	BLDG 379 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659152	NAVAL AIR STATION	BLDG 94 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114587994	BUILDING 39	BLDG 39 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659115	NAVAL AIR STATION	BLDG 1290 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659257	NAVAL AVIATION DEPOT	BLDG 194 NORTH ISLAND		RGA LUST
SAN DIEGO	S114659719	NAVY EXCHANGE SERVICE CENTER	BLDG 484 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114715171	US NAVY	BLDG 620 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659262	NAVAL AVIATION DEPOT	BLDG 379-1NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659264	NAVAL AVIATION DEPOT	BLDG 391 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114715173	US NAVY	BLDG 865 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114588070	BUILDING 653	BLDG 653 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659135	NAVAL AIR STATION	BLDG 618 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114698588	TANK 1056	BLDG 426 NORTH ISLAND		RGA LUST
SAN DIEGO	S114659118	NAVAL AIR STATION	BLDG 1290 NORTH ISLAND		RGA LUST
SAN DIEGO	S114715169	US NAVY	BLDG 484 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659722	NAVY EXCHANGE SERVICE CENTER	BLDG 484 NORTH ISLAND		RGA LUST
SAN DIEGO	S114698587	TANK 1056	BLDG 426 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659254	NAVAL AVIATION DEPOT	BLDG 194 NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659268	NAVAL AVIATION DEPOT	BLDG 391 NORTH ISLAND		RGA LUST
SAN DIEGO	S114584631	BLDG 739/743	BLDG739/43NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114729299	KELLY STREET BURNSITE	6500 BLOCK KELLY ST., LINDA VISTA AREA		RGA LF
SAN DIEGO	S114566120	38TH AND REDWOOD BIRN SITE	CAL TRANS RT OF WAY		RGA LUST
SAN DIEGO	S114566121	38TH AND REDWOOD BIRN SITE	CAL TRANS RT OF W		RGA LUST
SAN DIEGO	S114625744	GARY'S AUTO & RV SERVICE	1540 S COAST HY		RGA LUST
SAN DIEGO	S114687119	SHELL OIL	1202 S COAST HY		RGA LUST
SAN DIEGO	S114574529	ARCO #6021	1801 S COAST HY		RGA LUST
SAN DIEGO	S114661450	NORTH COUNTY AUTO SERVICE	1520 S COAST HY		RGA LUST
SAN DIEGO	S114632936	HOLIDAY INN EXPRESS	937 N COAST HY		RGA LUST
SAN DIEGO	S114711074	UNOCAL #4220	1802 S COAST HY		RGA LUST
SAN DIEGO	S114686999	SHELL OIL PRODUCTS SERVICE	601 N COAST HY		RGA LUST
SAN DIEGO	S114623408	FORMER WINSTON TIRE	1106 S COAST HY		RGA LUST
SAN DIEGO	S114709176	UNION BANK OF CALIFORNIA	102 N COAST HY		RGA LUST
SAN DIEGO	S114587457	BUBBLE BATH CAR WASH	1621 S COAST HY		RGA LUST
SAN DIEGO	S114682124	SANESCO	1943 S COAST HY		RGA LUST
SAN DIEGO	S114663014	OCEANSIDE IMPORTS	1426 S COAST HY		RGA LUST
SAN DIEGO	S114655409	MOBIL	1201 S COAST HY		RGA LUST
SAN DIEGO	S114702861	THRIFTY #401	802 N COAST HY		RGA LUST
SAN DIEGO	S114579535	B & R BUGGIES	1523 S COAST HY		RGA LUST
SAN DIEGO	S114613463	ECONO LUBE N TUNE	1942 S COAST HY		RGA LUST
SAN DIEGO	S114592826	CARPENTER'S GARAGE	1501 N COAST HY		RGA LUST
SAN DIEGO	S114682116	SANESCO, OCEANSIDE	1943 S COAST HY		RGA LUST
SAN DIEGO	S114706696	TRI-CITY PLATING	1307 S COAST HY		RGA LUST
SAN DIEGO	S114642030	LABBE SERVICE	801 N COAST HY		RGA LUST
SAN DIEGO	S114587501	BUCK'S TEXACO	628 S COAST HY		RGA LUST
SAN DIEGO	S114595912	CHEVRON #9-1191 OCEANSIDE	1601 N COAST HY		RGA LUST
SAN DIEGO	S114599983	CHEVRON/PRPSD CIVIC CNTR PL	401 N COAST HY		RGA LUST

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN DIEGO	S114632491	HILL STREET TEXACO	801 N COAST HY		RG LUST
SAN DIEGO	S114655470	MOBIL	1742 S COAST HY		RG LUST
SAN DIEGO	S114708054	U-HAUL OF OCEANSIDE	802 S COAST HY		RG LUST
SAN DIEGO	S114623953	FRANK MATTHEWS PROPERTY	263 S COAST HY		RG LUST
SAN DIEGO	1008392497	LARKSPUR ENERGY (FORMERLY WILDFLOWER)	CORNER OF HARVEST & OTAY RD	92154	US AIRS
SAN DIEGO	S111292366	PARCELS 1 AND 2 ROUGH GRADING	NE CORNER INTERSECTION OF LONE STAR RD AND ALTA RD	92154	NPDES
SAN DIEGO	1015730674	OTAY MESA CID DRUMS	CORNER HERITAGE ROAD AND OTAY VALLEY ROA	92154	CERCLIS
SAN DIEGO	S114701020	TEXACO/DEL DIOS HY 908	908 DEL DIOS HY		RG LUST
SAN DIEGO	S114607378	COUNTY OF SD-SANTA FE VLY P	DEL DIOS HY & LH		RG LUST
SAN DIEGO	S110736663	TM 5549	E END OF LONE STAR RD W OF ALTA RD	92154	NPDES
SAN DIEGO	S114727789	FIESTA ISLAND SLUDGE PROCESSING	ON FIESTA ISLAND ON MISSION BAY		RG LF
SAN DIEGO	S114589107	CABRILLO ISLE MARINA	1450 W HARBOR ISLAND D		RG LUST
SAN DIEGO	S114589106	CABRILLO ISLE MARINA	1450 W HARBOR ISLAND DR		RG LUST
SAN DIEGO	S114630696	HARBOR ISLAND FUEL DOCK	2040 W HARBOR ISLAND DR		RG LUST
SAN DIEGO	S114630697	HARBOR ISLAND WEST FUEL DOC	2040 W HARBOR ISLAND D		RG LUST
SAN DIEGO	S114630699	HARBOR ISLAND WEST FUEL DOCK	2040 W HARBOR ISLAND DR		RG LUST
SAN DIEGO	S110498344	SDG&E - HARVEST GATE STATION	0 HARVEST	92154	San Diego Co. HMMD
SAN DIEGO	S109692059	CHORE AUTO WRECKING NO 2	741 A HERITAGE RD	92154	NPDES
SAN DIEGO	S113018471	ROHR INC DBA GOODRICH	1500 HERITAGE RD BROWN FIELD	92154	HAZNET
SAN DIEGO	S113881049	IMPERIO AUTO PARTS	935 B HERITAGE ROAD	92154	NPDES
SAN DIEGO	S109446506	IMPERIAL AUTO WRECKING	1502 A HERITAGE R	92154	NPDES
SAN DIEGO	S104890850	CORAL POWER LLC, GATEWAY SITE	HERITAGE RD	92154	San Diego Co. HMMD
SAN DIEGO	S114604407	COAST RENTALS	153 N HY 101		RG LUST
SAN DIEGO	S114709116	UNION #7494	101 S HY 101		RG LUST
SAN DIEGO	S114630467	HANG-UP SQUARE	155 S HY 101		RG LUST
SAN DIEGO	S114620551	FIRST AMERICAN BANK/SCOTT A	1508 N HY 101		RG LUST
SAN DIEGO	S114701966	THE GAS STATION ETC	435 N HY 101		RG LUST
SAN DIEGO	S114575406	ARCO I-4 (IMPERIAL STATION)	1766 N HY 101		RG LUST
SAN DIEGO	S114572448	APOLLO SERVICE #2	13754 E HY 8		RG LUST
SAN DIEGO	S114636391	J.J. AUTOMOTIVE	184 N HY 101		RG LUST
SAN DIEGO	S114620547	FIRST AMERICAN BANK PROPERT	1508 N HY 101		RG LUST
SAN DIEGO	S114692796	SOLANA BEACH PROPERT	437 S HY 101		RG LUST
SAN DIEGO	S114572439	APOLLO OIL SERVICE #2	13754 E HY 8		RG LUST
SAN DIEGO	S114628943	GREENWOOD MORTUARY	HWY I-805 IMPERIAL AVENUE		RG LUST
SAN DIEGO	A100345928	NAVAL AVIATION DEPOT, N. ISLAND	NORTH ISLAND		AST
SAN DIEGO	S114646003	LUSARDI CONSTRUCTION	1570 LINDA VISTA DR		RG LUST
SAN DIEGO	S114678505	ROOFING WHOLESALE CO. INC	1401 LINDA VISTA DR		RG LUST
SAN DIEGO	S114683691	SCHMID INSULATION	1520 LINDA VISTA DR		RG LUST
SAN DIEGO	S114585743	BORGIA ENTERPRISES	1650 W LINDA VISTA DR		RG LUST
SAN DIEGO	S114647444	MARDEN SUSCO	1550 LINDA VISTA DR		RG LUST
SAN DIEGO	S114622824	FORMER MORALLY WHOLESALE IN	975 LINDA VISTA DR		RG LUST
SAN DIEGO	S114656232	MONIER CO	1355 LINDA VISTA DR		RG LUST
SAN DIEGO	S114656234	MONIER COMPANY	1355 LINDA VISTA DR		RG LUST
SAN DIEGO	S114678517	ROOFING WHOLESALE	1401 LINDA VISTA DR		RG LUST
SAN DIEGO	S114681748	SAN MARCOS CAR WASH	1660 LINDA VISTA DR		RG LUST
SAN DIEGO	1012175481	SOUTH BAY EXPRESSWAY/ DANTE PROPERTY	8651 LONE STAR ROAD	92154	RCRA-SQG
SAN DIEGO	S112960815	SOUTH BAY EXPRESSWAY	8651 LONE STAR RD	92154	HAZNET

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN DIEGO	S110736685	TPM 21140	7505 LONE STAR RD	92154	NPDES
SAN DIEGO	S114658581	NAS NORTH ISLAND BLDG 1456	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658594	NAS NORTH ISLAND BLDG 39	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658601	NAS NORTH ISLAND BLDG 484	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658603	NAS NORTH ISLAND BLDG 486	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658613	NAS NORTH ISLAND BLDG 652-0	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658639	NAS NORTH ISLAND FF TANK 96	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658641	NAS NORTH ISLAND FF TANK 97	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658658	NAS NORTH ISLAND TANK 966	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658570	NAS NORTH ISLAND (GAS STATI	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658579	NAS NORTH ISLAND BLDG 1456-2	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658590	NAS NORTH ISLAND BLDG 335-3	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658600	NAS NORTH ISLAND BLDG 484	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658602	NAS NORTH ISLAND BLDG 486	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658627	NAS NORTH ISLAND BLDG 802 P	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658633	NAS NORTH ISLAND FF TANK 848-	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658634	NAS NORTH ISLAND FF TANK 84	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658636	NAS NORTH ISLAND FF TANK 964	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114698584	TANK 1044/45/46	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658578	NAS NORTH ISLAND BLDG 1456	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658588	NAS NORTH ISLAND BLDG 334	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658606	NAS NORTH ISLAND BLDG 588	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658612	NAS NORTH ISLAND BLDG 652-01	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658614	NAS NORTH ISLAND BLDG 653	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658615	NAS NORTH ISLAND BLDG 653	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658621	NAS NORTH ISLAND BLDG 665	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658640	NAS NORTH ISLAND FF TANK 970	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658655	NAS NORTH ISLAND TANK 962	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659244	NAVAL AVIATION DEPOT BLDG 4	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658574	NAS NORTH ISLAND BLDG 1215	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658583	NAS NORTH ISLAND BLDG 1474	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658586	NAS NORTH ISLAND BLDG 29	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658589	NAS NORTH ISLAND BLDG 334	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658591	NAS NORTH ISLAND BLDG 335-3	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658595	NAS NORTH ISLAND BLDG 394	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658604	NAS NORTH ISLAND BLDG 489	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658610	NAS NORTH ISLAND BLDG 650-1	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658642	NAS NORTH ISLAND FUEL FARM	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658653	NAS NORTH ISLAND TANK 947	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658575	NAS NORTH ISLAND BLDG 1215	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658577	NAS NORTH ISLAND BLDG 1330	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658580	NAS NORTH ISLAND BLDG 1456-	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658593	NAS NORTH ISLAND BLDG 348	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658596	NAS NORTH ISLAND BLDG 394	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658598	NAS NORTH ISLAND BLDG 426	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658599	NAS NORTH ISLAND BLDG 426	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658607	NAS NORTH ISLAND BLDG 588	NAS NORTH ISLAND		RGA LUST

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN DIEGO	S114658609	NAS NORTH ISLAND BLDG 607 PWC	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658616	NAS NORTH ISLAND BLDG 656	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658622	NAS NORTH ISLAND BLDG 678	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658630	NAS NORTH ISLAND BLDG 865	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658635	NAS NORTH ISLAND FF TANK 963	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658644	NAS NORTH ISLAND	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658645	NAS NORTH ISLAND SITHE SOIL	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658649	NAS NORTH ISLAND T 1044/45/46	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658650	NAS NORTH ISLAND T 1044/45/	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658657	NAS NORTH ISLAND TANK 966	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659240	NAVAL AVIATION DEPOT BLDG 44	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658576	NAS NORTH ISLAND BLDG 1330	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658585	NAS NORTH ISLAND BLDG 1481	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658592	NAS NORTH ISLAND BLDG 348	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658623	NAS NORTH ISLAND BLDG 678	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658624	NAS NORTH ISLAND BLDG 739/743	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658625	NAS NORTH ISLAND BLDG 739/7	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658628	NAS NORTH ISLAND BLDG 802 PWC	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658629	NAS NORTH ISLAND BLDG 865	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658637	NAS NORTH ISLAND FF TANK 968	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658643	NAS NORTH ISLAND FUEL FARM	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658654	NAS NORTH ISLAND TANK 947	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658656	NAS NORTH ISLAND TANK 962	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114659242	NAVAL AVIATION DEPOT BLDG 472	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S106841929	USN AIR STATION-NORIS	NAS NORTH ISLAND		EMI
SAN DIEGO	S114658582	NAS NORTH ISLAND BLDG 1474	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658619	NAS NORTH ISLAND BLDG 660	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658631	NAS NORTH ISLAND CIRCU RNWA	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658638	NAS NORTH ISLAND FF TANK 969	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658651	NAS NORTH ISLAND T1044/45/46	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658652	NAS NORTH ISLAND T1044/45/4	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658571	NAS NORTH ISLAND (GAS STATION BLDG 454)	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658584	NAS NORTH ISLAND BLDG 1481	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658587	NAS NORTH ISLAND BLDG 29	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658597	NAS NORTH ISLAND BLDG 39	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658605	NAS NORTH ISLAND BLDG 489	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658608	NAS NORTH ISLAND BLDG 607 P	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658611	NAS NORTH ISLAND BLDG 650-1	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658617	NAS NORTH ISLAND BLDG 656	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658618	NAS NORTH ISLAND BLDG 660	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658620	NAS NORTH ISLAND BLDG 665	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658632	NAS NORTH ISLAND CIRCU RNWAY	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658646	NAS NORTH ISLAND SITHE SOIL	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114658683	NAS NORTH ISLAND	NAS NORTH ISLAND		RGA LUST
SAN DIEGO	S114730658	NCCOSC SAN DIEGO	NCCOSC SAN DIEGO		RGA LF
SAN DIEGO	S114727197	DEXTER CANYON DISPOSAL SITE	NEAR SAN VICENTE RES		RGA LF
SAN DIEGO	S114716956	USN-NI/BASE PERMIT	NONE NAS NORTH ISLAND		RGA LUST

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN DIEGO	S114572423	APN #303-070-00	NONE BLACK MOUNTAIN RD		RGA LUST
SAN DIEGO	S114603434	CITY OF SD- WATER UTILITIES	NONE PACIFIC HY		RGA LUST
SAN DIEGO	S114684166	SDCTY-STORM STATION #L	NONE NOELL ST/PACIFIC HY		RGA LUST
SAN DIEGO	S114606725	CORNER OF JUNIPER/PACIFIC HY	NONE JUNIPER AT PACIFIC HY		RGA LUST
SAN DIEGO	S114566115	38TH & REDWOOD BURN SITE #8	NONE CAL TRANS RT OF WAY		RGA LUST
SAN DIEGO	S114591198	CALTRANS	NONE HY 8 BET TEXAS ST805		RGA LUST
SAN DIEGO	S114672675	PUBLIC AUTO SERVICE	NONE PACIFIC HY		RGA LUST
SAN DIEGO	S114719538	W-HOTEL SAN DIEGO	NONE STATE ST		RGA LUST
SAN DIEGO	S110735775	ROUGH GRADING FOR MPA 10 003 L15563	NWC INTERSECTION OF LONE STAR RD AND ALTA RD	92154	NPDES
SAN DIEGO	S111292408	PICO OTAY	SOUTH OF OTAY MESA RD BETWEEN SANYO AVE AND HARVEST RD	92154	NPDES
SAN DIEGO	S114728999	INS SHOOTING RANGE (CAYS)	E. OF HERITAGE RD		RGA LF
SAN DIEGO	S114728998	INS SHOOTING RANGE (CAYS)	6400 E. OF HERITAGE RD		RGA LF
SAN DIEGO	S114726384	CITY FARM DUMP	1500' SOUTH OF PAC.HWY/LA JOLLA CYN		RGA LF
SAN DIEGO	S114724663	ALLRED COLLINS SITE	SW OF THE INTERSECTION OF SR 52 & CONVOY		RGA LF
SAN DIEGO	S114657116	MOUNTAIN TOP MARKET	39710 OLD HY 80		RGA LUST
SAN DIEGO	S114630144	HAEGLE/E-M-H REALTY&INVESTM	OLD HY 80 & RAILR		RGA LUST
SAN DIEGO	S114678251	ROGERS AUTO	44490 OLD HY 80		RGA LUST
SAN DIEGO	S114669812	PINE VALLEY TEXACO STATION	28880 OLD HY 80		RGA LUST
SAN DIEGO	S114669817	PINE VALLEY TRAILER PARK	27541 OLD HY 80		RGA LUST
SAN DIEGO	S114590509	CALTRANS BOULEVARD	40945 OLD HY 80		RGA LUST
SAN DIEGO	S114630141	HAEGELE/E-M-H REALTY & INVE	OLD HY 80 & RAILR		RGA LUST
SAN DIEGO	S114694162	SOUTHLAND (UNKNOWN SOURCE)	14110 OLDE HY 80		RGA LUST
SAN DIEGO	S114566734	7-ELEVEN FOOD STORE #16439	14110 OLDE HY 80		RGA LUST
SAN DIEGO	S114614496	EMBLY RANCH	15303 OLDE HY 80		RGA LUST
SAN DIEGO	S114566823	7-ELEVEN STORE #16439	14110 OLDE HY 80		RGA LUST
SAN DIEGO	S114665488	PACIFIC BELL-OLD HY 80	14470 OLDE HY 80		RGA LUST
SAN DIEGO	S114581958	BECKER PROPERTY	OLIVE VISTA DR		RGA LUST
SAN DIEGO	S109438226	BULL MOOSE ENERGY OF SAN DIEGO LLC	S OTAY MESA RD BTWN SANYO AVE & HARVEST	92154	NPDES
SAN DIEGO	S114726385	CITY FARM DUMP	PAC.HWY/LA JOLLA CYN		RGA LF
SAN DIEGO	S114672671	PUBLIC AUTO SERVICE	PACIFIC HY		RGA LUST
SAN DIEGO	S114672672	PUBLIC AUTO SERVICE	0 PACIFIC HWY		RGA LUST
SAN DIEGO	S114718880	VIETNAM VETERANS OF SD	4141 PACIFIC HY		RGA LUST
SAN DIEGO	S114603321	CITY OF SAN DIEGO-WATER UTIL	PACIFIC HY		RGA LUST
SAN DIEGO	S114603322	CITY OF SAN DIEGO-WATER UTI	PACIFIC HY		RGA LUST
SAN DIEGO	S114672676	PUBLIC AUTO SERVICE	PACIFIC HY		RGA LUST
SAN DIEGO	S114666516	PACIFICA ENTERPRISES	PACIFIC HY		RGA LUST
SAN DIEGO	S114666518	PACIFICA ENTERPRISES	PACIFIC HY		RGA LUST
SAN DIEGO	S114682466	SANTA FE DEPOT PROJECT	1045 PACIFIC HY		RGA LUST
SAN DIEGO	S114629225	GROSSMONT/CUY.COLLEGE DIST.	900 RANCHO SAN DIEGO		RGA LUST
SAN DIEGO	S114614814	ENNISS ENTERPRISES	12135 ROYAL RD		RGA LUST
SAN DIEGO	S114574584	ARCO #6075	779 SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114567373	76 STATION #6412	1221 SAN YSIDRO BLVD		RGA LUST
SAN DIEGO	S114603224	CITY OF S.D. FIRE STATION #29	179 SAN YSIDRO BLVD, WEST		RGA LUST
SAN DIEGO	S114603287	CITY OF SAN DIEGO-FS 29	179 W SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114603449	CITY OF SD-POLICE SOUTHERN DIV	663 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114684110	SD METRO TRANSIT	1790 SAN ALTOS PL		RGA LUST
SAN DIEGO	S114700992	TEXACO/314 SAN YSIDRO BL	314 E SAN YSIDRO BL		RGA LUST

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN DIEGO	S114701144	TEXACO/W. SAN MARCOS 615	615 W SAN MARCOS BL		RGA LUST
SAN DIEGO	S114681065	SAN DIEGO WILD ANIMAL PARK	15500 SAN PASQUAL VALLEY RD		RGA LUST
SAN DIEGO	S114655789	MOBILE ONE	526 W SAN MARCOS BL		RGA LUST
SAN DIEGO	S114695147	ST CLAIR ENTERPRISE INC/ARCO	301 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114705321	TOSCO 76 #6412	121 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S103442740	NORTH MIRAMAR	SAN CLEMENTE CANYON		WMUDS/SWAT
SAN DIEGO	S114685031	SEVEL GARAGE & SERVICE STATION	299 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114681913	SAN PASQUAL ACADEMY	17701 SAN PASQUAL VALLE		RGA LUST
SAN DIEGO	S113881613	SAN DIEGO RIVER - FSDRIP - AQUATIC PESTICIDES - WEEDS	SAN DIEGO RIVER		NPDES
SAN DIEGO	S114575113	ARCO 6075	779 SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114574602	ARCO #6086	301 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114603438	CITY OF SD-INTERCEPTOR SEWE	10957 SAN DIEGO MISSION		RGA LUST
SAN DIEGO	S114701026	TEXACO/E SAN YSIDRO 314	314 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114654043	MOBIL OIL CORPORATION	120 W SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114681989	SAN YSIDRO CHEVRON	104 WEST SAN YSIDRO BLVD.		RGA LUST
SAN DIEGO	S114681990	SAN YSIDRO EXXON	108 W SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114693766	SOUTHERN DIV. POLICE STATION	663 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114615035	ESBENSON'S PROPERTIES	670 W SAN MARCOS BL		RGA LUST
SAN DIEGO	S114695237	ST. CLAIR'S ARCO	301 SAN YSIDRO BLVD E		RGA LUST
SAN DIEGO	S114596197	CHEVRON #9-2339	555 SAN MARCOS BL		RGA LUST
SAN DIEGO	S114607304	COUNTY OF SAN DIEGO-SAN FEL	25704 SAN FELIPE RD		RGA LUST
SAN DIEGO	S106801025	AQUATIC PESTI-SAN DIEGO RIVER	SAN DIEGO RIVER	0	WDS
SAN DIEGO	S114576303	ARCO STATION #6075	779 SAN YSIDRO BLVD W		RGA LUST
SAN DIEGO	S114700088	TEXACO REFINING & MARKETING	314 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114713066	UNOCAL SERV STATION #641231171	121 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114681063	SAN DIEGO WILD ANIMAL PARK	15500 SAN PASQUAL VALLE		RGA LUST
SAN DIEGO	S114603450	CITY OF SD-POLICE SOUTHERN	663 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114681988	SAN YSIDRO CHEVRON	104 W SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114684115	SD WILD ANIMAL PARK - DIESE	15500 SAN PASQUAL VALLE		RGA LUST
SAN DIEGO	S114685030	SEVEL GARAGE & SERVICE STAT	299 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114566380	7 ELEVEN FOOD #25766	2211 SAN ELIJO AV		RGA LUST
SAN DIEGO	S114565717	(FORMERLY THE SINGER COMPAN	1370 SAN MARCOS BLVD		RGA LUST
SAN DIEGO	S112939676	ABS	644 SAN YSIDRO	92154	HAZNET
SAN DIEGO	S114693765	SOUTHERN DIV. POLICE STATIO	663 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114705312	TOSCO 76 #5965	1110 SAN MARINO DR		RGA LUST
SAN DIEGO	S114684160	SDCTY-POLICE SOUTHERN	663 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114700091	TEXACO REFINING & MARKETING	615 W SAN MARCOS BL		RGA LUST
SAN DIEGO	S114620610	FIRST NATIONAL BANK OF N.C.	885 SAN MARCOS BL		RGA LUST
SAN DIEGO	S114701118	TEXACO/SAN DIEGO MISSION RD	9966 SAN DIEGO MISSION		RGA LUST
SAN DIEGO	S114690146	SHELL	556 SAN MARCOS BL		RGA LUST
SAN DIEGO	S114655404	MOBIL	120 W SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114681746	SAN MARCOS AUTO CENTER	755 SAN MARCOS BL		RGA LUST
SAN DIEGO	S114681766	SAN MARCOS WATER DISTRICT	788 SAN MARCOS BL		RGA LUST
SAN DIEGO	S114681921	SAN PASQUAL UNION SCHOOL DI	16666 SAN PASQUAL VALLE		RGA LUST
SAN DIEGO	S114575115	ARCO 6086	301 E SAN YSIDRO BL		RGA LUST
SAN DIEGO	S114598274	CHEVRON PRODUCTS COMPANY	104 SAN YSIDRO BLVD W		RGA LUST

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN DIEGO	S114684141	SDCTY-FIRE STATION #29	179 W SAN YSIDRO BL		RG LUST
SAN DIEGO	S114697116	SUNNY FRESH CLEANERS	SAN MARCOS BL		RG LUST
SAN DIEGO	S114686728	SHELL 7026-0108	108 W SAN YSIDRO BL		RG LUST
SAN DIEGO	S114655157	MOBIL STATION #18-D4D	120 SAN YSIDRO BLVD W		RG LUST
SAN DIEGO	S114681753	SAN MARCOS EXXON	615 W SAN MARCOS BL		RG LUST
SAN DIEGO	S114684117	SD WILD ANIMAL PARK	15500 SAN PASQUAL VALLE		RG LUST
SAN DIEGO	S114685035	SEVEL'S 24 HOUR	299 E SAN YSIDRO BL		RG LUST
SAN DIEGO	S114596187	CHEVRON #9-2318	104 W SAN YSIDRO BL		RG LUST
SAN DIEGO	S114575546	ARCO PRODUCTS COMPANY	779 SAN YSIDRO BLVD		RG LUST
SAN DIEGO	S113090948	CCI	7603 SAN ANDREW AVE STE D	92154	HAZNET
SAN DIEGO	S114730383	MISSION BAY LANDFILL #1	SEA WORLD DRIVE		RG LF
SAN DIEGO	S114684530	SEAVIEW PROPERTIES	3612 SEA VIEW WY		RG LUST
SAN DIEGO	S114580492	BARTELL GARDEN INN	1901 SHELTER ISLAND		RG LUST
SAN DIEGO	S114719537	W-HOTEL SAN DIEGO	STATE ST		RG LUST
SAN DIEGO	S114666902	PALOMAR MOUNTAIN STATE PARK	19952 STATE PARK RD		RG LUST
SAN DIEGO	S114607365	COUNTY OF SD-PALOMAR MT RS	20745 STATE PARK RD		RG LUST
SAN DIEGO	S114719539	W-HOTEL SAN DIEGO	STATE ST		RG LUST
SAN DIEGO	S113881616	SAN DIEGO WATER/SEWER REPLACEMENT PROJEC ON STRAND WAY	STRAND WAY AT ISLAND COURT		NPDES
SAN DIEGO	S114657408	MT. LAGUNA RADAR STATION	SUNRISE HIGHWAY		RG LUST
SAN DIEGO	S114665486	PACIFIC BELL-MT LAGUNA	370 SUNRISE HY VISTA		RG LUST
SAN DIEGO	S114641249	LA CIMA CONSERVATION CAMP	15108 SUNRISE HY		RG LUST
SAN DIEGO	S114658684	NAS NORTH ISLAND	TANK 965 NAS NORTH ISLAND		RG LUST
SAN DIEGO	S114715175	US NAVY	TANK 965 NAS NORTH ISLAND		RG LUST
SAN DIEGO	S114730403	MISSION VALLEY DISPOSAL AREA	TEXAS ST./ HWY 8		RG LF
SAN DIEGO	S114627523	GOAL LINE L P	555 N TULIP ST		RG LUST
SAN DIEGO	S114627526	GOAL LINE LP	555 N TULIP ST		RG LUST
SAN DIEGO	S114719196	VISTA IND. MERCEDES REPAIR	727 E VISTA WY		RG LUST
SAN DIEGO	S114617290	EXXON	1227 VISTA WY		RG LUST
SAN DIEGO	S114684594	SECURITY CHEVROLET	1100 E VISTA WY		RG LUST
SAN DIEGO	S114686716	SHELL 204-8202-14	2131 E VISTA WY		RG LUST
SAN DIEGO	S114668814	PETO'S - VISTA REDEVELOPMEN	122 W VISTA WY		RG LUST
SAN DIEGO	S114614988	ERNEST F MILLER	2124 VISTA DEL VALLE B		RG LUST
SAN DIEGO	S114697717	SURFSIDE NISSAN	2205 VISTA WY		RG LUST
SAN DIEGO	S114653900	MOBIL GAS STATION	410 W VISTA WY		RG LUST
SAN DIEGO	S114706694	TRI-CITY MEDICAL CENTER	4002 VISTA WY		RG LUST
SAN DIEGO	S114721778	WESTWOOD TRUCKING A DIVISIO	122 W VISTA WY		RG LUST
SAN DIEGO	S114643315	LEARMOUTH EXXON SERVICE	900 E VISTA WY		RG LUST
SAN DIEGO	S114705301	TOSCO 76 #5633	967 E VISTA WY		RG LUST
SAN DIEGO	S114719256	VISTA VALLEY COUNTRY CLUB	29354 VISTA VALLEY DR		RG LUST
SAN DIEGO	S114701029	TEXACO/E. VISTA WAY 900	900 E VISTA WY		RG LUST
SAN DIEGO	S114604510	COBBLESTONE GOLF COURSE	3202 VISTA WY		RG LUST
SAN DIEGO	S114617601	EXXON	911 E VISTA WY		RG LUST
SAN DIEGO	S114700903	TEXACO USA	900 E VISTA WY		RG LUST
SAN DIEGO	S114700907	TEXACO USA	911 E VISTA WY		RG LUST
SAN DIEGO	S114654678	MOBIL SERVICE STATION (08-F	410 W VISTA WY		RG LUST
SAN DIEGO	S114657272	MR. GOODWASH CARWASH	2315 VISTA WY		RG LUST

Count: 439 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAN DIEGO	S114657274	MR. GOODWASH	2315 VISTA WY		RGA LUST
SAN DIEGO	S114606899	CORRAL FORD	3470 VISTA AV		RGA LUST
SAN DIEGO	S114617923	FAA SITE MT LAGUNA CLEVE NA	VISTA POINT RD		RGA LUST
SAN DIEGO	S114600113	CHEVRON	1211 E VISTA WY		RGA LUST
SAN DIEGO	S114580317	BARNICLES EXPRESS GAS	845 E VISTA WY		RGA LUST
SAN DIEGO	S114700889	TEXACO USA	1227 VISTA WY		RGA LUST
SAN DIEGO	S114715296	US RENTALS-VISTA REDEVELOPM	240 W VISTA WY		RGA LUST
SAN DIEGO	S114630000	H&H IMPORTS	718 E VISTA WY		RGA LUST
SAN DIEGO	S110732923	DENNERY RNCH, OTAY CORP, CAL TER, PALM VISTA	2000 FT WEST OF HERITAGE ROAD	92154	NPDES
SAN DIEGO COUNTY	S113880349	AUDI OF AMERICA - FIREWORKS EVENT LOCATIONS	BARGE OF THE MIDWAY IN SAN DIEGO BAY		NPDES
SAN DIEGO COUNTY	M300002765	WESTERN SALT CO	CHULA VISTA PLANT		US MINES
SAN DIEGO COUNTY	M300002489	WESTERN SALT CO	CHULA VISTA PLANT		US MINES
SAN DIEGO COUNTY	S113882082	YAHOO! STUDIOS - FIREWORKS EVENT LOCATIONS	FIREWORKS OFF MIDWAY IN SAN DIEGO BAY		NPDES
SAN DIEGO COUNTY	S113880302	AMERICAN NATIONAL STANDARDS INSTITUTE-FIREWORKS EVENT LOCATI	SAN DIEGO BAY NEAR MIDWAY MUSEUM		NPDES
SAN DIEGO COUNTY	S113881166	LINK ENGINEERING/FIREWORKS AMERICA - FIREWORKS EVENT LOCATIO	VARIOUS LOCATIONS WITHIN THE SAN DIEGO REGION		NPDES
SAN DIEGO COUNTY	S113880303	AMERICAN PISTACHIO GROWERS - FIREWORKS EVENT LOCATION	VARIOUS LOCATIONS IN SAN DIEGO		NPDES
SAN DIEGO COUNTY	S116497366	ACCESS DESTINATION SERVICES/FIREWORKS AMERICA - FIREWORKS EV	VARIOUS LOCATIONS THROUGHOUT THE SAN DIEGO REGION		NPDES
SAN DIEGO COUNTY	S116498074	SPANGLER EVENT PRODUCTIONS/FIREWORKS AMERICA - FIREWORKS EVE	VARIOUS LOCATIONS WITHIN THE SAN DIEGO REGION		NPDES
SAN DIEGO COUNTY	S113881840	THE EVENT TEAM/FIREWORKS AMERICA - EVENT LOCATIONS	VARIOUS LOCATIONS THROUGHOUT THE SAN DIEGO REGION		NPDES
SAN DIEGO COUNTY	S113881611	SAN DIEGO CNTY-DEH-VECTOR CONTROL PROGRA AREA	VARIOUS SITES IN SAN DIEGO COUNTY		NPDES
SAN DIEGO COUNTY	S113880294	ALLIED PRA - FIREWORKS EVENT LOCATIONS	VARIOUS LOCATIONS IN SAN DIEGO COUNTY		NPDES
SAN DIEGO COUNTY	S113881394	PACIFIC EVENT PRODUCTIONS - FIREWORKS EVENT LOCATIONS	VARIOUS LOCATIONS THROUGHOUT THE SAN DIEGO REGION		NPDES
SAN DIEGO COUNTY	S113880467	CALIFORNIA AMERICAN WATER - HYDRO	VARIOUS LOCATIONS THROUGHOUT THE SAN DIEGO REGION		NPDES

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: N/A
Date Made Active in Reports: 01/28/2014	Last EDR Contact: 04/08/2014
Number of Days to Update: 78	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: N/A
Date Made Active in Reports: 01/28/2014	Last EDR Contact: 04/08/2014
Number of Days to Update: 78	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: N/A
Date Made Active in Reports: 01/28/2014	Last EDR Contact: 04/08/2014
Number of Days to Update: 78	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/29/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 05/29/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Quarterly

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/11/2014
Date Data Arrived at EDR: 03/13/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/13/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/17/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/14/2014	Telephone: 703-603-0695
Date Made Active in Reports: 01/28/2014	Last EDR Contact: 03/10/2014
Number of Days to Update: 14	Next Scheduled EDR Contact: 06/23/2014
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/17/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/14/2014	Telephone: 703-603-0695
Date Made Active in Reports: 01/28/2014	Last EDR Contact: 03/10/2014
Number of Days to Update: 14	Next Scheduled EDR Contact: 06/23/2014
	Data Release Frequency: Varies

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/30/2013	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 10/01/2013	Telephone: 202-267-2180
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 04/04/2014
Number of Days to Update: 66	Next Scheduled EDR Contact: 07/14/2014
	Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2013	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 01/03/2014	Telephone: 202-366-4555
Date Made Active in Reports: 02/24/2014	Last EDR Contact: 04/01/2014
Number of Days to Update: 52	Next Scheduled EDR Contact: 07/14/2014
	Data Release Frequency: Annually

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 05/06/2014
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/18/2014
	Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/04/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 65

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Quarterly

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/20/2014
Date Data Arrived at EDR: 03/20/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/20/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Semi-Annually

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 55

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/26/2014
Date Data Arrived at EDR: 02/28/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 55

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/19/2014
Next Scheduled EDR Contact: 09/01/2014
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/24/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 31

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/27/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/25/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/05/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/30/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006	Source: EPA
Date Data Arrived at EDR: 09/29/2010	Telephone: 202-260-5521
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 03/28/2014
Number of Days to Update: 64	Next Scheduled EDR Contact: 07/07/2014
	Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/22/2014
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/08/2014
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 05/22/2014
Number of Days to Update: 25	Next Scheduled EDR Contact: 09/08/2014
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 04/29/2014
Number of Days to Update: 77	Next Scheduled EDR Contact: 08/11/2014
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/10/2011	Telephone: 202-564-5088
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/09/2014
Number of Days to Update: 61	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013	Source: EPA
Date Data Arrived at EDR: 07/17/2013	Telephone: 202-566-0500
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 04/18/2014
Number of Days to Update: 107	Next Scheduled EDR Contact: 07/28/2014
	Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 08/02/2013	Telephone: 301-415-7169
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 03/10/2014
Number of Days to Update: 91	Next Scheduled EDR Contact: 06/23/2014
	Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/09/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/10/2014	Telephone: 202-343-9775
Date Made Active in Reports: 03/12/2014	Last EDR Contact: 04/09/2014
Number of Days to Update: 61	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/18/2013
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 13

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/14/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/30/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Biennially

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/15/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/11/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/31/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 151

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/11/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 04/09/2014
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 05/16/2014
Next Scheduled EDR Contact: 09/01/2014
Data Release Frequency: Quarterly

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/04/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: No Update Planned

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/02/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/16/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: Quarterly

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/16/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 04/21/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 04/18/2014
Number of Days to Update: 76	Next Scheduled EDR Contact: 07/28/2014
	Data Release Frequency: Varies

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/23/2013	Source: EPA
Date Data Arrived at EDR: 11/06/2013	Telephone: 202-564-5962
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 03/31/2014
Number of Days to Update: 30	Next Scheduled EDR Contact: 07/14/2014
	Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/23/2013	Source: EPA
Date Data Arrived at EDR: 11/06/2013	Telephone: 202-564-5962
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 03/31/2014
Number of Days to Update: 30	Next Scheduled EDR Contact: 07/14/2014
	Data Release Frequency: Annually

STATE AND LOCAL RECORDS

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/05/2014
Date Data Arrived at EDR: 05/06/2014
Date Made Active in Reports: 05/19/2014
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/06/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/19/2014
Date Data Arrived at EDR: 05/20/2014
Date Made Active in Reports: 05/22/2014
Number of Days to Update: 2

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/20/2014
Next Scheduled EDR Contact: 09/01/2014
Data Release Frequency: Quarterly

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 05/07/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/15/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Department of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/22/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/19/2014	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/20/2014	Telephone: 916-445-9379
Date Made Active in Reports: 05/28/2014	Last EDR Contact: 05/20/2014
Number of Days to Update: 8	Next Scheduled EDR Contact: 09/01/2014
	Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/31/2014	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 04/02/2014	Telephone: 916-323-3400
Date Made Active in Reports: 04/29/2014	Last EDR Contact: 04/01/2014
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/14/2014
	Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/17/2014	Source: Department of Conservation
Date Data Arrived at EDR: 03/18/2014	Telephone: 916-323-3836
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 03/18/2014
Number of Days to Update: 37	Next Scheduled EDR Contact: 06/30/2014
	Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 05/01/2014	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/01/2014	Telephone: see region list
Date Made Active in Reports: 05/13/2014	Last EDR Contact: 05/01/2014
Number of Days to Update: 12	Next Scheduled EDR Contact: 06/30/2014
	Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calaveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/01/2014
Date Data Arrived at EDR: 05/01/2014
Date Made Active in Reports: 05/13/2014
Number of Days to Update: 12

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/01/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/19/2014
Date Made Active in Reports: 04/25/2014
Number of Days to Update: 37

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/19/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Semi-Annually

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/05/2014
Date Data Arrived at EDR: 05/06/2014
Date Made Active in Reports: 05/19/2014
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 02/04/2014	Source: Office of Emergency Services
Date Data Arrived at EDR: 04/29/2014	Telephone: 916-845-8400
Date Made Active in Reports: 05/09/2014	Last EDR Contact: 04/29/2014
Number of Days to Update: 10	Next Scheduled EDR Contact: 08/11/2014
	Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 05/01/2014	Source: State Water Quality Control Board
Date Data Arrived at EDR: 05/01/2014	Telephone: 866-480-1028
Date Made Active in Reports: 05/13/2014	Last EDR Contact: 05/01/2014
Number of Days to Update: 12	Next Scheduled EDR Contact: 06/30/2014
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 05/01/2014	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/01/2014	Telephone: 866-480-1028
Date Made Active in Reports: 05/13/2014	Last EDR Contact: 05/01/2014
Number of Days to Update: 12	Next Scheduled EDR Contact: 06/30/2014
	Data Release Frequency: Quarterly

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2009	Telephone: 916-327-5092
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 04/07/2014
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/01/1993	Telephone: 916-445-3846
Date Made Active in Reports: 11/19/1993	Last EDR Contact: 04/07/2014
Number of Days to Update: 18	Next Scheduled EDR Contact: 07/07/2014
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/10/2014	Source: DTSC and SWRCB
Date Data Arrived at EDR: 03/11/2014	Telephone: 916-323-3400
Date Made Active in Reports: 04/10/2014	Last EDR Contact: 03/11/2014
Number of Days to Update: 30	Next Scheduled EDR Contact: 06/23/2014
	Data Release Frequency: Semi-Annually

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/05/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/06/2014	Telephone: 916-323-3400
Date Made Active in Reports: 05/19/2014	Last EDR Contact: 05/06/2014
Number of Days to Update: 13	Next Scheduled EDR Contact: 08/18/2014
	Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/10/2013	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 09/11/2013	Telephone: 916-327-4498
Date Made Active in Reports: 10/16/2013	Last EDR Contact: 03/10/2014
Number of Days to Update: 35	Next Scheduled EDR Contact: 06/23/2014
	Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 03/31/2014
Number of Days to Update: 13	Next Scheduled EDR Contact: 07/14/2014
	Data Release Frequency: Varies

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 02/28/2014	Telephone: 916-255-6504
Date Made Active in Reports: 03/20/2014	Last EDR Contact: 04/10/2014
Number of Days to Update: 20	Next Scheduled EDR Contact: 07/28/2014
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 19

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/05/2014
Date Data Arrived at EDR: 05/06/2014
Date Made Active in Reports: 05/19/2014
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/06/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 41

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 03/25/2014
Date Made Active in Reports: 04/28/2014
Number of Days to Update: 34

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/25/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Varies

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 02/20/2014
Date Made Active in Reports: 03/27/2014
Number of Days to Update: 35

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/19/2014
Next Scheduled EDR Contact: 09/01/2014
Data Release Frequency: Varies

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/05/2014
Date Data Arrived at EDR: 05/06/2014
Date Made Active in Reports: 05/19/2014
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/06/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/28/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/17/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/18/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/21/2014
Date Data Arrived at EDR: 03/12/2014
Date Made Active in Reports: 04/14/2014
Number of Days to Update: 33

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/14/2014
Date Data Arrived at EDR: 04/15/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 9

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/15/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Quarterly

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/02/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/22/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 62

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013	Source: EPA Region 1
Date Data Arrived at EDR: 05/01/2013	Telephone: 617-918-1313
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 05/02/2014
Number of Days to Update: 184	Next Scheduled EDR Contact: 08/11/2014
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/06/2013	Source: EPA Region 10
Date Data Arrived at EDR: 11/07/2013	Telephone: 206-553-2857
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 04/28/2014
Number of Days to Update: 29	Next Scheduled EDR Contact: 08/11/2014
	Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/13/2014	Source: EPA, Region 5
Date Data Arrived at EDR: 02/14/2014	Telephone: 312-886-7439
Date Made Active in Reports: 02/24/2014	Last EDR Contact: 04/28/2014
Number of Days to Update: 10	Next Scheduled EDR Contact: 08/11/2014
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012	Source: EPA Region 8
Date Data Arrived at EDR: 08/28/2012	Telephone: 303-312-6271
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 04/28/2014
Number of Days to Update: 49	Next Scheduled EDR Contact: 08/11/2014
	Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013	Source: EPA, Region 1
Date Data Arrived at EDR: 05/01/2013	Telephone: 617-918-1313
Date Made Active in Reports: 01/27/2014	Last EDR Contact: 05/02/2014
Number of Days to Update: 271	Next Scheduled EDR Contact: 08/11/2014
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/21/2013	Source: EPA Region 4
Date Data Arrived at EDR: 11/26/2013	Telephone: 404-562-9424
Date Made Active in Reports: 02/24/2014	Last EDR Contact: 04/22/2014
Number of Days to Update: 90	Next Scheduled EDR Contact: 08/11/2014
	Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 01/29/2014
Date Data Arrived at EDR: 01/29/2014
Date Made Active in Reports: 03/12/2014
Number of Days to Update: 42

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 62

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 07/30/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 129

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/17/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 04/01/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/22/2014
Date Data Arrived at EDR: 04/24/2014
Date Made Active in Reports: 05/09/2014
Number of Days to Update: 15

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/22/2014
Date Data Arrived at EDR: 04/24/2014
Date Made Active in Reports: 05/12/2014
Number of Days to Update: 18

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 03/24/2014
Date Data Arrived at EDR: 03/24/2014
Date Made Active in Reports: 04/30/2014
Number of Days to Update: 37

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 20

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/10/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 04/03/2014
Date Made Active in Reports: 04/29/2014
Number of Days to Update: 26

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 12/05/2013
Date Data Arrived at EDR: 12/05/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 53

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 05/30/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/25/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 21

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/05/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List

Cupa Facility list

Date of Government Version: 05/05/2014
Date Data Arrived at EDR: 05/06/2014
Date Made Active in Reports: 05/13/2014
Number of Days to Update: 7

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/05/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 02/20/2014
Date Data Arrived at EDR: 02/21/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 27

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/05/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Varies

FRESNO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 03/31/2014
Date Data Arrived at EDR: 04/15/2014
Date Made Active in Reports: 05/01/2014
Number of Days to Update: 16

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/14/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/20/2014
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 04/28/2014
Number of Days to Update: 38

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/22/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 04/28/2014
Date Data Arrived at EDR: 04/30/2014
Date Made Active in Reports: 05/13/2014
Number of Days to Update: 13

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/22/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 05/12/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: Quarterly

KINGS COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/25/2014
Date Data Arrived at EDR: 02/27/2014
Date Made Active in Reports: 03/20/2014
Number of Days to Update: 21

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/27/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 04/22/2014
Date Data Arrived at EDR: 04/24/2014
Date Made Active in Reports: 05/13/2014
Number of Days to Update: 19

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/21/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/06/2013
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 48

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/02/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/21/2014
Date Data Arrived at EDR: 04/22/2014
Date Made Active in Reports: 05/19/2014
Number of Days to Update: 27

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/22/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/17/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/07/2014	Source: Community Health Services
Date Data Arrived at EDR: 02/25/2014	Telephone: 323-890-7806
Date Made Active in Reports: 03/25/2014	Last EDR Contact: 04/17/2014
Number of Days to Update: 28	Next Scheduled EDR Contact: 08/04/2014
	Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 04/23/2014	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/25/2014	Telephone: 310-524-2236
Date Made Active in Reports: 05/22/2014	Last EDR Contact: 04/21/2014
Number of Days to Update: 27	Next Scheduled EDR Contact: 08/04/2014
	Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 02/25/2014	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 02/27/2014	Telephone: 562-570-2563
Date Made Active in Reports: 04/14/2014	Last EDR Contact: 04/28/2014
Number of Days to Update: 46	Next Scheduled EDR Contact: 08/11/2014
	Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/13/2014	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 03/27/2014	Telephone: 310-618-2973
Date Made Active in Reports: 04/28/2014	Last EDR Contact: 04/14/2014
Number of Days to Update: 32	Next Scheduled EDR Contact: 07/28/2014
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/26/2014	Source: Madera County Environmental Health
Date Data Arrived at EDR: 03/27/2014	Telephone: 559-675-7823
Date Made Active in Reports: 04/29/2014	Last EDR Contact: 05/02/2014
Number of Days to Update: 33	Next Scheduled EDR Contact: 09/08/2014
	Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 01/03/2014	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 01/09/2014	Telephone: 415-499-6647
Date Made Active in Reports: 02/12/2014	Last EDR Contact: 04/07/2014
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/21/2014
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List CUPA facility list.

Date of Government Version: 03/10/2014
Date Data Arrived at EDR: 03/11/2014
Date Made Active in Reports: 04/10/2014
Number of Days to Update: 30

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/27/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List CUPA Facility List

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/04/2014
Date Made Active in Reports: 04/01/2014
Number of Days to Update: 28

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 03/03/2014
Next Scheduled EDR Contact: 06/16/2014
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/18/2014
Date Data Arrived at EDR: 03/20/2014
Date Made Active in Reports: 04/25/2014
Number of Days to Update: 36

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/22/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/30/2014
Next Scheduled EDR Contact: 09/15/2014
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/30/2014
Next Scheduled EDR Contact: 09/15/2014
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List CUPA facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 27

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/13/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2014
Date Data Arrived at EDR: 05/15/2014
Date Made Active in Reports: 05/22/2014
Number of Days to Update: 7

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2014
Next Scheduled EDR Contact: 08/28/2014
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2014
Date Data Arrived at EDR: 05/15/2014
Date Made Active in Reports: 05/28/2014
Number of Days to Update: 13

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2014
Date Data Arrived at EDR: 05/14/2014
Date Made Active in Reports: 05/21/2014
Number of Days to Update: 7

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/10/2014
Date Data Arrived at EDR: 03/11/2014
Date Made Active in Reports: 04/10/2014
Number of Days to Update: 30

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/15/2014
Date Data Arrived at EDR: 04/17/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 7

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/02/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Underground Storage Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 04/15/2014
Date Data Arrived at EDR: 04/17/2014
Date Made Active in Reports: 05/09/2014
Number of Days to Update: 22

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/06/2014
Date Data Arrived at EDR: 04/08/2014
Date Made Active in Reports: 04/29/2014
Number of Days to Update: 21

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/06/2014
Date Data Arrived at EDR: 04/08/2014
Date Made Active in Reports: 04/29/2014
Number of Days to Update: 21

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/18/2014
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 04/25/2014
Number of Days to Update: 35

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 05/12/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2013
Date Data Arrived at EDR: 11/19/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 42

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 03/10/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 05/09/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 05/09/2014
Next Scheduled EDR Contact: 08/25/2014
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 04/10/2014
Date Data Arrived at EDR: 04/11/2014
Date Made Active in Reports: 04/29/2014
Number of Days to Update: 18

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 04/07/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 02/24/2014
Date Data Arrived at EDR: 02/26/2014
Date Made Active in Reports: 03/26/2014
Number of Days to Update: 28

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/27/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Varies

SAN MATEO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 04/03/2014

Date Data Arrived at EDR: 04/04/2014

Date Made Active in Reports: 05/01/2014

Number of Days to Update: 27

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921

Last EDR Contact: 03/17/2014

Next Scheduled EDR Contact: 06/30/2014

Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/17/2014

Date Data Arrived at EDR: 03/18/2014

Date Made Active in Reports: 04/24/2014

Number of Days to Update: 37

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921

Last EDR Contact: 03/17/2014

Next Scheduled EDR Contact: 06/30/2014

Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011

Date Data Arrived at EDR: 09/09/2011

Date Made Active in Reports: 10/07/2011

Number of Days to Update: 28

Source: Santa Barbara County Public Health Department

Telephone: 805-686-8167

Last EDR Contact: 05/22/2014

Next Scheduled EDR Contact: 09/08/2014

Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List

Cupa facility list

Date of Government Version: 03/04/2014

Date Data Arrived at EDR: 03/06/2014

Date Made Active in Reports: 03/20/2014

Number of Days to Update: 14

Source: Department of Environmental Health

Telephone: 408-918-1973

Last EDR Contact: 03/03/2014

Next Scheduled EDR Contact: 06/16/2014

Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005

Date Data Arrived at EDR: 03/30/2005

Date Made Active in Reports: 04/21/2005

Number of Days to Update: 22

Source: Santa Clara Valley Water District

Telephone: 408-265-2600

Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009

Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014

Date Data Arrived at EDR: 03/05/2014

Date Made Active in Reports: 03/18/2014

Number of Days to Update: 13

Source: Department of Environmental Health

Telephone: 408-918-3417

Last EDR Contact: 03/03/2014

Next Scheduled EDR Contact: 06/16/2014

Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/12/2014

Date Data Arrived at EDR: 05/19/2014

Date Made Active in Reports: 05/28/2014

Number of Days to Update: 9

Source: City of San Jose Fire Department

Telephone: 408-535-7694

Last EDR Contact: 05/12/2014

Next Scheduled EDR Contact: 08/25/2014

Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 02/24/2014

Date Data Arrived at EDR: 02/25/2014

Date Made Active in Reports: 03/20/2014

Number of Days to Update: 23

Source: Santa Cruz County Environmental Health

Telephone: 831-464-2761

Last EDR Contact: 05/27/2014

Next Scheduled EDR Contact: 09/08/2014

Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 03/17/2014

Date Data Arrived at EDR: 03/18/2014

Date Made Active in Reports: 04/24/2014

Number of Days to Update: 37

Source: Shasta County Department of Resource Management

Telephone: 530-225-5789

Last EDR Contact: 05/22/2014

Next Scheduled EDR Contact: 09/08/2014

Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 04/25/2014

Date Data Arrived at EDR: 04/01/2014

Date Made Active in Reports: 04/28/2014

Number of Days to Update: 27

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770

Last EDR Contact: 03/17/2014

Next Scheduled EDR Contact: 06/30/2014

Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/25/2014

Date Data Arrived at EDR: 04/01/2014

Date Made Active in Reports: 05/05/2014

Number of Days to Update: 34

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770

Last EDR Contact: 03/17/2014

Next Scheduled EDR Contact: 06/30/2014

Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List

Cupa Facility list

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/02/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 40

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 04/03/2014
Date Made Active in Reports: 04/28/2014
Number of Days to Update: 25

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/31/2014
Next Scheduled EDR Contact: 07/14/2014
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 03/24/2014
Date Data Arrived at EDR: 03/24/2014
Date Made Active in Reports: 04/28/2014
Number of Days to Update: 35

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 06/23/2014
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 48

Source: Division of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 04/28/2014
Date Data Arrived at EDR: 05/20/2014
Date Made Active in Reports: 05/27/2014
Number of Days to Update: 7

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/16/2014
Next Scheduled EDR Contact: 09/01/2014
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/04/2014
Next Scheduled EDR Contact: 07/21/2014
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/16/2014
Next Scheduled EDR Contact: 09/01/2014
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 04/28/2014
Date Data Arrived at EDR: 04/30/2014
Date Made Active in Reports: 05/19/2014
Number of Days to Update: 19

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/28/2014
Next Scheduled EDR Contact: 08/11/2014
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/06/2014
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 04/28/2014
Number of Days to Update: 38

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 04/08/2014
Date Made Active in Reports: 05/05/2014
Number of Days to Update: 27

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/24/2014
Next Scheduled EDR Contact: 07/07/2014
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 02/11/2014
Date Data Arrived at EDR: 02/13/2014
Date Made Active in Reports: 03/17/2014
Number of Days to Update: 32

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 05/19/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/23/2014
Next Scheduled EDR Contact: 09/01/2014
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/18/2014
Next Scheduled EDR Contact: 07/28/2014
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/28/2014
Date Data Arrived at EDR: 03/12/2014
Date Made Active in Reports: 04/29/2014
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/07/2014
Next Scheduled EDR Contact: 08/18/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/21/2014
Next Scheduled EDR Contact: 08/04/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/27/2014
Next Scheduled EDR Contact: 09/08/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/17/2014
Next Scheduled EDR Contact: 06/30/2014
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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EDR DataMap® Corridor Study

Tie Line 649

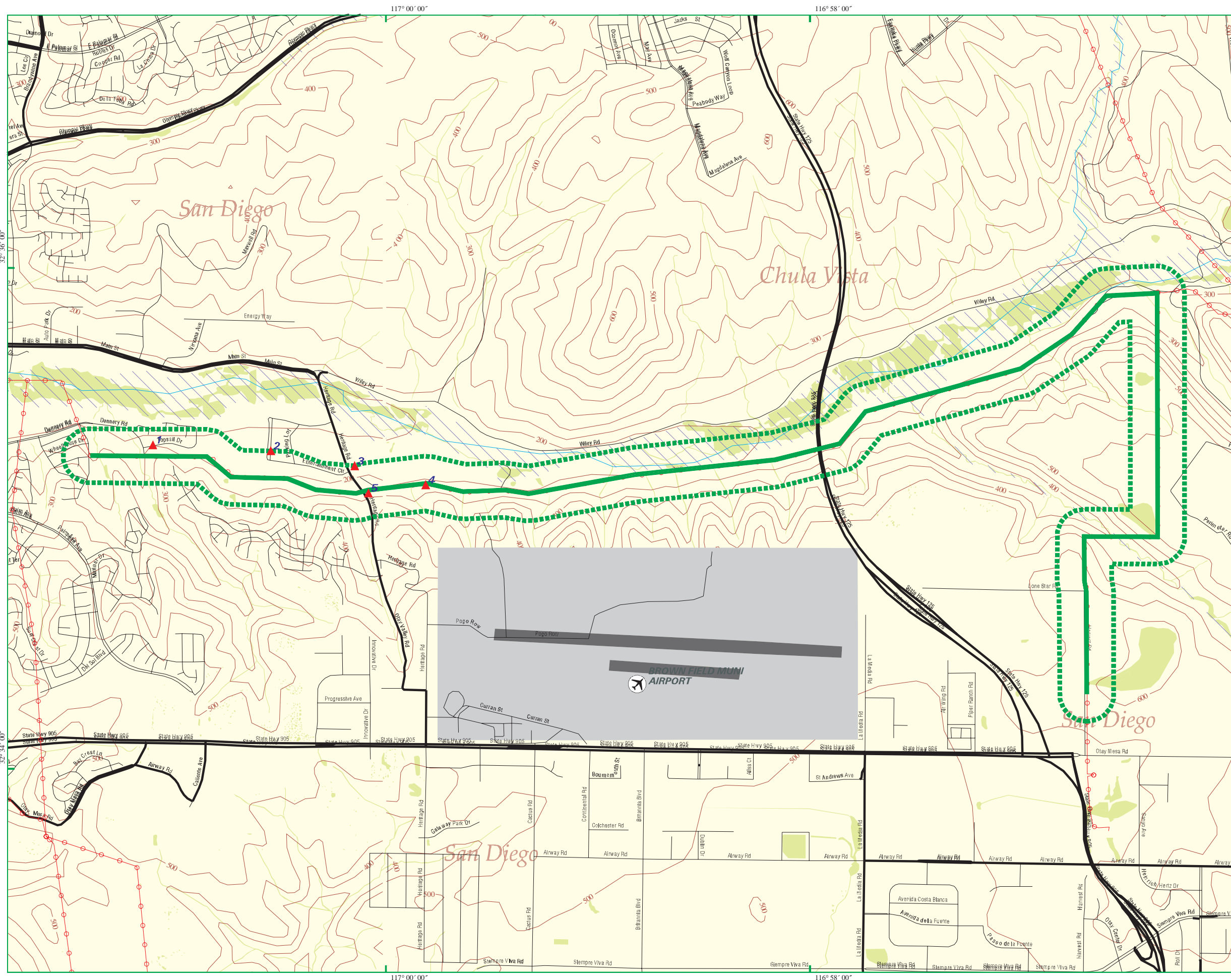
- Listed Sites
- Earthquake Epicenters (Richter 5 or greater)
- Search Boundary
- Roads
- Major Roads
- Waterways
- Railroads
- Contour Lines
- Pipelines
- Powerlines
- Fault Lines
- Water
- Superfund Sites
- Federal DOD Sites
- Indian Reservations BIA
- 100-Yr Flood Zones
- National Wetland Inventory



San Diego, CA



Scale in Miles





December 5, 2017

From: InDepth Corporation

To: San Diego Gas & Electric (SDG&E)

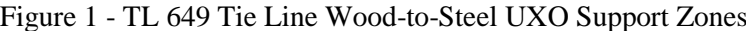
Subject: Tie-Line 649 (TL649) Replacement Project Surface Visual Survey (SVS)

1. **Purpose.** To perform an SVS on the TL649 project site work areas and access roads to identify UXO/Material Potentially Presenting an Explosive Hazard (MPPEH) on the surface of the project footprint that could pose a hazard to project personnel.
2. **Location.** Former Brown Field Bombing Range, Otay Mesa, California
3. **Key personnel contacted.** Andy Renger (SDG&E Major Projects Manager)
4. **Discussion.** InDepth performed a hand-held detector-aided SVS along the 1.7-mile section of the TL649 project corridor that is located within the Formerly Used Defense (FUDS) boundary of the Former Brown Field Bombing Range. This project corridor is the area identified in Figure 1 below as the SDG&E Proposed UXO Investigation Corridor. The TL649 project corridor areas outside of the FUDS boundary were not surveyed since there is no history of UXO/MPPEH. The Proposed UXO Investigation Corridor boundary was initially established at 150-feet (ft) along either side of the powerline alignment, which includes the proposed work areas, as well as a buffer. Due to limiting conditions such as steep/unsafe terrain conditions, heavy vegetation, private property barbed-wire fences, and the Richard J. Donovan Correctional Facility perimeter fencing, the SVS was focused on the specific work areas recommended by InDepth in the *Tie Line 649 Wood-To-Steel Proposed Investigation Plan* (April 2017). These work areas consisted of pier foundations with steel poles, micro pile foundation with steel pole, direct bury steel poles, and stringing areas. In addition to these work areas, the UXO team performed the SVS on a 50-foot (ft) buffer on either side of the access roads leading to the work areas (limiting conditions permitting) and 150 ft (diameter) buffers around each direct bury pole location that was not within the access road buffers or the team encountered the limiting conditions discussed above.

The SVS was performed by a two-person UXO team using a backpack mapping-grade GPS (Trimble Model Pro XRT) and Schonstedt GA-52 hand-held magnetometers. The GPS contained maps of the project footprint, planned work areas, and the access road/pole buffers. The maps also included transect lines (10-ft spacing) that the UXO technician equipped with the backpack GPS followed to keep close spacing between the team members to ensure the maximum accessible area was covered. The second team member was positioned approximately 10-feet behind and to the right or left (depending on the area). This approach was used to perform the SVS along the 1.7-mile corridor to ensure coverage of all proposed work areas and access roads.

In areas where the vegetation and ground cover were too dense to allow 100% of the surface to be scanned effectively using visual means, the UXO team maneuvered around the vegetation visually surveying the surface and utilized the hand-held detector to check the areas covered with vegetation/ground cover. If the handheld detector indicated a response to a metal object, an attempt was made to identify the source of the anomaly. The inaccessible areas were mapped using the mapping-grade GPS and shown in the figures and photographs included in this letter report.

For the purposes of this discussion, the survey area was divided into five zones (see Figure 1) based on the type of terrain and limiting features that affected the SVS. Maps and photographs of each zone's work site areas and conditions limiting the SVS are provided in the letter report attachment. Each figure includes the work sites and access road/direct bury pole buffers that were surveyed and the locations of the supporting photographs.





5. **Observations.** No unexploded ordnance (UXO), MPPEH, munitions debris (MD), or explosive residue was encountered on the surface of any of the areas the UXO Team performed the SVS. The UXO team encountered assorted commercial debris (nails, T-bar fence posts, rebar, aluminum drink cans, assorted metal pieces etc.) throughout the areas that is consistent with access roads and maintenance easements. As these were encountered, the UXO team members would move the metal debris and recheck the spot with the hand-held magnetometer. If the team detected a metal anomaly but could not see any metal debris on the surface, the UXO technician would scrape the soil to see if the metal was just below the soil. If it was, the metal was removed and the area was checked again with the hand-held detector.

No metal anomalies were identified where ground disturbance is proposed, even when the UXO technician scratched the soil surface as discussed above.

6. **Recommendations.** Based on InDepth's experience on the Former Brown Field Bombing range supporting ground disturbance operations for numerous private sector, city, county, and state agencies since 2010 and the results of this SVS, SDG&E personnel would not be exposed to surface UXO/MPPEH hazards. However, due to the depth of detection limitations of the hand-held detectors (16-18 inches below ground surface), the site's historical munitions usage, and the lack of accurate historical records, there is a low probability that there may be 100-lb practice bomb debris, fuze components, and/or MK series practice bombs subsurface that may contain explosive residue. These items do not pose a lethal hazard to personnel but should be identified and handled by UXO personnel. Any future ground disturbance operations should include the use of UXO construction support which consist of an onsite UXO technician to provide daily UXO safety briefings and UXO safety oversight. If during construction it is determine that additional workspace is needed, additional surface visual surveys should be conducted in those areas.
7. If you require additional information, please contact me via email at alucero@indepthcorporation.com or on my cellular phone at (858) 472-5202.

Respectfully,

Armando Lucero,
Munitions Response Division Director
InDepth Corporation

Attachment:

TL 649 SVS Zone Maps and Photographs



ATTACHMENT

TL 649 SVS Zone Maps and Photographs

Zone 1

The work sites in this zone are two pier foundations with steel poles and four direct bury steel poles. These sites are located along the south side of the east-west easement road that runs along the northern foot of the Former Brown Field Bombing Range mesa. Limiting conditions in this zone were the heavy grass ground cover throughout the work site footprints and road buffers, dense vegetation shown in blue below, and the private property barbed-wire fence that runs parallel on the north side of the east-west easement road. Other than the area with dense vegetation, most of this area was accessible.

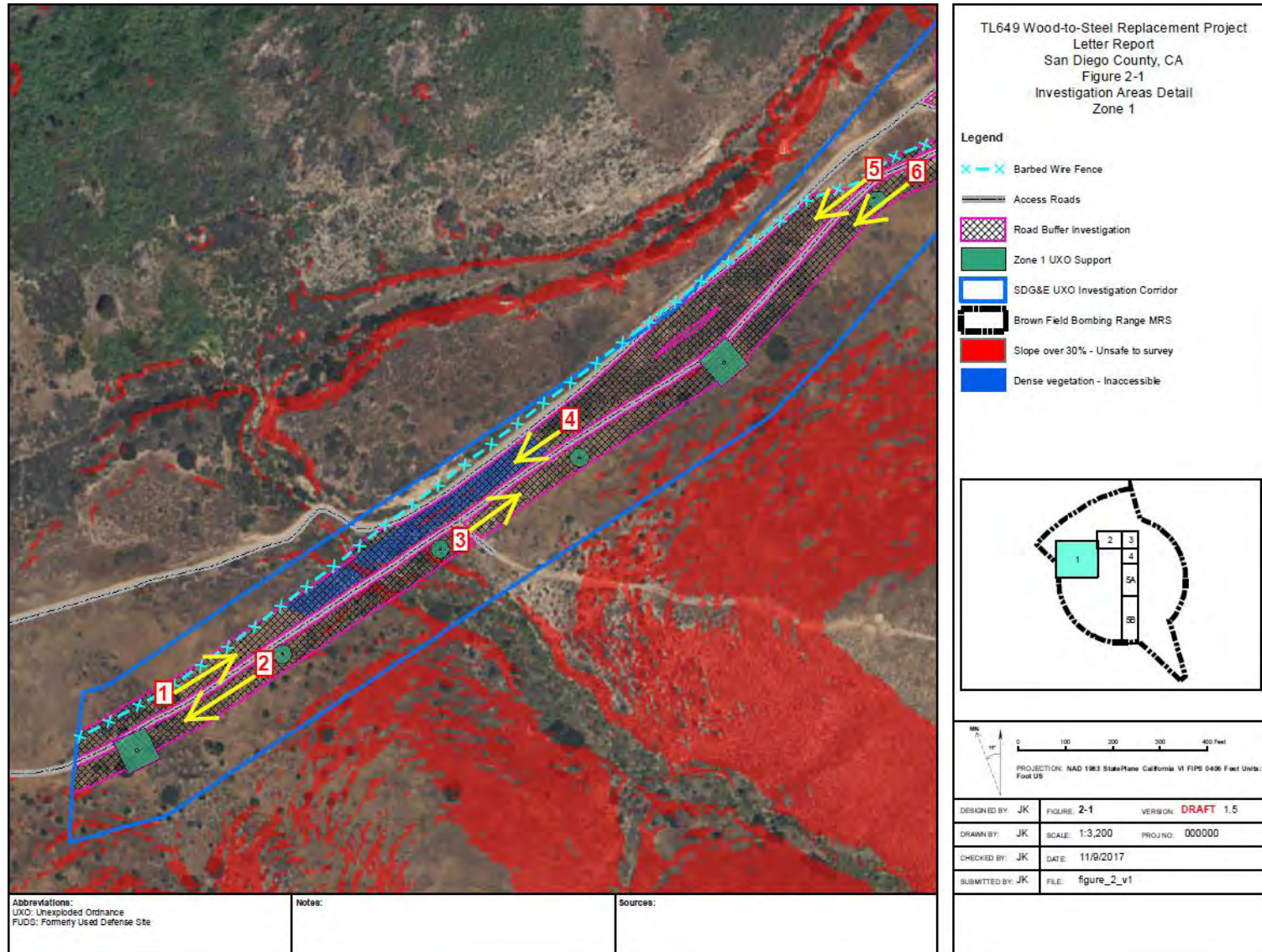




Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6

Zone 2

The work sites in this zone are two pier foundations w/steel poles, two direct bury steel poles, and two wooden poles scheduled to be removed. These sites are located across the intersection of the east-west easement road that runs through Zone 1 and two connecting easement roads. Limiting conditions in this zone were the heavy vegetation throughout the work site footprints and the steep grades on the sides of the easement roads.

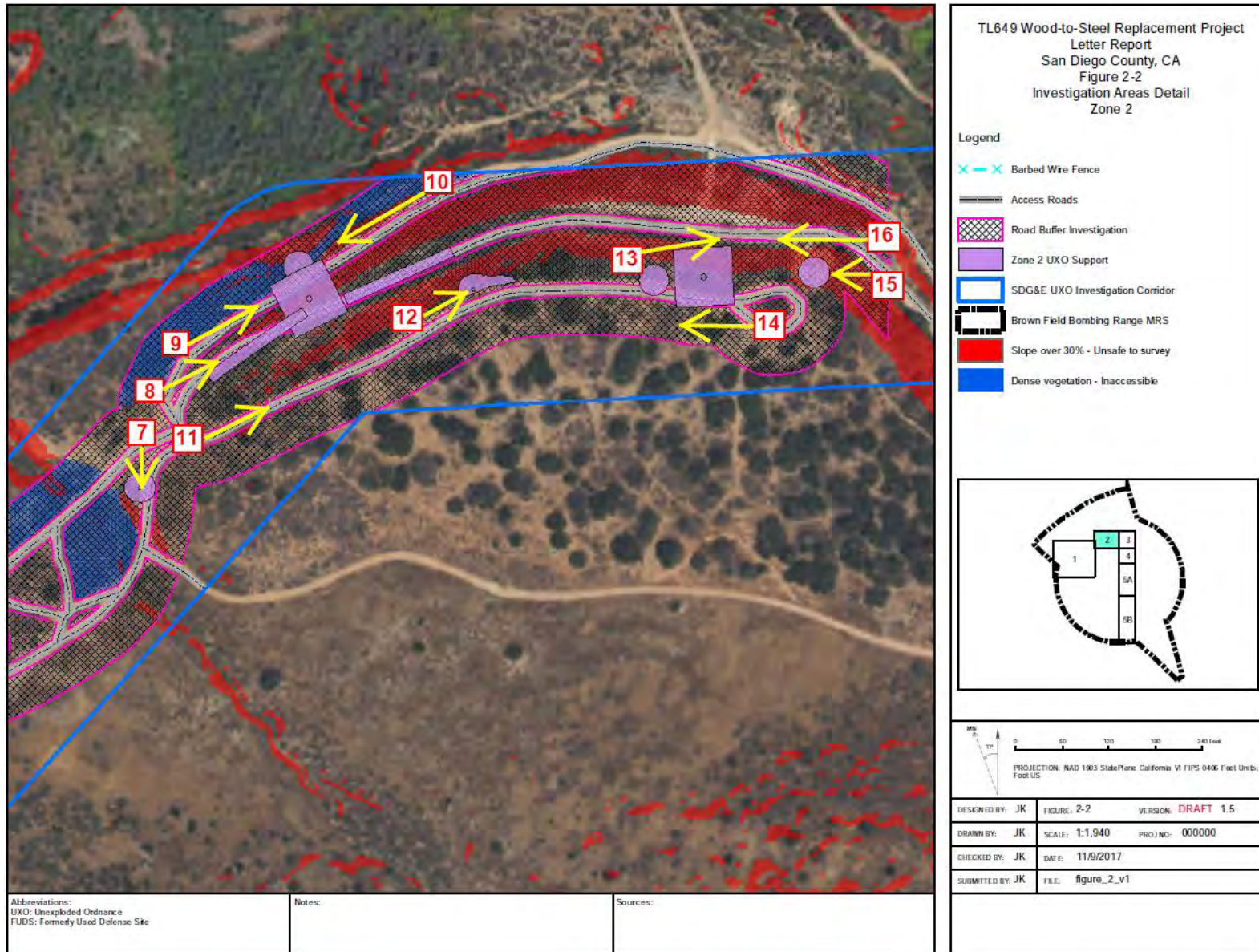




Photo 7



Photo 8



Photo 9

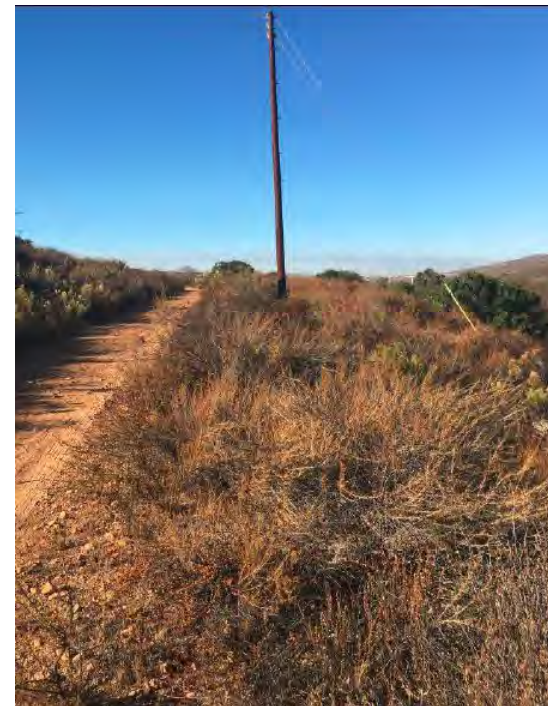


Photo 10



Photo 11



Photo 12



Photo 13

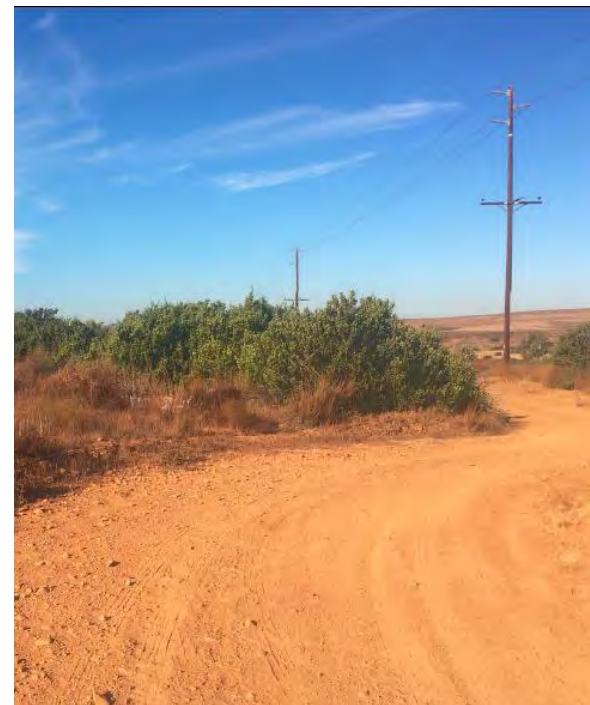


Photo 14



Photo 15



Photo 16

Zone 3

The work sites in this zone are one pier foundations with steel pole, three direct bury steel poles, and two stringing sites. These features are located on the northeast corner of the project corridor. Limiting conditions in this zone were the heavy vegetation throughout the work site footprints, steep grades on the sides of the easement roads, and an ephemeral stream bed.

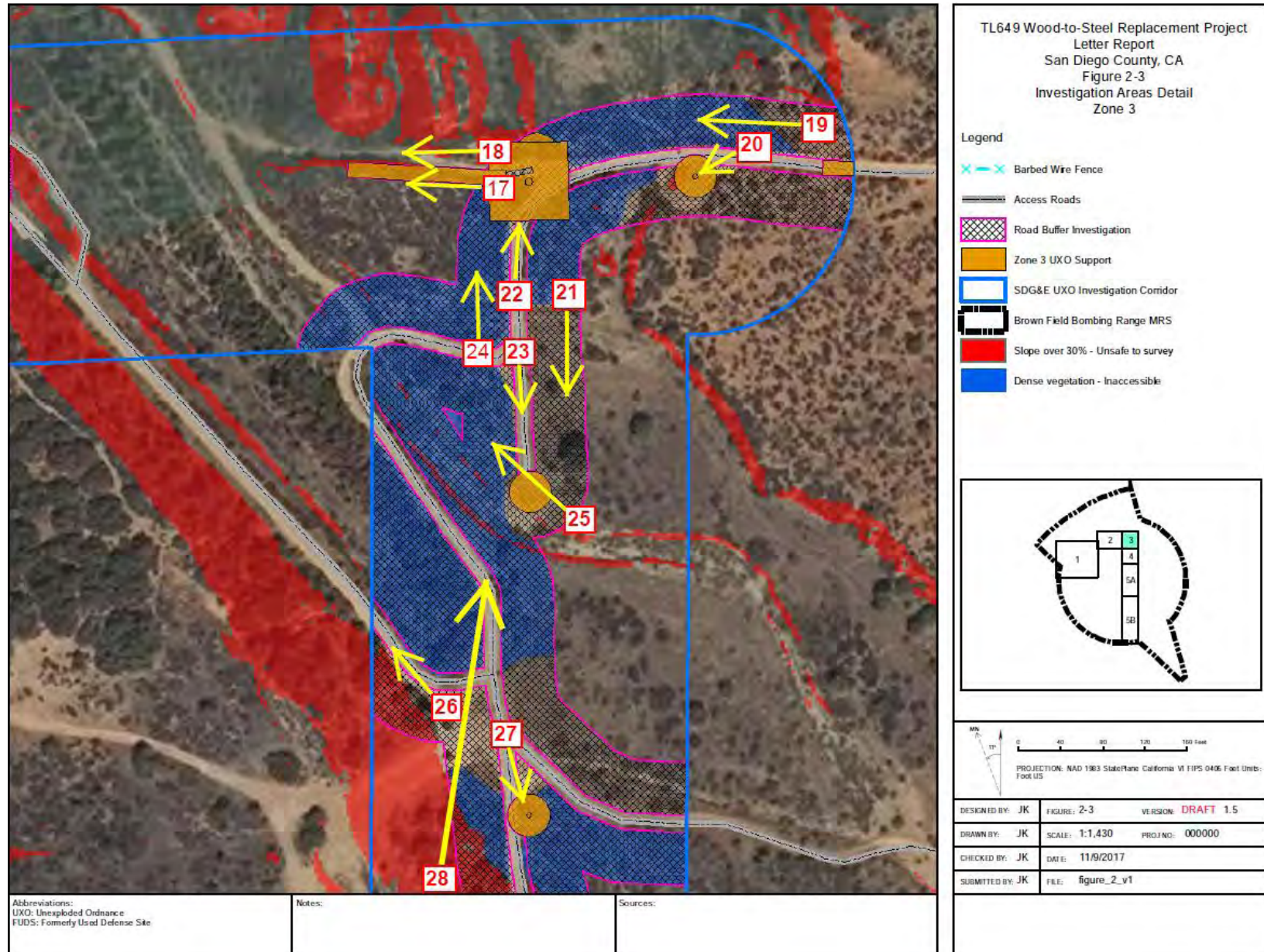




Photo 17



Photo 18



Photo 19



Photo 20



Photo 21



Photo 22



Photo 23



Photo 24



Photo 25



Photo 26



Photo 27



Photo 28

Zone 4

The work sites in this zone are three direct bury steel poles and one micro pile foundation with steel pole. These features are located on the easement road running up to the top of the Former Brown Field Bombing Range mesa. Limiting conditions in this zone were the heavy vegetation and steep grades along both sides of the easement roads.

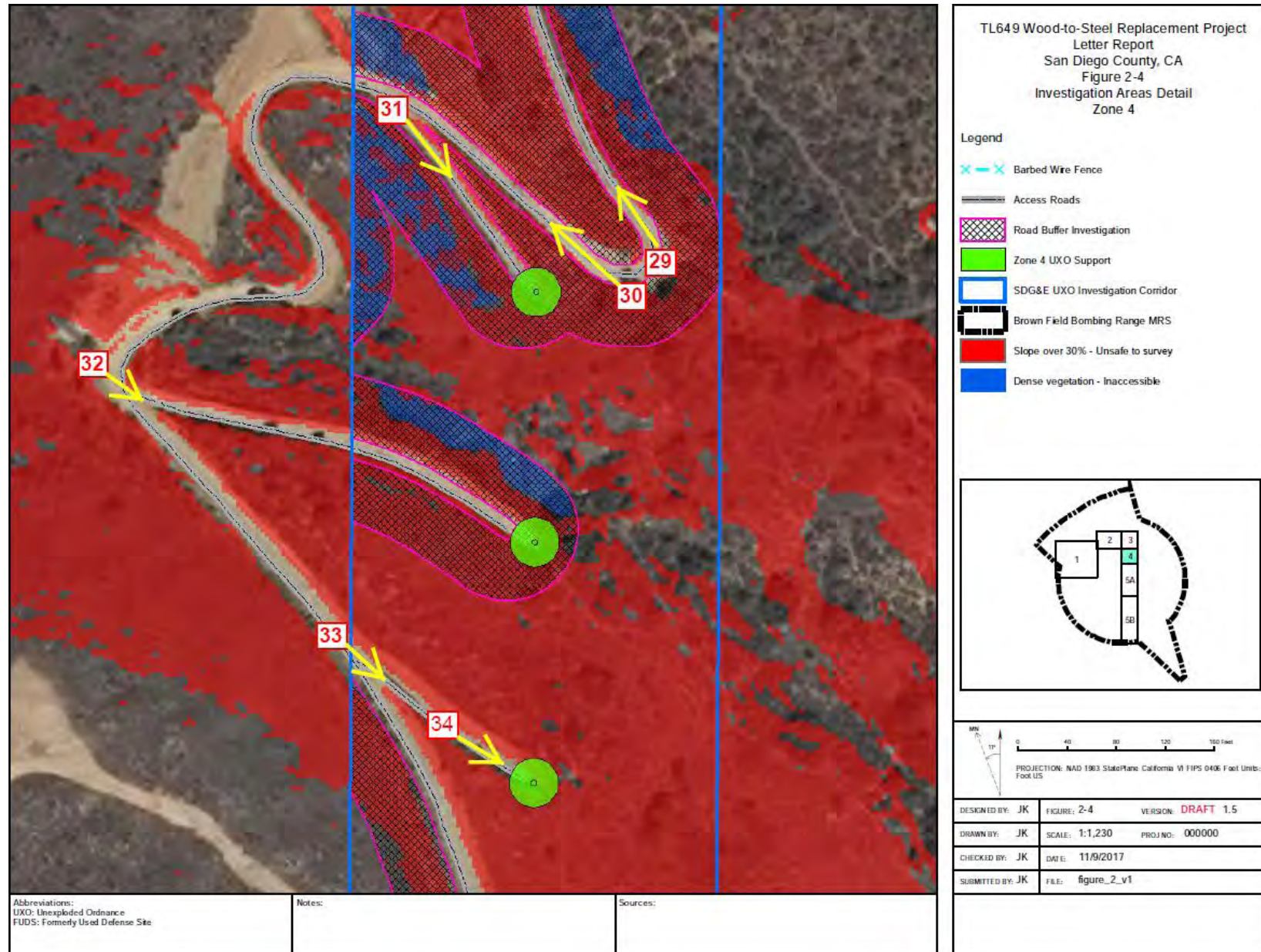




Photo 29



Photo 30



Photo 31

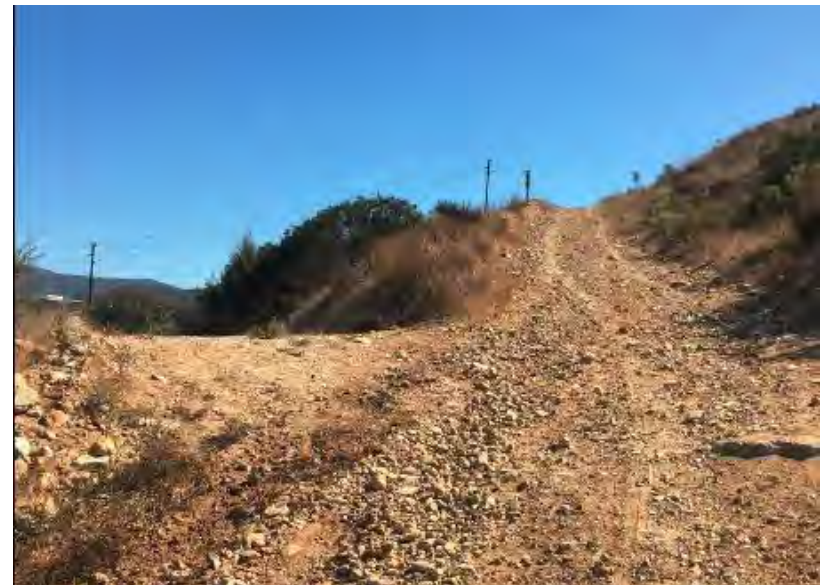


Photo 32



Photo 33



Photo 34

Zone 5

The work sites in this zone are a micro pile foundation with steel pole and twelve direct bury steel poles. These features are located at the top of the Former Brown Field Bombing Range mesa along the easement road running north-south parallel to the Richard Donovan State Detention Facility property barbed wire fence. Limiting conditions in this zone were the dense grass ground cover and the detention facility property boundary barbed-wire fence. This section is illustrated in two separate figures with accompanying photographs after each figure.

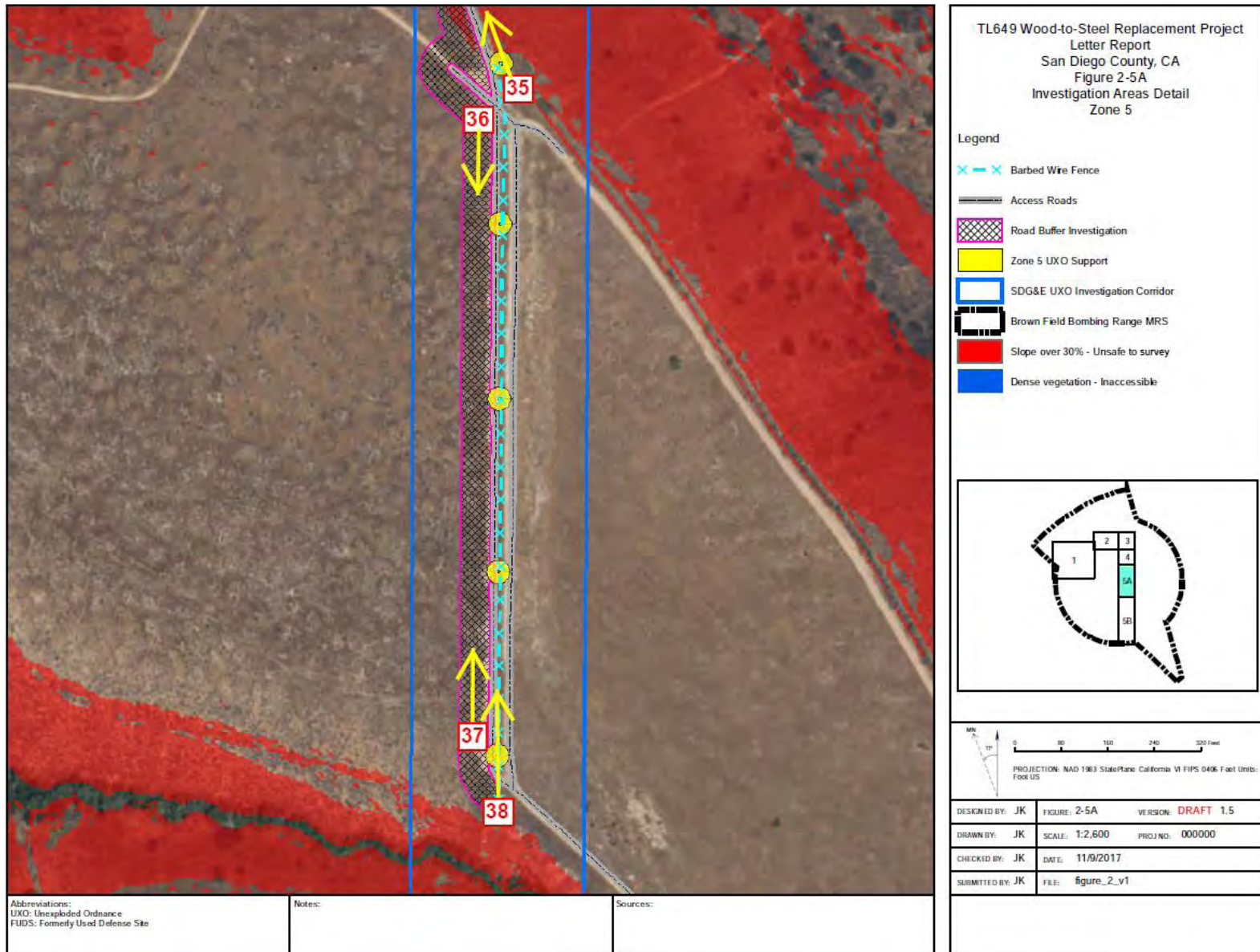




Photo 35



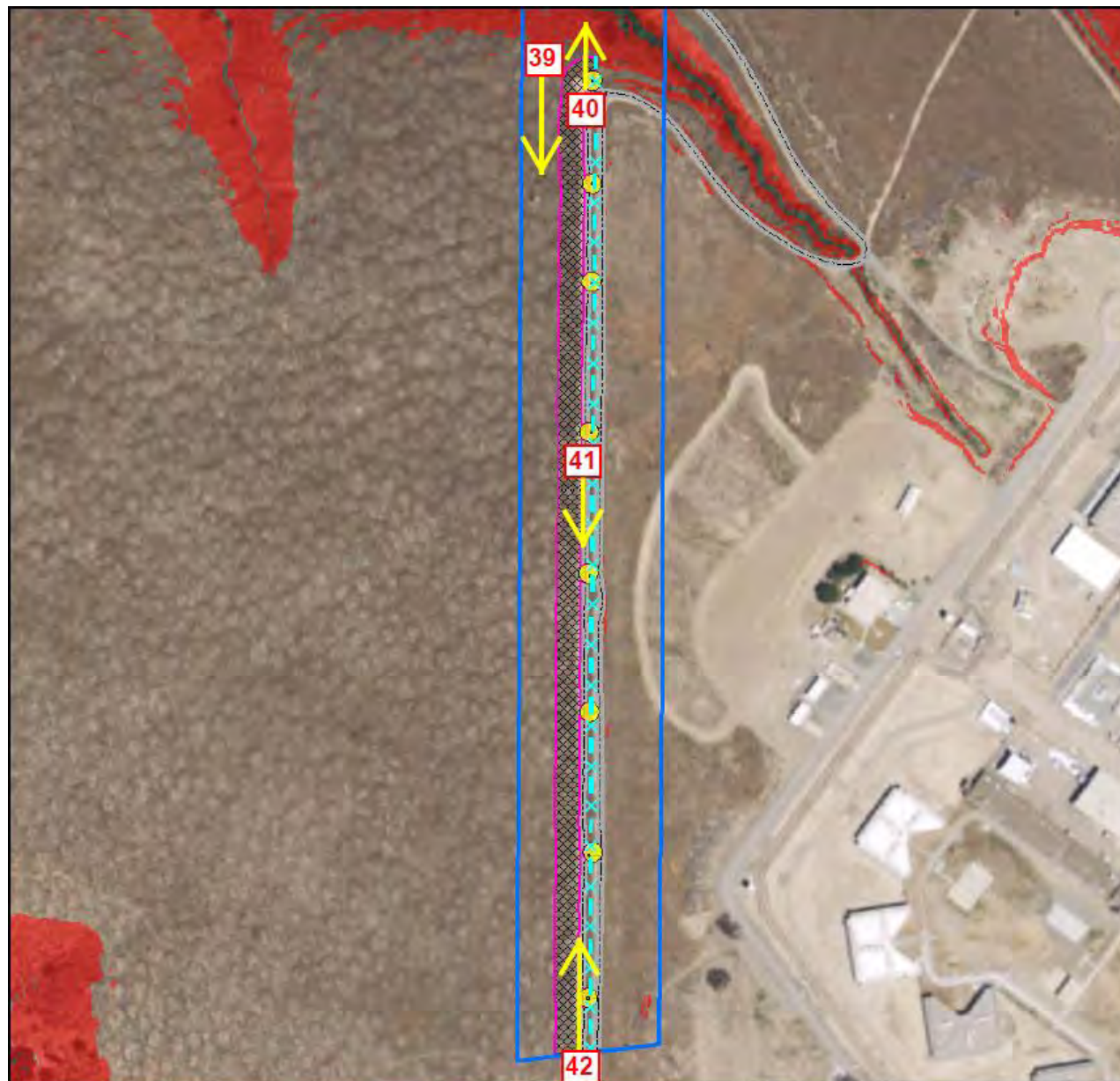
Photo 36



Photo 37



Photo 38



Abbreviations:
UXO: Unexploded Ordnance
FUDS: Formerly Used Defense Site

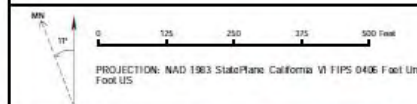
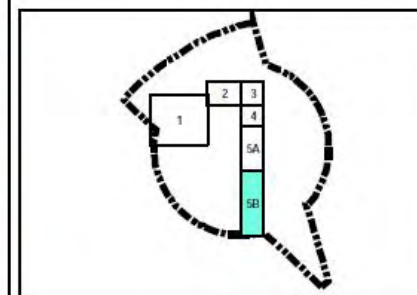
Notes:

Sources:

TL649 Wood-to-Steel Replacement Project
Letter Report
San Diego County, CA
Figure 2-5B
Investigation Areas Detail
Zone 5

Legend

- Barbed Wire Fence
- Access Roads
- Road Buffer Investigation
- Zone 5 UXO Support
- SDG&E UXO Investigation Corridor
- Brown Field Bombing Range MRS
- Slope over 30% - Unsafe to survey
- Dense vegetation - Inaccessible



DESIGNED BY: JK	FIGURE: 2-5B	VERSION: DRAFT 1.5
DRAWN BY: JK	SCALE: 1:3,840	PROJ NO: 000000
CHECKED BY: JK	DATE: 11/9/2017	
SUBMITTED BY: JK	FILE: figure_2_v1	



Photo 39



Photo 40



Photo 41



Photo 42



**Federal Airways
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Satellite Beach, FL 32937
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<http://www.AirspaceUSA.com>

Memo

To: Joe Zulauf
Date: November 24, 2014
From: Ashley Haupt
Subject: TL649F Structure Review - Executive Summary

A preliminary analysis of the TL649F Structure Review was conducted in order to determine how many sites will require Notice to the Federal Aviation Administration (FAA). One hundred and thirty five sites were evaluated based upon the data provided by the client.

According to FAR Part 77.9 Notice Requirements, thirty four of the sites exceed the Notice Criteria. An Excel spreadsheet was provided to detail each point based upon FAR Part 77 Notice Requirements. None of the sites exceed the Electromagnetic Interference (EMI) Criteria or IFR Notice Criteria of the United States. The closest navaid of concern is VOR/DME TIJ located in Tijuana, Mexico. The terrain between the closest pole (2014-APS-2580-OE) slopes down to TIJ. The terrain, trees, existing buildings and boarder security fence provide sufficient shielding to assure the TIJ VOR/DME will be unaffected by the replacement poles.

Approved,

Ashley M Haupt, Airspace Technician

Clyde J Pittman, Aerospace Engineer

 * Federal Airways & Airspace *
 * Summary Report: Alteration Of Existing Structure *
 * Utility Pole *

File: 2014-APS-2444-OE

Site Name: TL649F/CIR260_Z253200

Location: Chula Vista, CA

Latitude: 32°-35'-53.62"

Longitude: 116°-56'-30.05"

SITE ELEVATION AMSL.....298 ft.

STRUCTURE HEIGHT..... 77 ft.

OVERALL HEIGHT AMSL.....375 ft.

NOTICE CRITERIA

FAR 77.9(a): NNR (DNE 200 ft AGL)
 FAR 77.9(b): NNR (DNE Notice Slope)
 FAR 77.9(c): NNR (Not a Traverse Way)
 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for SDM
 FAR 77.9: NNR FAR 77.9 IFR Notice Criteria for NRS
 FAR 77.9(d): NNR (Off Airport Construction)

NR = Notice Required

NNR = Notice Not Required

PNR = Possible Notice Required (depends upon actual IFR procedure)
 Review Air Navigation Facilities at bottom of this report.

Notice to the FAA is not required at the analyzed location and height.

NR = Notice Required

NNR = Notice Not Required

PNR = Possible Notice Required

OBSTRUCTION STANDARDS

FAR 77.17(a)(1): DNE 499 ft AGL
 FAR 77.17(a)(2): DNE - Airport Surface
 FAR 77.19(a): DNE - Horizontal Surface
 FAR 77.19(b): DNE - Conical Surface
 FAR 77.19(c): DNE - Primary Surface
 FAR 77.19(d): DNE - Approach Surface
 FAR 77.19(e): DNE - Transitional Surface

VFR TRAFFIC PATTERN AIRSPACE FOR: SDM: BROWN FIELD MUNI

Type: A RD: 12499.22 RE: 507.6

FAR 77.17(a)(1): DNE

FAR 77.17(a)(2): DNE - Height No Greater Than 200 feet AGL.

VFR Horizontal Surface: DNE

VFR Conical Surface: DNE
VFR Approach Slope: DNE
VFR Transitional Slope: DNE

The structure is within VFR - Traffic Pattern Airspace Climb/Descent Area. Structures exceeding the greater of 350' AAE, 77.17(a)(2), or VFR horizontal and conical surfaces will receive a hazard determination from the FAA. Maximum AMSL of Climb/Descent Area is 876 feet.

VFR TRAFFIC PATTERN AIRSPACE FOR: NRS: IMPERIAL BEACH NOLF (REAM FL

Type: A RD: 52243.95 RE: 21.4

FAR 77.17(a)(1): DNE
FAR 77.17(a)(2): DNE - Greater Than 5.99 NM.
VFR Horizontal Surface: DNE
VFR Conical Surface: DNE
VFR Approach Slope: DNE
VFR Transitional Slope: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)

FAR 77.17(a)(3) Departure Surface Criteria (40:1)
DNE Departure Surface

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)

FAR 77.17(a)(4) MOCA Altitude Enroute Criteria
The Maximum Height Permitted is 6000 ft AMSL

PRIVATE LANDING FACILITIES

FACIL IDENT TYP NAME	BEARING To FACIL	RANGE IN NM	DELTA ARP ELEVATION	FAA IFR
OCL3 AIR JOHN NICHOL'S FIELD No Impact to Near Airport Surface. Below surface height of 223 ft above ARP.	49.75	3.23	-115	
CL09 HEL SHARP CHULA VISTA MEDICAL CE No Impact to Private Landing Facility Structure 5 ft below heliport.	287.14	4.32	-71	

AIR NAVIGATION ELECTRONIC FACILITIES

FAC IDNT	TYPE	ST AT	FREQ	VECTOR	DIST (ft)	DELTA ELEVA	ST	LOCATION	GRND ANGLE	APCH BEAR
PGY	VORTAC	R	109.8	290.95	12324	-205	CA	POGGI	-.95	
SDM	ATCT	ON		228.16	15565	-227	CA	BROWN FIELD MUNI	-.84	
TIJ	VOR/DME	I	116.5	189.89	21452	-124	MX	TIJUANA	-.33	
UN	NDB	I	38	230.08	36808	+375	MX	TIJUANA	.58	
No Impact. Does Not Exceed NDB EMI Notice Height Criteria.										
NRS	ATCT	Y	A/G	257.51	52729	+296	CA	IMPERIAL BEACH NO	.32	
NRS	TACAN	I	NA	256.49	53228	+353	CA	IMPERIAL BEACH	.38	
SEE	CO	Y	A/G	349.97	82313	-472	CA	SEE RTR	-.33	
SEE	ATCT	Y	A/G	353.13	83195	-96	CA	GILLESPIE FIELD	-.07	

SAN	CO	Y	124.45	302.99	88409	+324	CA SAN DIEGO RCO	.21
NZY	ATCT	ON		294.45	90206	+263	CA NORTH ISLAND NAS	.17
SAN	CO	Y	A/G	294.42	90430	+288	CA SAN DIEGO RTR	.18
SAN	ATCT	Y	A/G	303.64	90958	+216	CA SAN DIEGO INTL-LI	.14
NZY	TACAN	I	NA	294.27	92644	+350	CA NORTH ISLAND	.22
NZY	RADAR	Y	2700.	294.49	92881	+310	CA NORTH ISLAND NAS	.19

No Impact. Alteration does not require Notice based upon EMI.

The studied location is within 20 NM of a Radar facility.

The calculated Radar Line-Of-Sight (LOS) distance is: 34 NM.

This location and height is within the Radar Line-Of-Sight.

MYF	CO	Y	A/G	323.63	98573	-116	CA MONTGOMERY RTR	-.07	
MYF	ATCT	ON		323.25	99536	-116	CA MONTGOMERY FIELD	-.07	
PTL	CO	Y		118.65	293.48	103284	-80	CA POINT LOMA RCO	
MZB	VORTAC	R		117.8	307.56	109998	+363	CA MISSION BAY	.19
NKX	CO	Y	A/G	328.66	113014	-141	CA MIRAMAR RTR	-.07	
NKX	CO	Y	A/G	327.29	114211	-130	CA MIRAMAR RTR	-.07	
NKX	ATCT	Y	A/G	328.73	117664	-187	CA MIRAMAR MCAS/MITS	-.09	
NKX	TACAN	I	NA	326.49	118541	-55	CA MIRAMAR	-.03	
NKX	RADAR WXL	Y		345.23	120670	-677	CA SAN DIEGO	-.32	
NKX	RADAR	Y		329.11	120904	-154	CA MIRAMAR MCAS	-.07	

No Impact. Alteration does not require Notice based upon EMI.

The studied location is within 20 NM of a Radar facility.

The calculated Radar Line-Of-Sight (LOS) distance is: 52 NM.

This location and height is within the Radar Line-Of-Sight.

NKX	CO	Y	A/G	329.11	120913	-118	CA MIRAMAR RTR	-.06
SAN	CO	Y	A/G	312.63	129866	-475	CA LA JOLLA RTR	-.21
RNM	ATCT	Y	A/G	2.73	161138	-1062	CA RAMONA	-.38
QRW	RADAR ARSR	Y		1275.1	57.9	190889	-5868	CA Mt. Laguna ARSR-4
ZLA	CO	Y	A/G	57.82	190962	-5813	CA LAGUNA	-1.74
QRW	CO	Y		8412.	57.79	190969	-5860	CA MOUNT LAGUNA ARSR
CRQ	ATCT	ON		332.05	217787	-22	CA MC CLELLAN-PALOMA	-.01
JLI	CO	Y	A/G	29.93	218873	-5155	CA JULIAN RCO	-1.35

CFR Title 47, §1.30000-\$1.30004

AM STUDY NOT REQUIRED: Structure is not near a FCC licensed AM station.

Movement Method Proof as specified in §73.151(c) is not required. Please review 'AM Station Report' for details.

Nearest AM Station: XEUT @ 7556 meters.

Airspace® State Summary Version 14.11.249

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11-17-2014

09:57:06



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9463-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31735 - TL649
Location:	San Diego, CA
Latitude:	32-35-21.44N NAD 83
Longitude:	116-56-21.68W
Heights:	557 feet site elevation (SE) 61 feet above ground level (AGL) 618 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9463-OE.

Signature Control No: 236531602-244358062

(DNE)

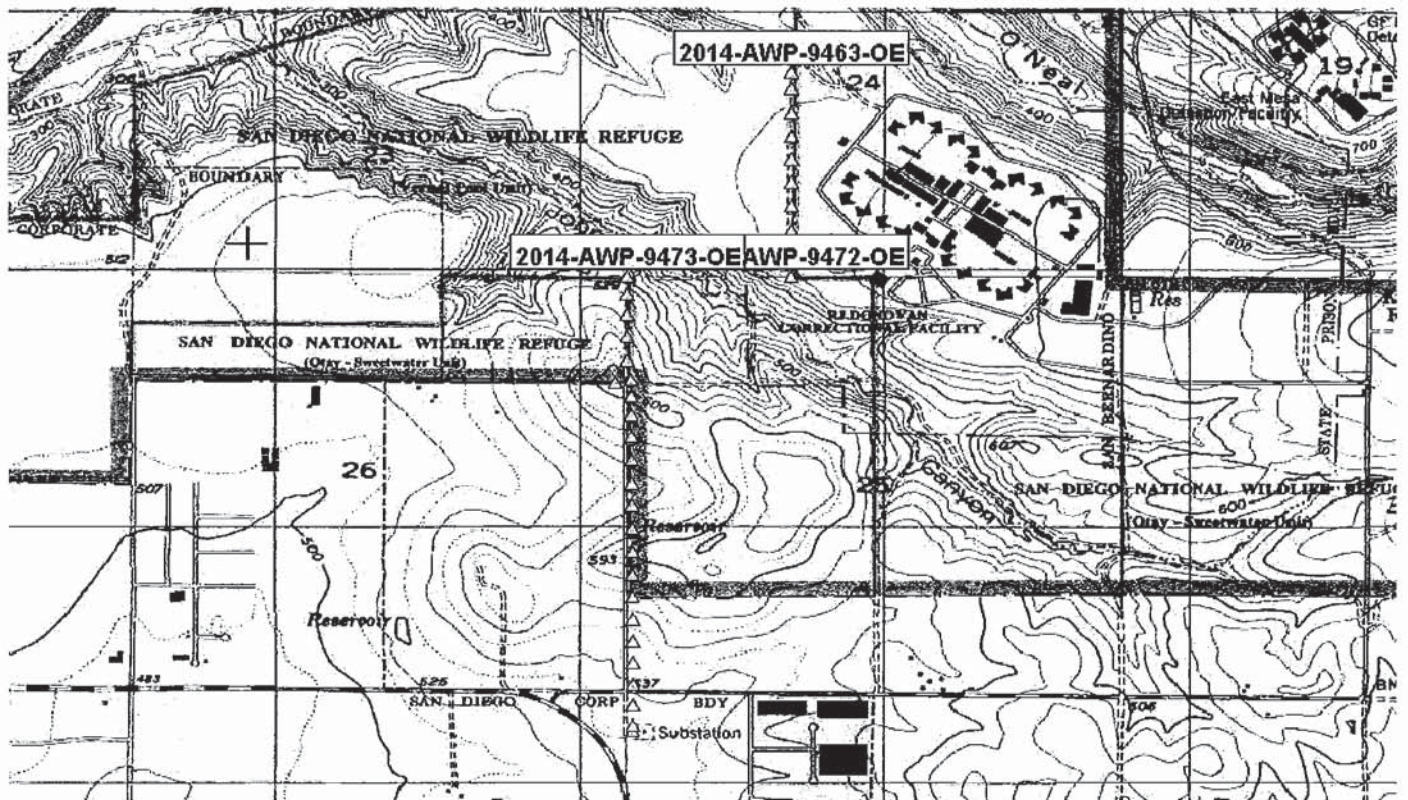
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9463-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a 61 ft. AGL steel 69kV transmission pole.

Verified Map for ASN 2014-AWP-9463-OE





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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9464-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31736 - TL649
Location:	San Diego, CA
Latitude:	32-35-19.37N NAD 83
Longitude:	116-56-21.68W
Heights:	561 feet site elevation (SE) 66 feet above ground level (AGL) 627 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9464-OE.

Signature Control No: 236531603-244358075

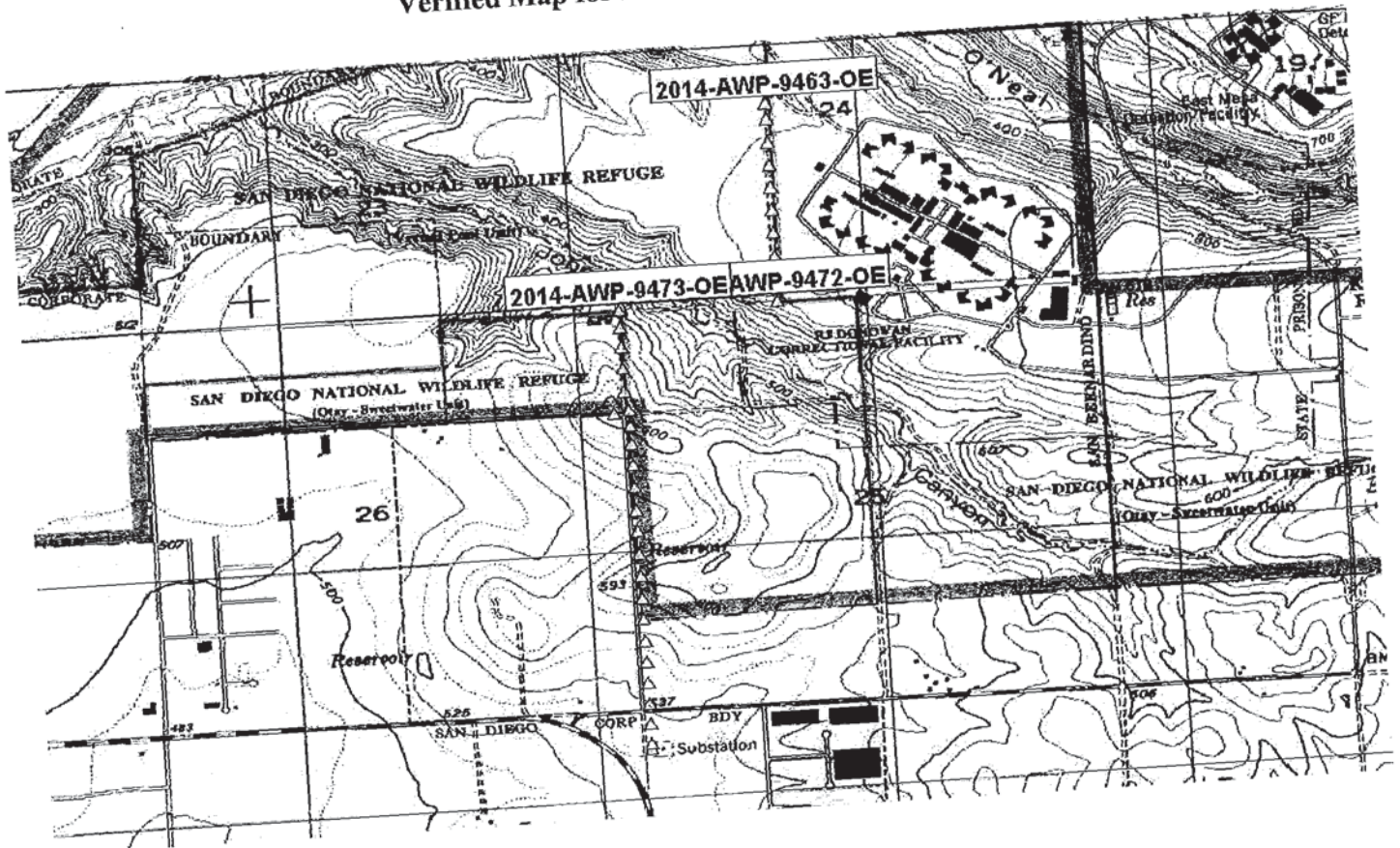
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9464-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a 66 ft. AGL steel 69kV transmission pole.





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Southwest Regional Office
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Aeronautical Study No.
2014-AWP-9465-OE

Issued Date: 02/27/2015

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8315 Century Park Ct., CP21C
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**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31737 - TL649
Location:	San Diego, CA
Latitude:	32-35-16.28N NAD 83
Longitude:	116-56-21.67W
Heights:	565 feet site elevation (SE) 66 feet above ground level (AGL) 631 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9465-OE.

Signature Control No: 236531604-244358067

(DNE)

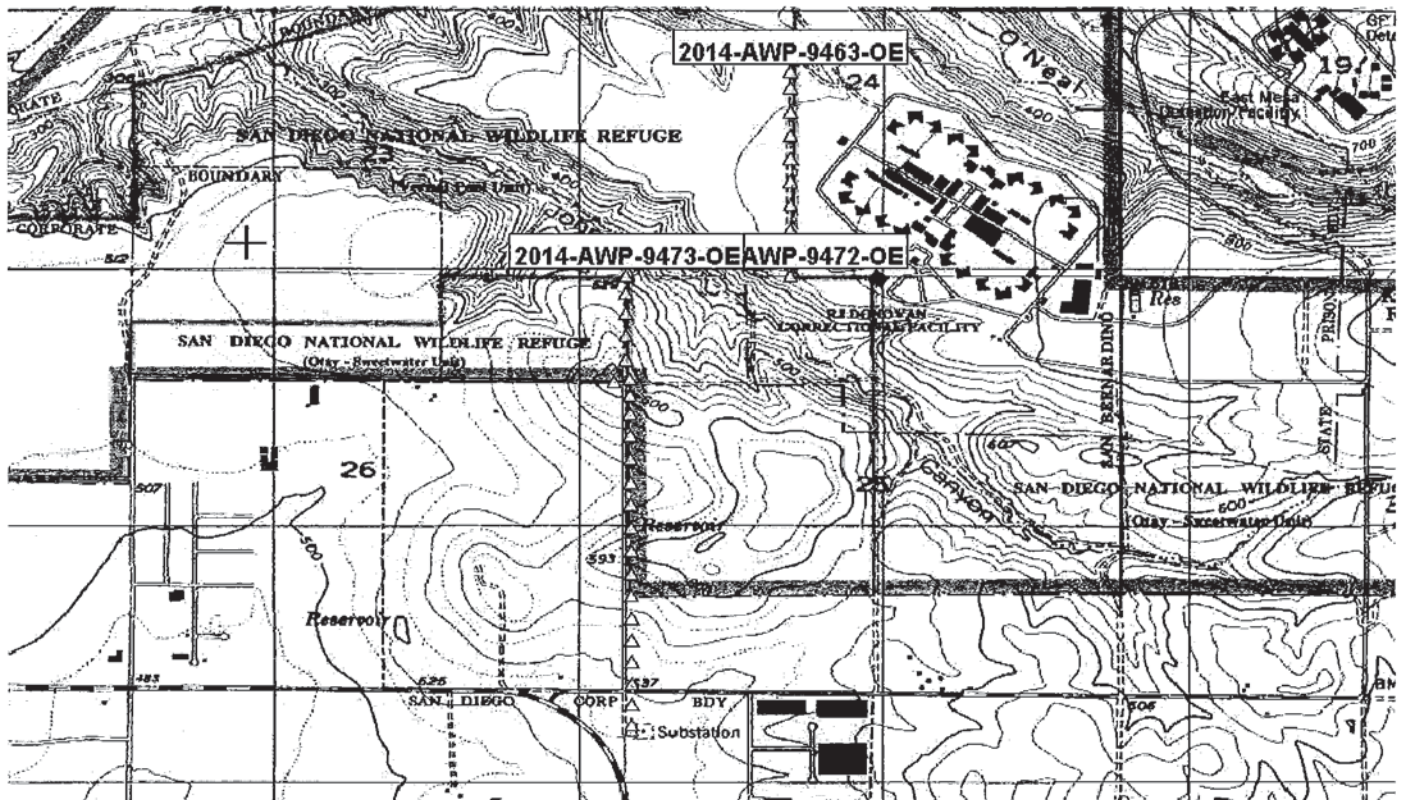
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9465-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a 66 ft. AGL steel 69kV transmission pole.

Verified Map for ASN 2014-AWP-9465-OE





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Aeronautical Study No.
2014-AWP-9466-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
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**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31738 - TL649
Location:	San Diego, CA
Latitude:	32-35-13.30N NAD 83
Longitude:	116-56-21.66W
Heights:	569 feet site elevation (SE) 66 feet above ground level (AGL) 635 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9466-OE.

Signature Control No: 236531605-244358060

(DNE)

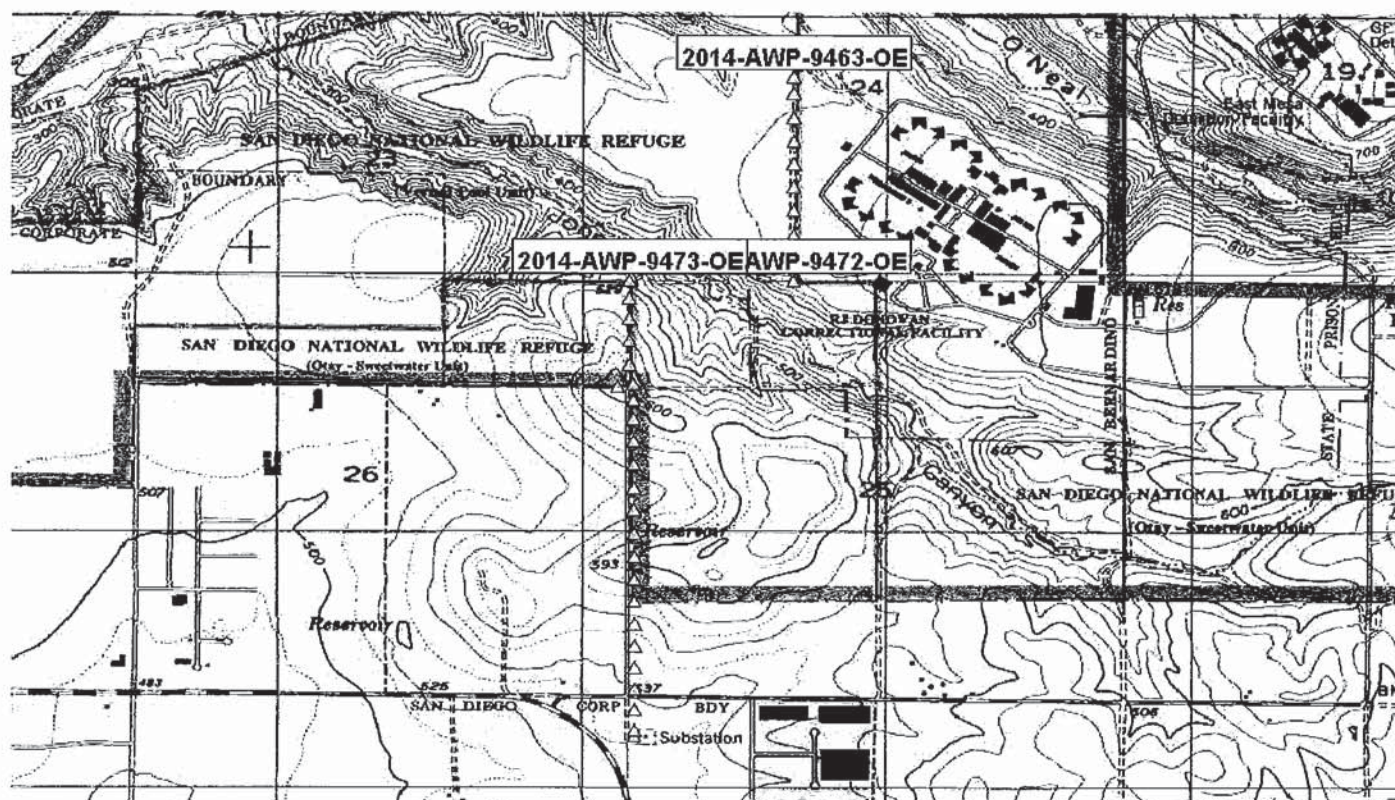
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9466-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a 66 ft. AGL steel 69kV transmission pole.

Verified Map for ASN 2014-AWP-9466-OE





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Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9467-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31739 - TL649
Location:	San Diego, CA
Latitude:	32-35-10.46N NAD 83
Longitude:	116-56-21.66W
Heights:	570 feet site elevation (SE) 66 feet above ground level (AGL) 636 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9467-OE.

Signature Control No: 236531606-244358061

(DNE)

Karen McDonald

Specialist

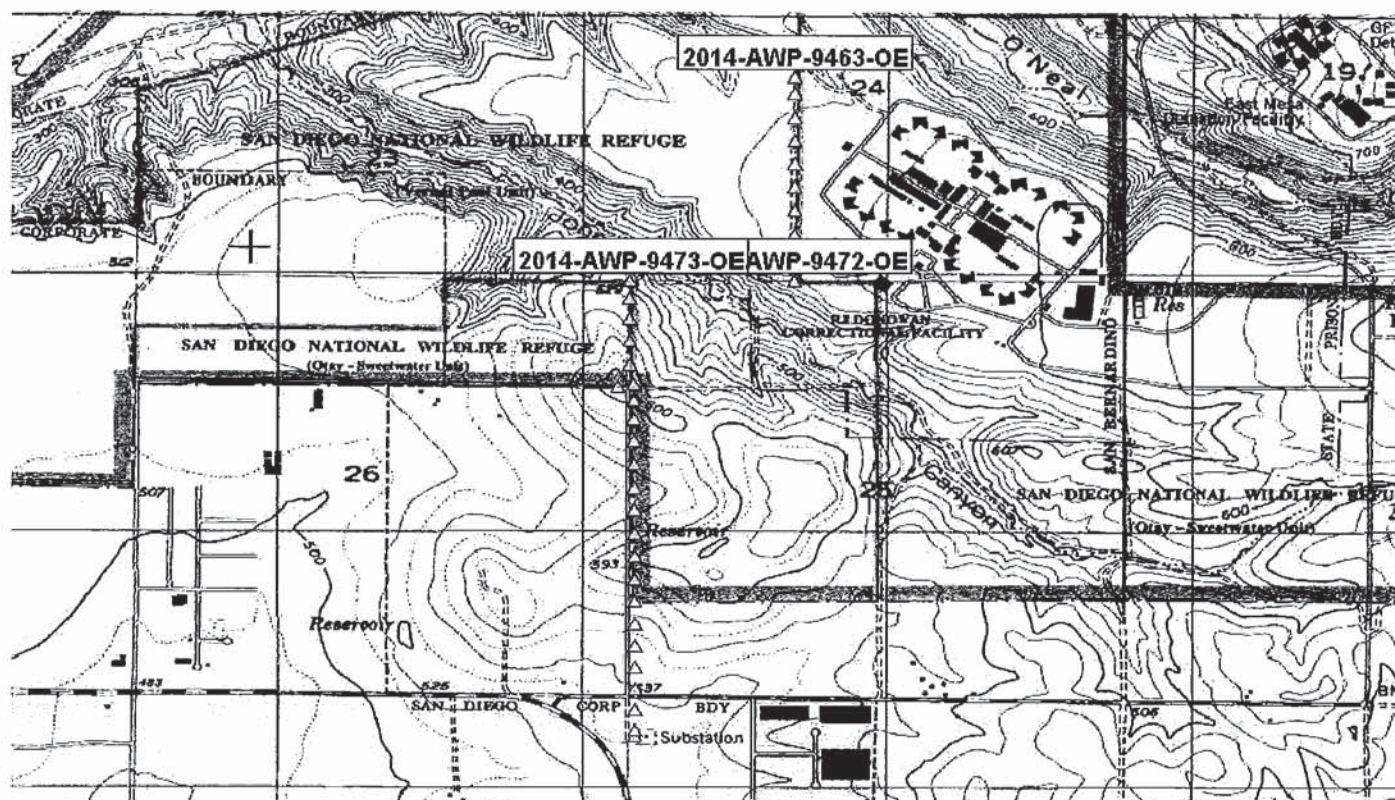
Attachment(s)

Case Description

Map(s)

Case Description for ASN 2014-AWP-9467-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a 66 ft. AGL steel 69kV transmission pole.

Verified Map for ASN 2014-AWP-9467-OE



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Aeronautical Study No.
2014-AWP-9468-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z729583 - TL649
Location:	San Diego, CA
Latitude:	32-35-07.50N NAD 83
Longitude:	116-56-21.66W
Heights:	572 feet site elevation (SE) 66 feet above ground level (AGL) 638 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

 At least 10 days prior to start of construction (7460-2, Part 1)
 X Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9468-OE.

Signature Control No: 236531607-244358064

(DNE)

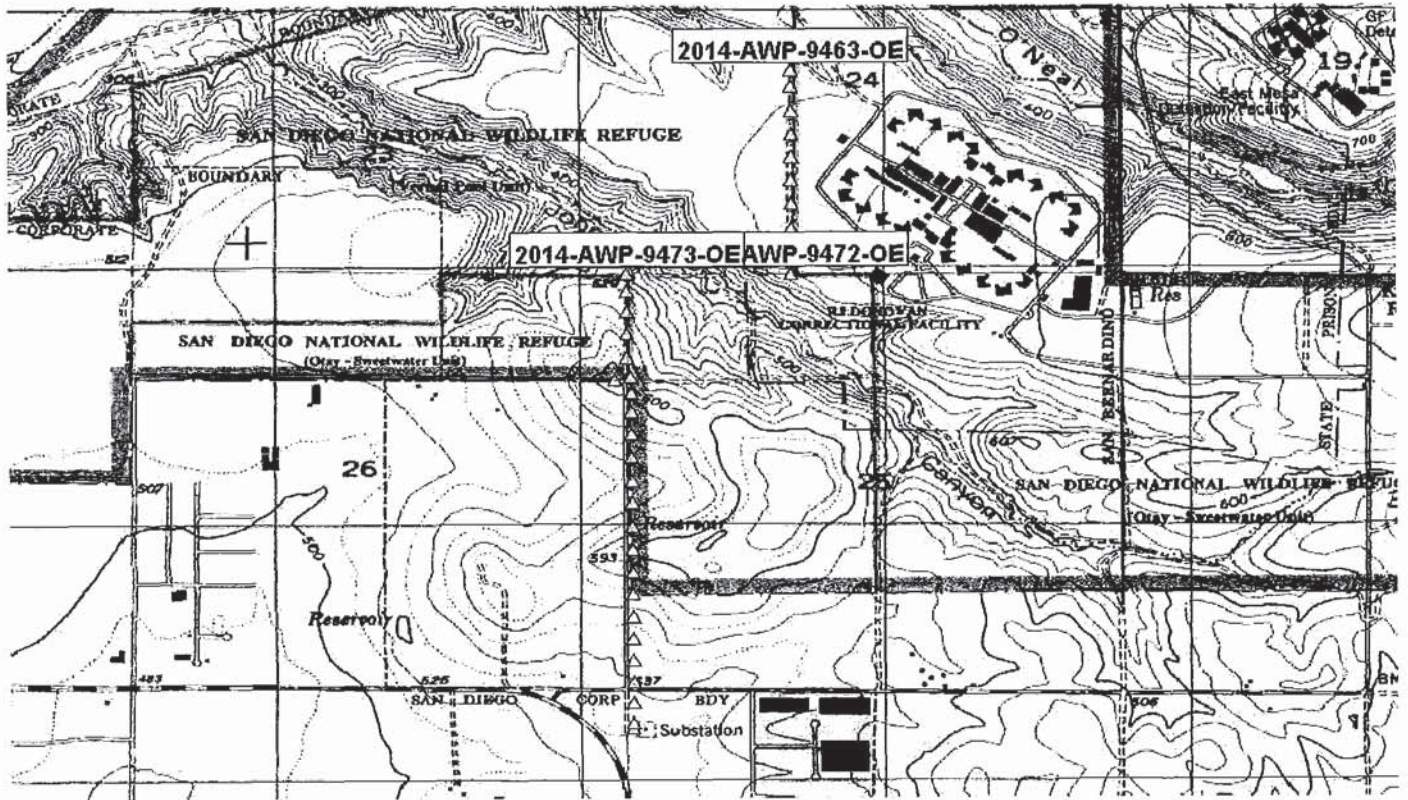
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9468-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a 66 ft. AGL steel 69kV transmission pole.

Verified Map for ASN 2014-AWP-9468-OE





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Aeronautical Study No.
2014-AWP-9469-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31741 - TL649
Location:	San Diego, CA
Latitude:	32-35-04.52N NAD 83
Longitude:	116-56-21.65W
Heights:	574 feet site elevation (SE) 66 feet above ground level (AGL) 640 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9469-OE.

Signature Control No: 236531608-244358063

(DNE)

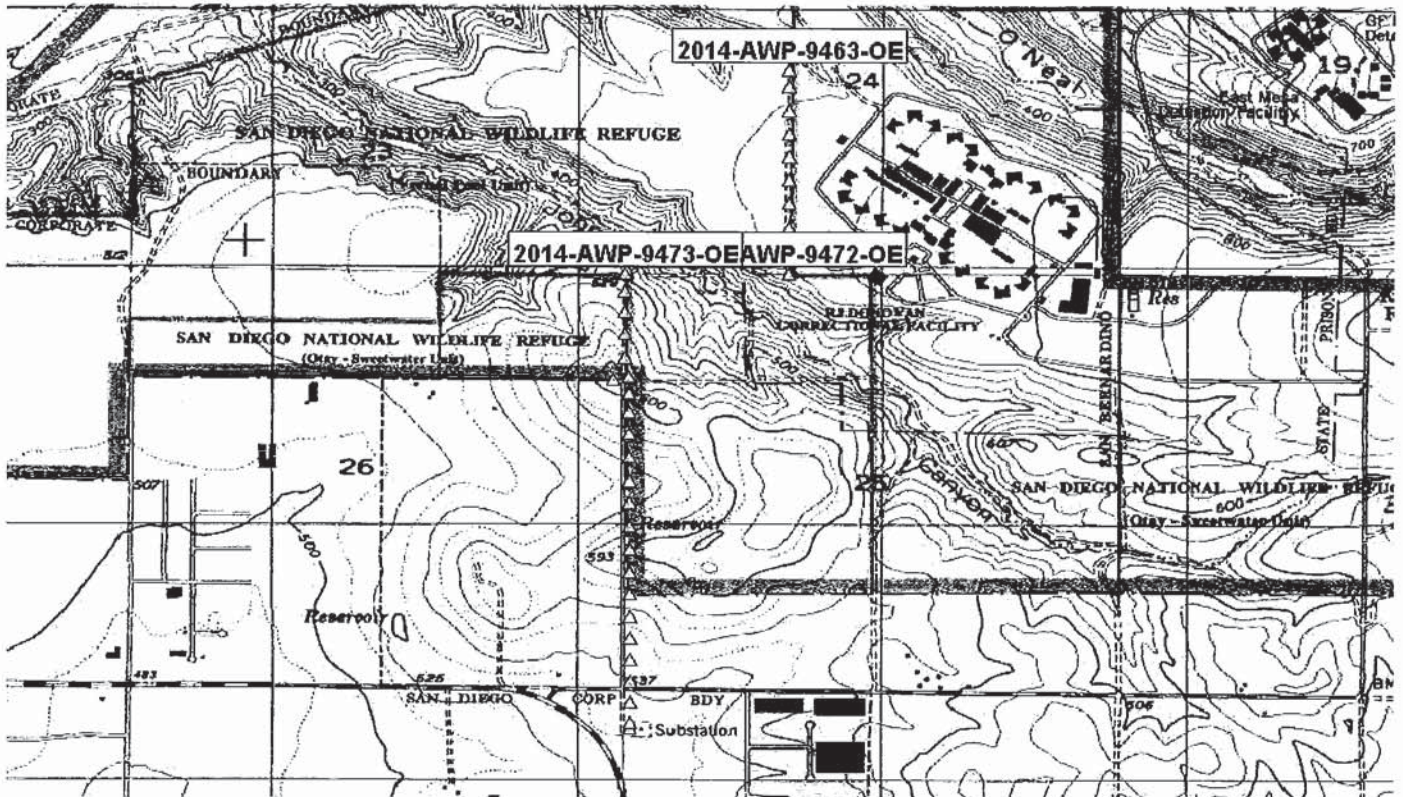
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9469-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a 66 ft. AGL steel 69kV transmission pole.

Verified Map for ASN 2014-AWP-9469-OE





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Aeronautical Study No.
2014-AWP-9470-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31742 - TL649
Location:	San Diego, CA
Latitude:	32-35-01.44N NAD 83
Longitude:	116-56-21.64W
Heights:	574 feet site elevation (SE) 66 feet above ground level (AGL) 640 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9470-OE.

Signature Control No: 236531609-244358074

(DNE)

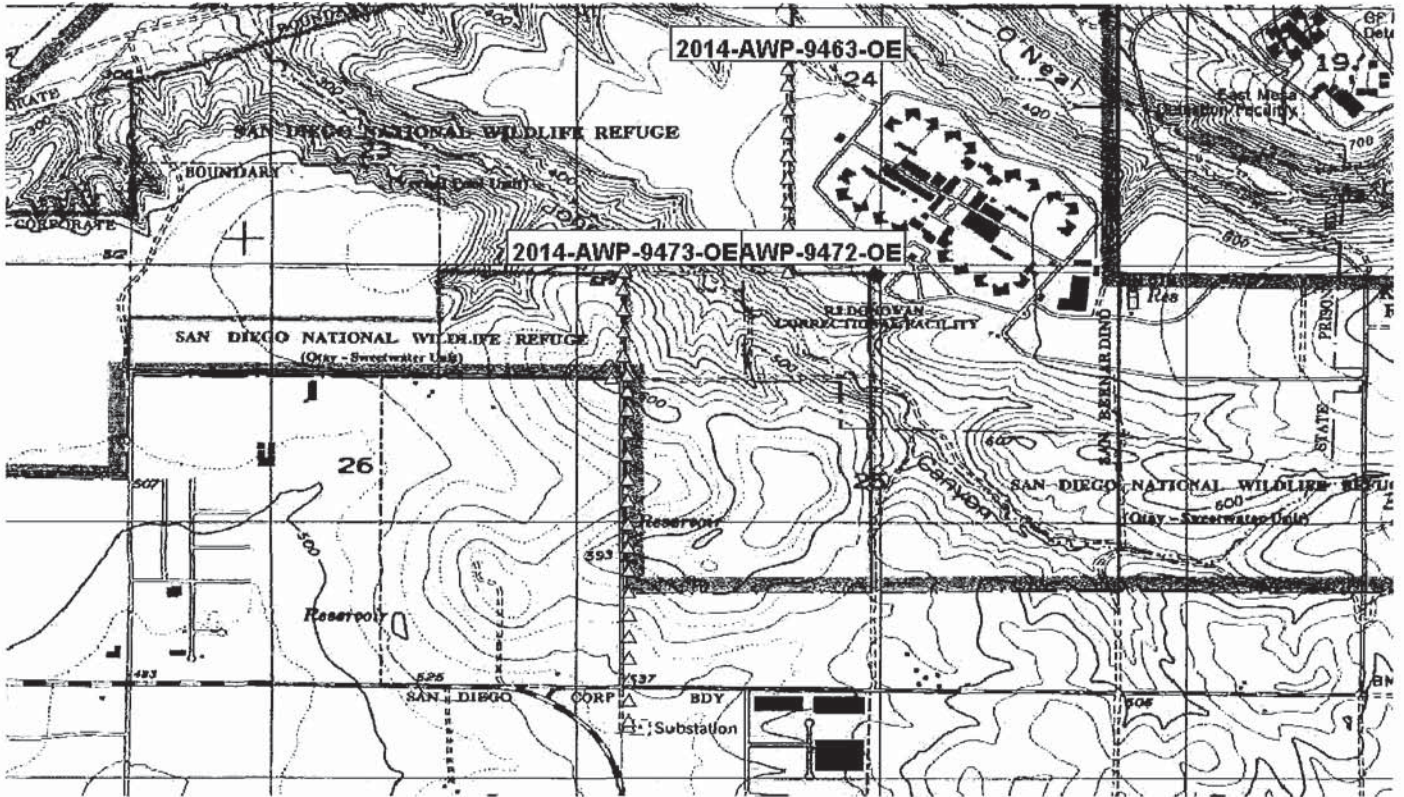
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9470-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a 66 ft. AGL steel 69kV transmission pole.

Verified Map for ASN 2014-AWP-9470-OE





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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9471-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31743 - TL649
Location:	San Diego, CA
Latitude:	32-34-58.59N NAD 83
Longitude:	116-56-21.67W
Heights:	571 feet site elevation (SE) 66 feet above ground level (AGL) 637 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9471-OE.

Signature Control No: 236531610-244358073

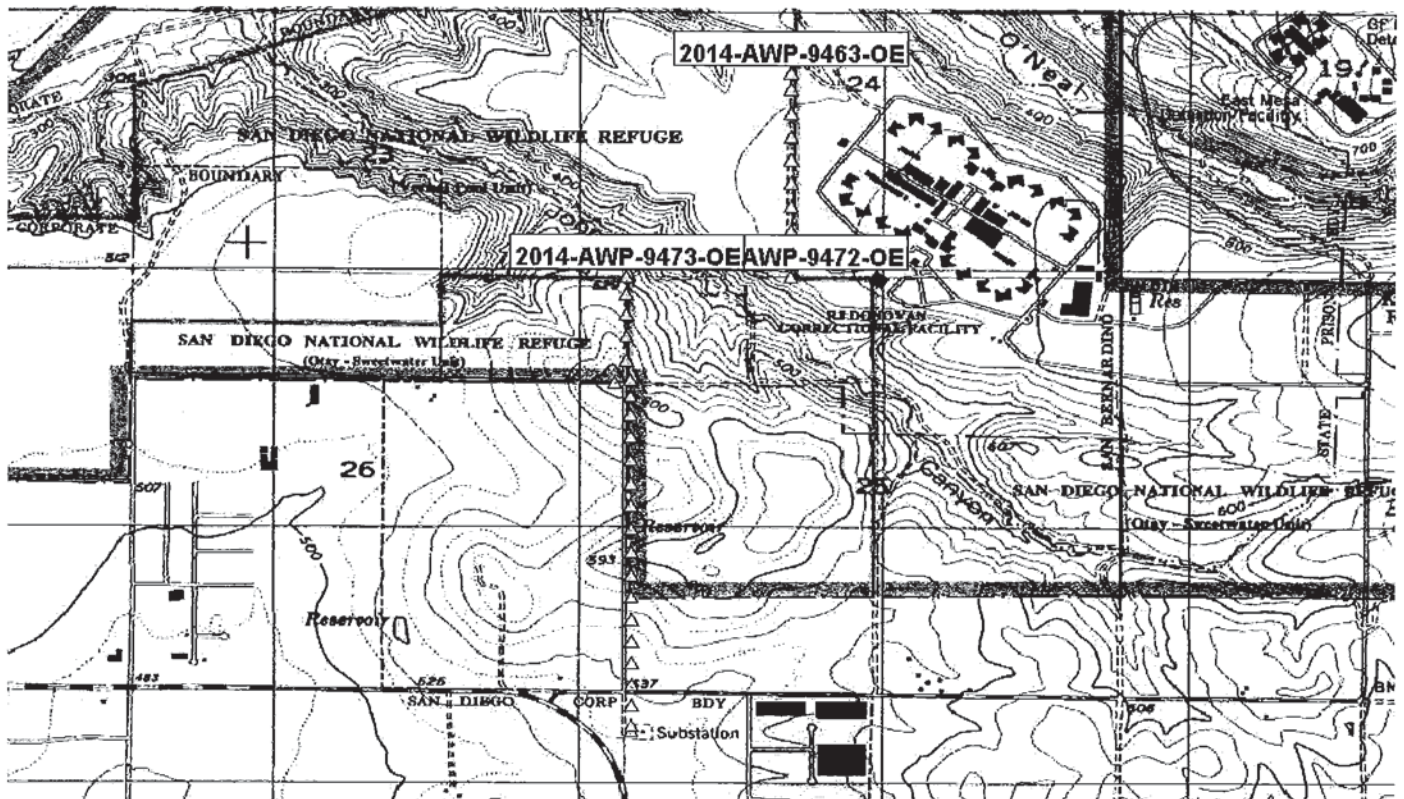
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9471-OE

Replacing and increasing the height of an existing 61 ft. AGL wood 69kV transmission pole with a 66 ft. AGL steel 69kV transmission pole.

Verified Map for ASN 2014-AWP-9471-OE



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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9472-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31744 - TL649
Location:	San Diego, CA
Latitude:	32-34-55.61N NAD 83
Longitude:	116-56-21.68W
Heights:	555 feet site elevation (SE) 85 feet above ground level (AGL) 640 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9472-OE.

Signature Control No: 236531611-244358071

(DNE)

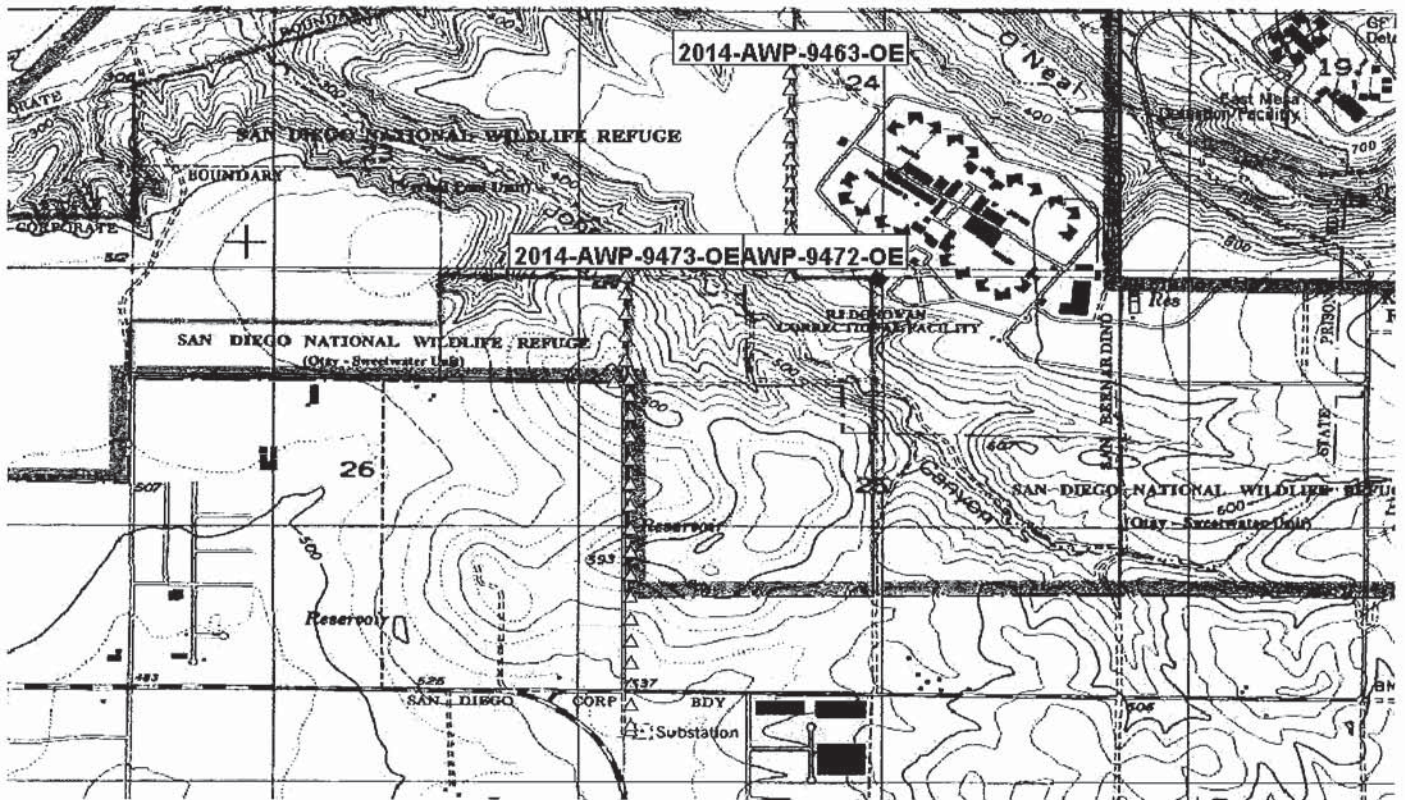
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9472-OE

Replacing and increasing the height of an existing 56 ft. AGL wood 69kV transmission pole with a 85 ft. AGL steel 69kV transmission pole.

Verified Map for ASN 2014-AWP-9472-OE





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Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9473-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31745 - TL649
Location:	San Diego, CA
Latitude:	32-34-55.61N NAD 83
Longitude:	116-56-42.33W
Heights:	531 feet site elevation (SE) 90 feet above ground level (AGL) 621 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9473-OE.

Signature Control No: 236531612-244358079

(DNE)

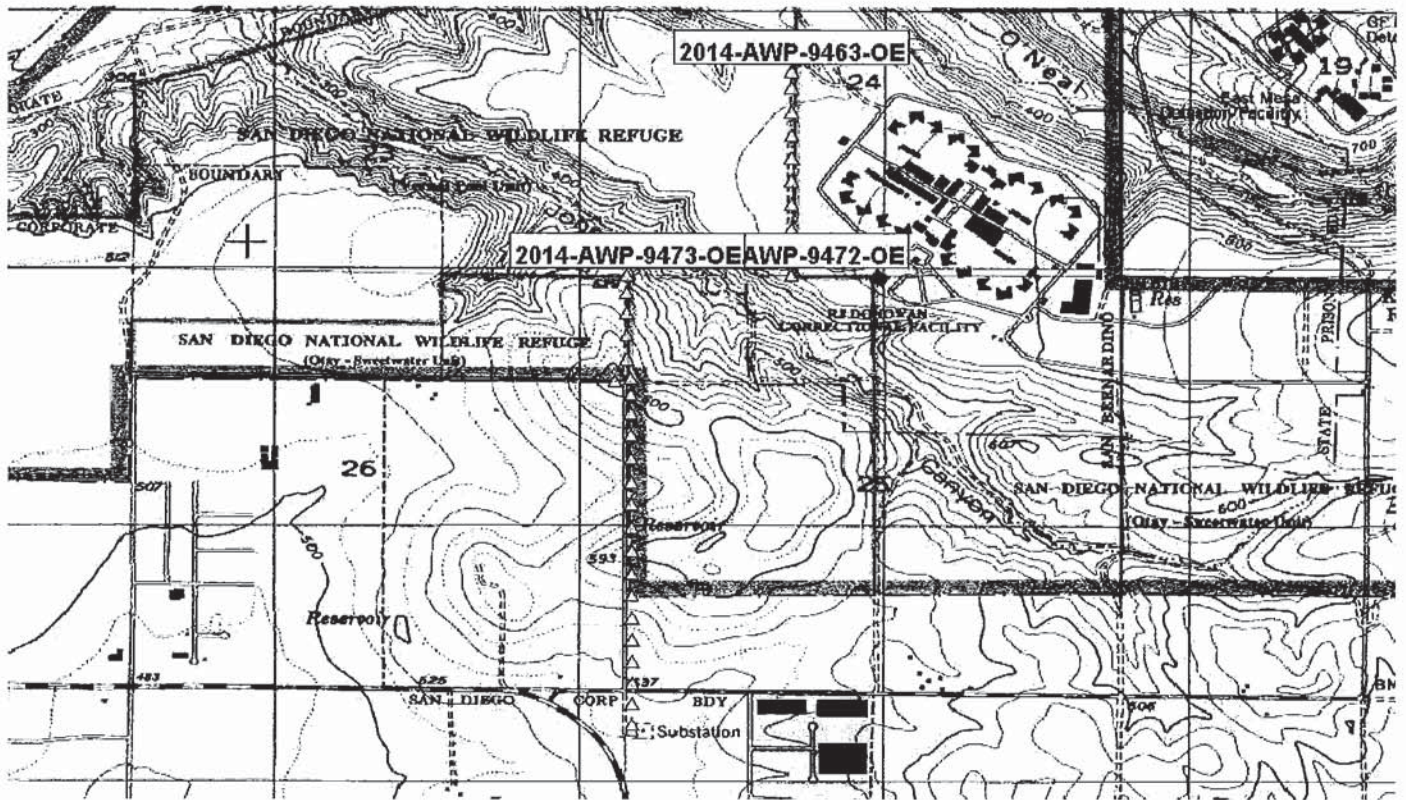
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9473-OE

Replacing and increasing the height of an existing 58 ft. AGL wood 69kV transmission pole with a steel 90 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9473-OE





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Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9474-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31746 - TL649
Location:	San Diego, CA
Latitude:	32-34-53.42N NAD 83
Longitude:	116-56-42.34W
Heights:	545 feet site elevation (SE) 75 feet above ground level (AGL) 620 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9474-OE.

Signature Control No: 236531613-244358068

(DNE)

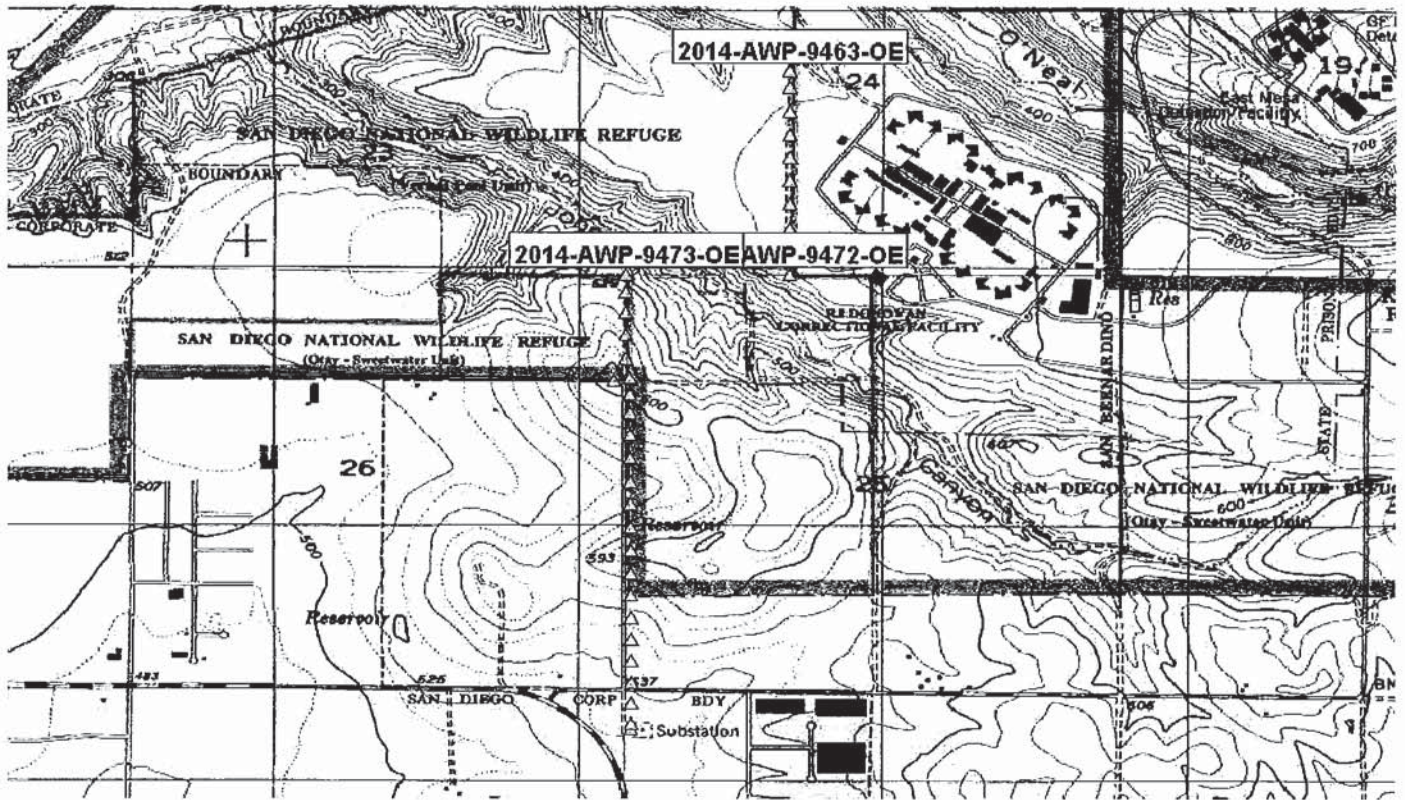
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9474-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a steel 75 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9474-OE





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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9475-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31747 - TL649
Location:	San Diego, CA
Latitude:	32-34-50.85N NAD 83
Longitude:	116-56-42.34W
Heights:	560 feet site elevation (SE) 70 feet above ground level (AGL) 630 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9475-OE.

Signature Control No: 236531614-244358069

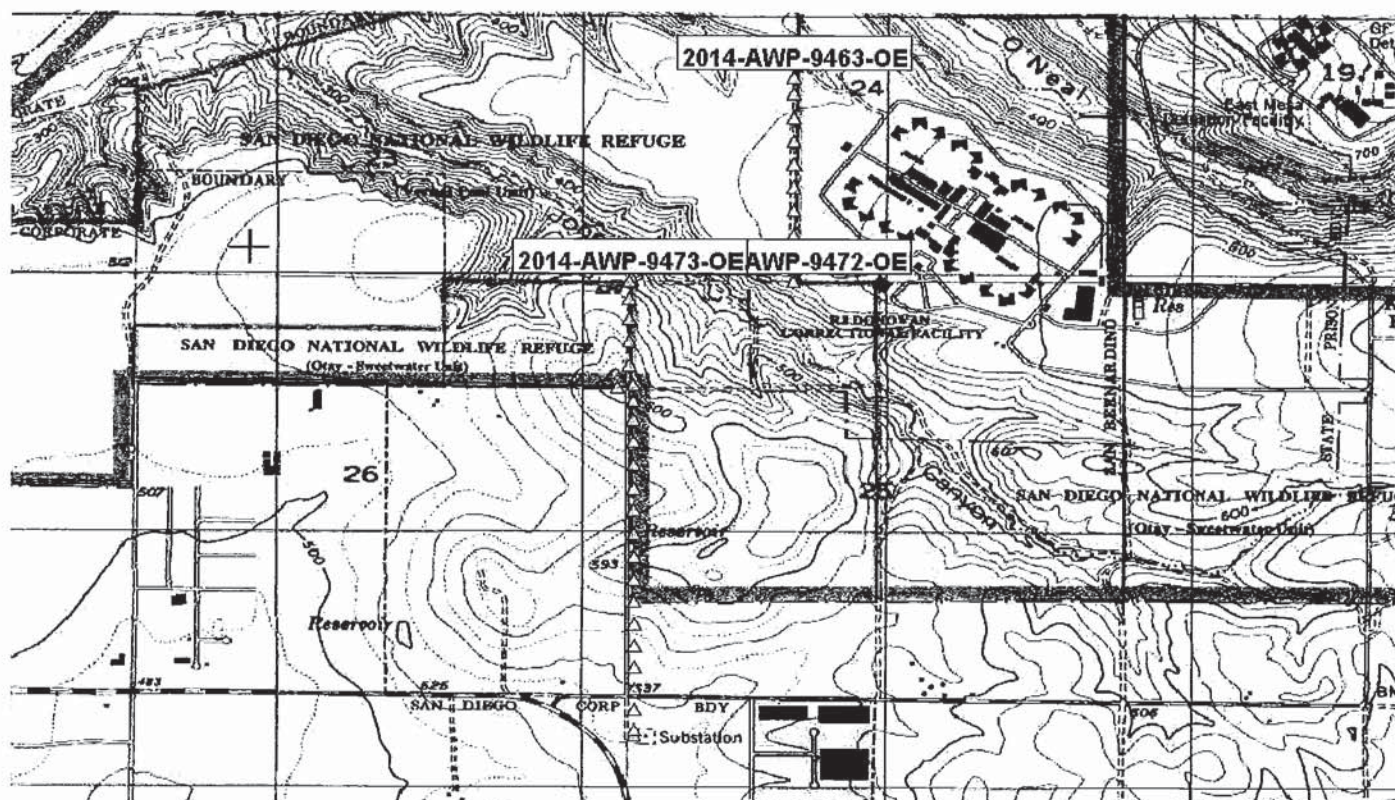
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9475-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a steel 70 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9475-OE



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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9476-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31748 - TL649
Location:	San Diego, CA
Latitude:	32-34-48.02N NAD 83
Longitude:	116-56-42.33W
Heights:	576 feet site elevation (SE) 79 feet above ground level (AGL) 655 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9476-OE.

Signature Control No: 236531615-244358077

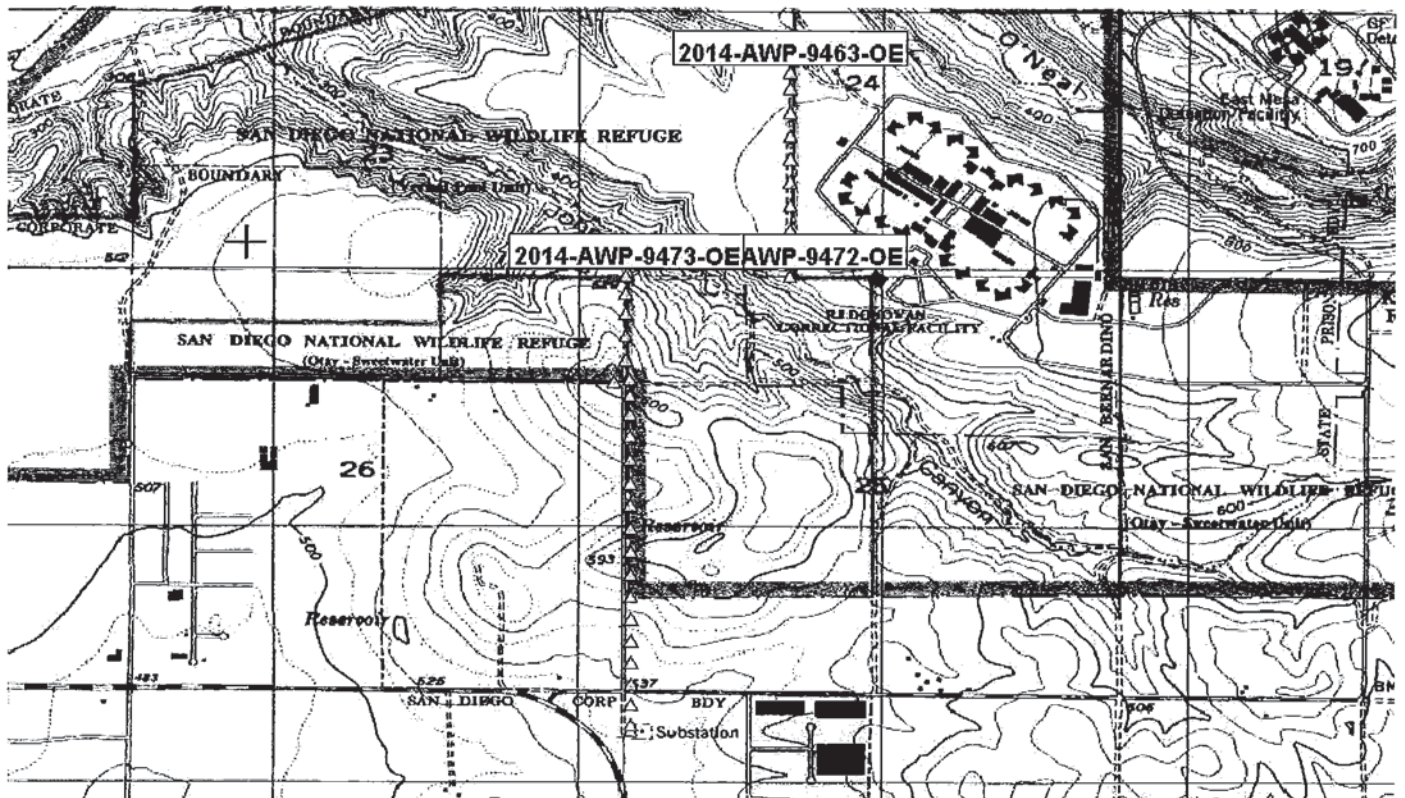
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9476-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a steel 79 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9476-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9477-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31749 - TL649
Location:	San Diego, CA
Latitude:	32-34-45.03N NAD 83
Longitude:	116-56-42.33W
Heights:	593 feet site elevation (SE) 70 feet above ground level (AGL) 663 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9477-OE.

Signature Control No: 236531616-244358066

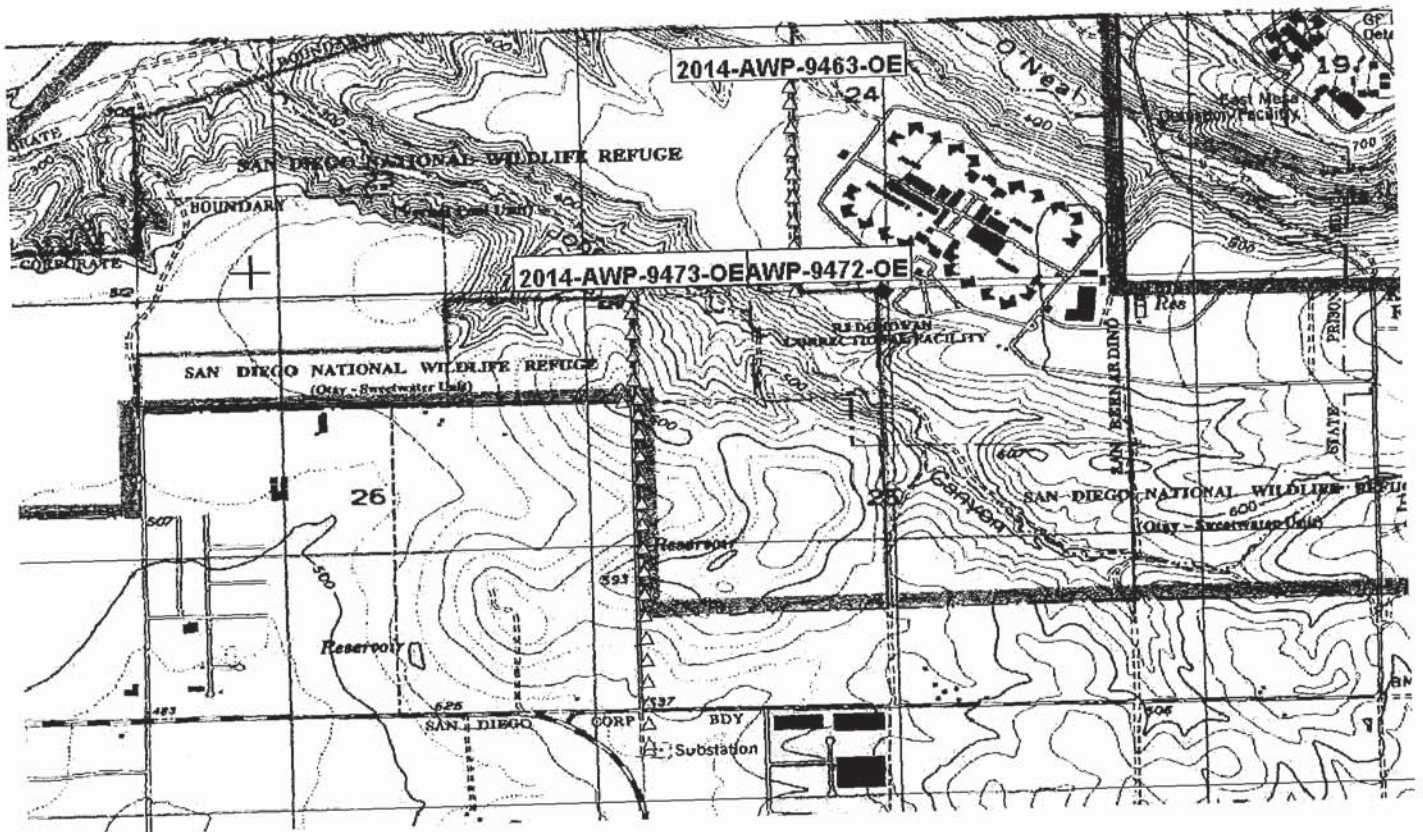
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9477-OE

Replacing and increasing the height of an existing 55 ft. AGL wood 69kV transmission pole with a steel 70 ft. AGL 69kV transmission pole.





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Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9478-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31750 - TL649
Location:	San Diego, CA
Latitude:	32-34-42.57N NAD 83
Longitude:	116-56-41.86W
Heights:	604 feet site elevation (SE) 70 feet above ground level (AGL) 674 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9478-OE.

Signature Control No: 236531617-244358065

(DNE)

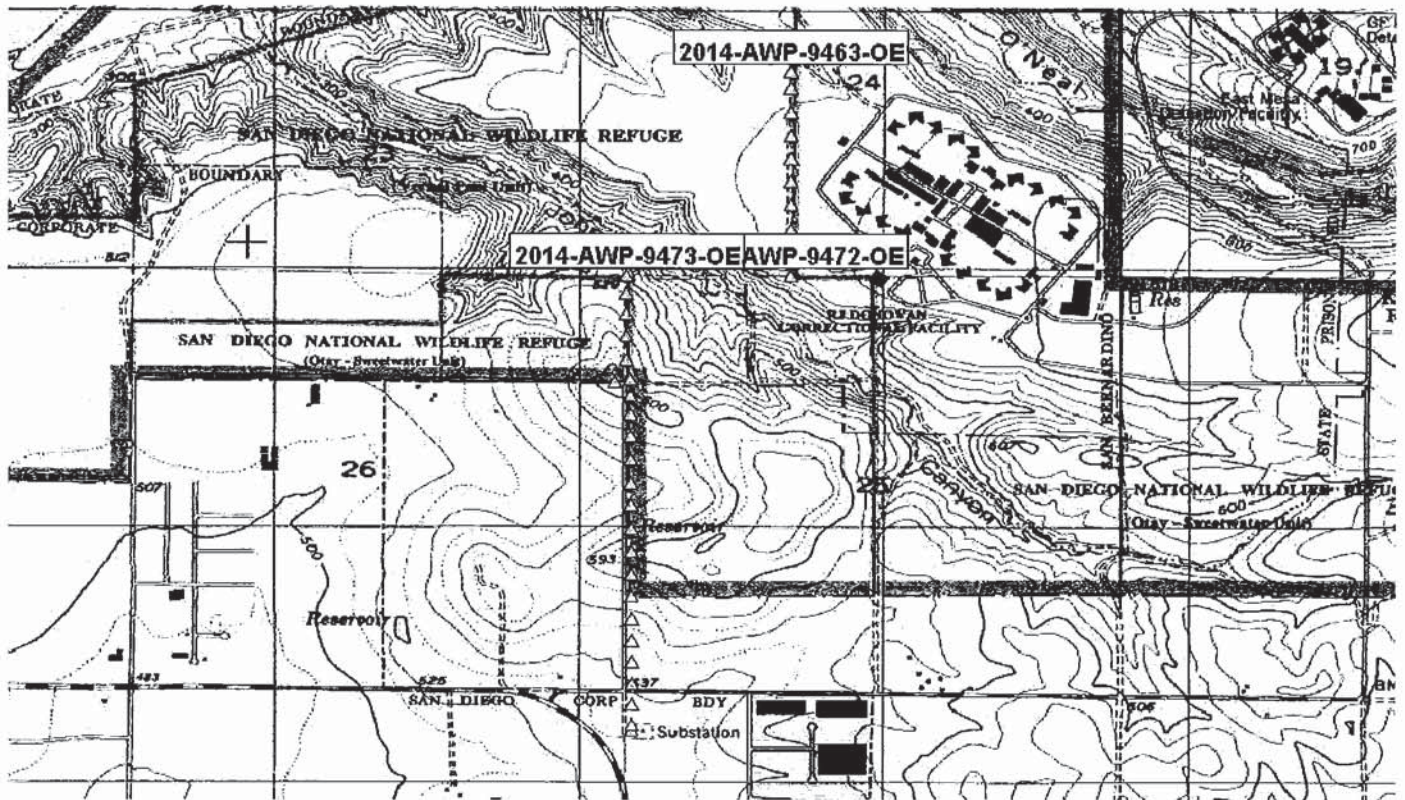
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9478-OE

Replacing and increasing the height of an existing 51 ft. AGL wood 69kV transmission pole with a steel 70 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9478-OE





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Aeronautical Study No.
2014-AWP-9479-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Utility Pole P89151 - C534
Location:	San Diego, CA
Latitude:	32-34-42.27N NAD 83
Longitude:	116-56-43.84W
Heights:	611 feet site elevation (SE) 39 feet above ground level (AGL) 650 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

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- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9479-OE.

Signature Control No: 236531618-244358076

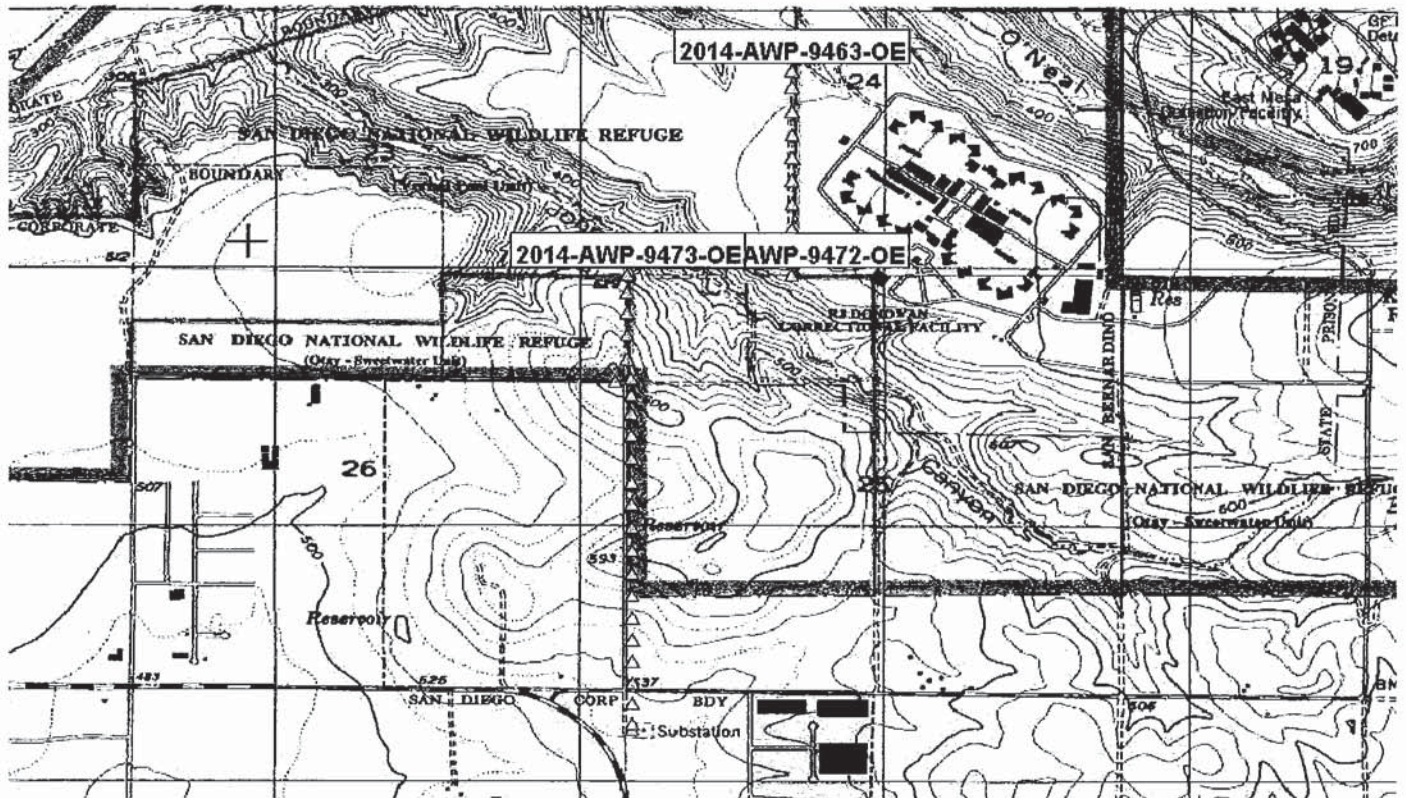
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9479-OE

Replacing and increasing the height of an existing 34 ft. AGL wood distribution pole with a steel 39 ft. AGL distribution pole.

Verified Map for ASN 2014-AWP-9479-OE



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Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9480-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31751 - TL649
Location:	San Diego, CA
Latitude:	32-34-40.48N NAD 83
Longitude:	116-56-41.82W
Heights:	607 feet site elevation (SE) 66 feet above ground level (AGL) 673 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9480-OE.

Signature Control No: 236531619-244358070

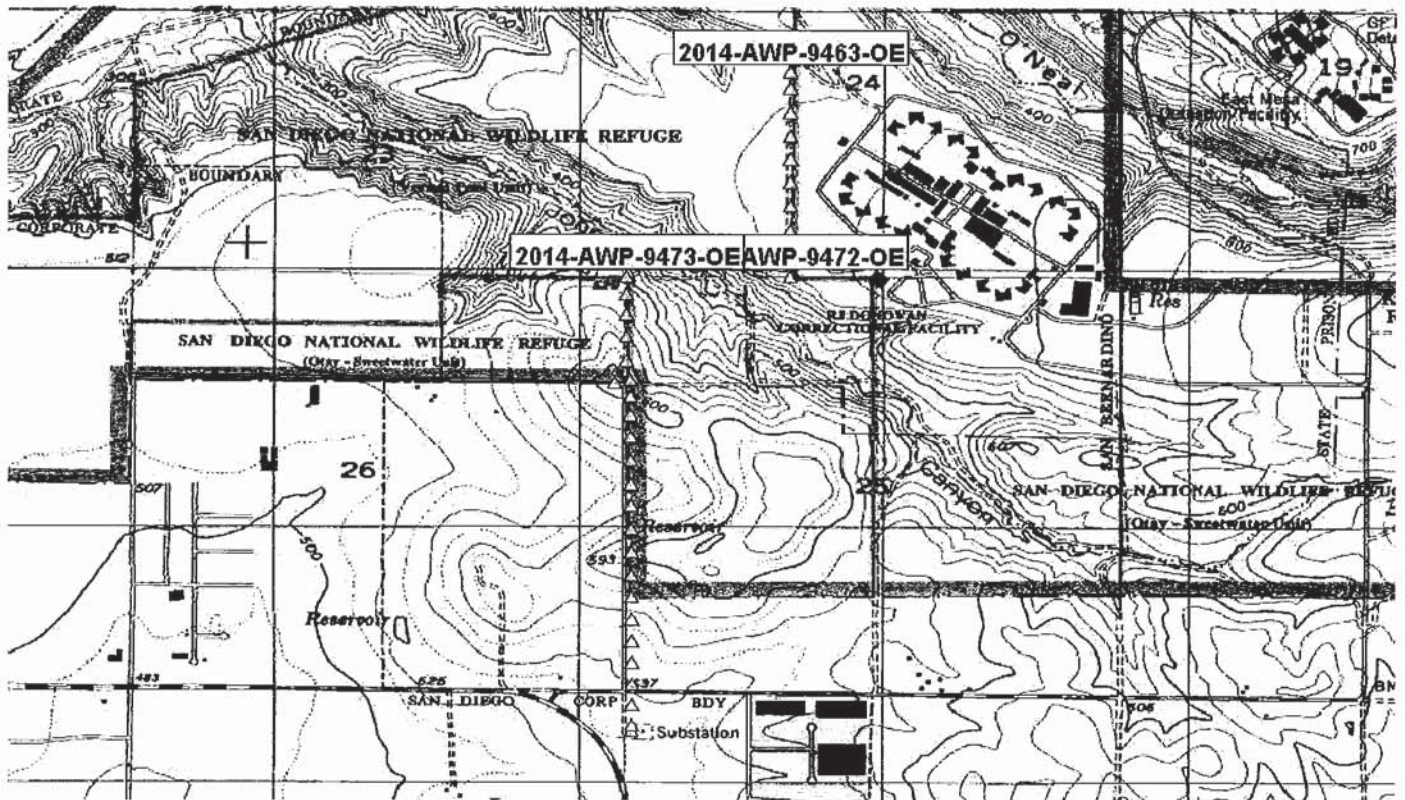
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9480-OE

Replacing and increasing the height of an existing 56 ft. AGL wood 69kV transmission pole with a steel 66 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9480-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9481-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31752 - TL649
Location:	San Diego, CA
Latitude:	32-34-38.24N NAD 83
Longitude:	116-56-41.81W
Heights:	598 feet site elevation (SE) 66 feet above ground level (AGL) 664 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9481-OE.

Signature Control No: 236531620-244358072

(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9481-OE

Replacing and increasing the height of an existing 55 ft. AGL wood 69kV transmission pole with a steel 66 ft. AGL 69kV transmission pole.

This topographic map shows the San Diego National Wildlife Refuge, which is divided into several units including the Gray-Sweetwater Unit, the O'Neal Unit, and the Canyon Unit. The refuge is bordered by the San Diego County and Imperial County. To the east of the refuge is the Red Swan Correctional Facility, and further east is the San Bernardino State Prison. The map includes contour lines indicating elevation, a grid system, and various geographical features such as the San Diego River and the San Diego Bay. A scale bar is provided at the bottom left, and a north arrow is located at the bottom center. The map is labeled with various coordinates and grid numbers, including 2014-AWP-9463-OE, 2014-AWP-9473-OE, and 2014-AWP-9472-OE.



Mail Processing Center
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Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9482-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31753 - TL649
Location:	San Diego, CA
Latitude:	32-34-35.39N NAD 83
Longitude:	116-56-41.79W
Heights:	584 feet site elevation (SE) 70 feet above ground level (AGL) 654 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

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- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9482-OE.

Signature Control No: 236531621-244358078

(DNE)

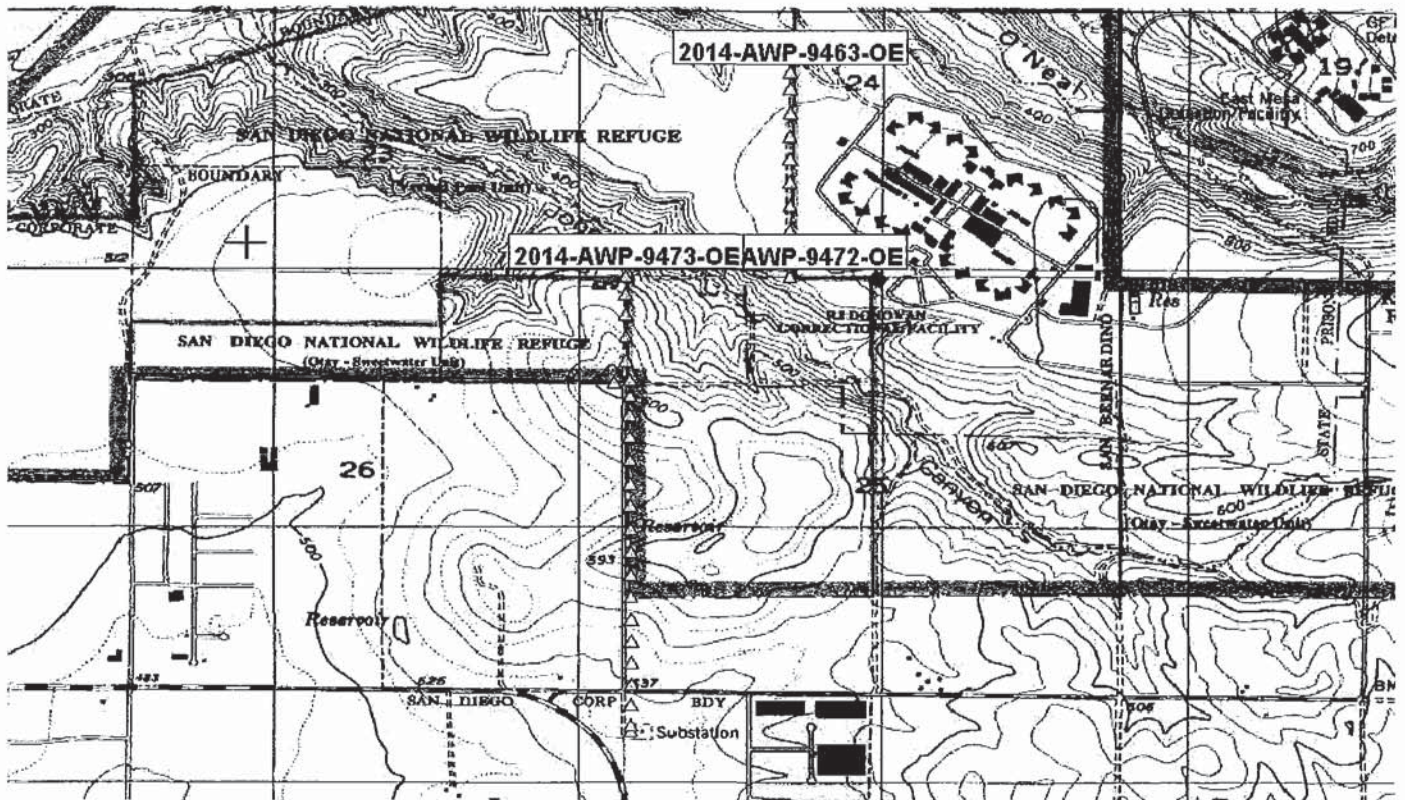
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9482-OE

Replacing and increasing the height of an existing 56 ft. AGL wood 69kV transmission pole with a steel 70 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9482-OE





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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9483-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31754 - TL649
Location:	San Diego, CA
Latitude:	32-34-32.44N NAD 83
Longitude:	116-56-41.77W
Heights:	568 feet site elevation (SE) 75 feet above ground level (AGL) 643 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9483-OE.

Signature Control No: 236531622-244358104

(DNE)

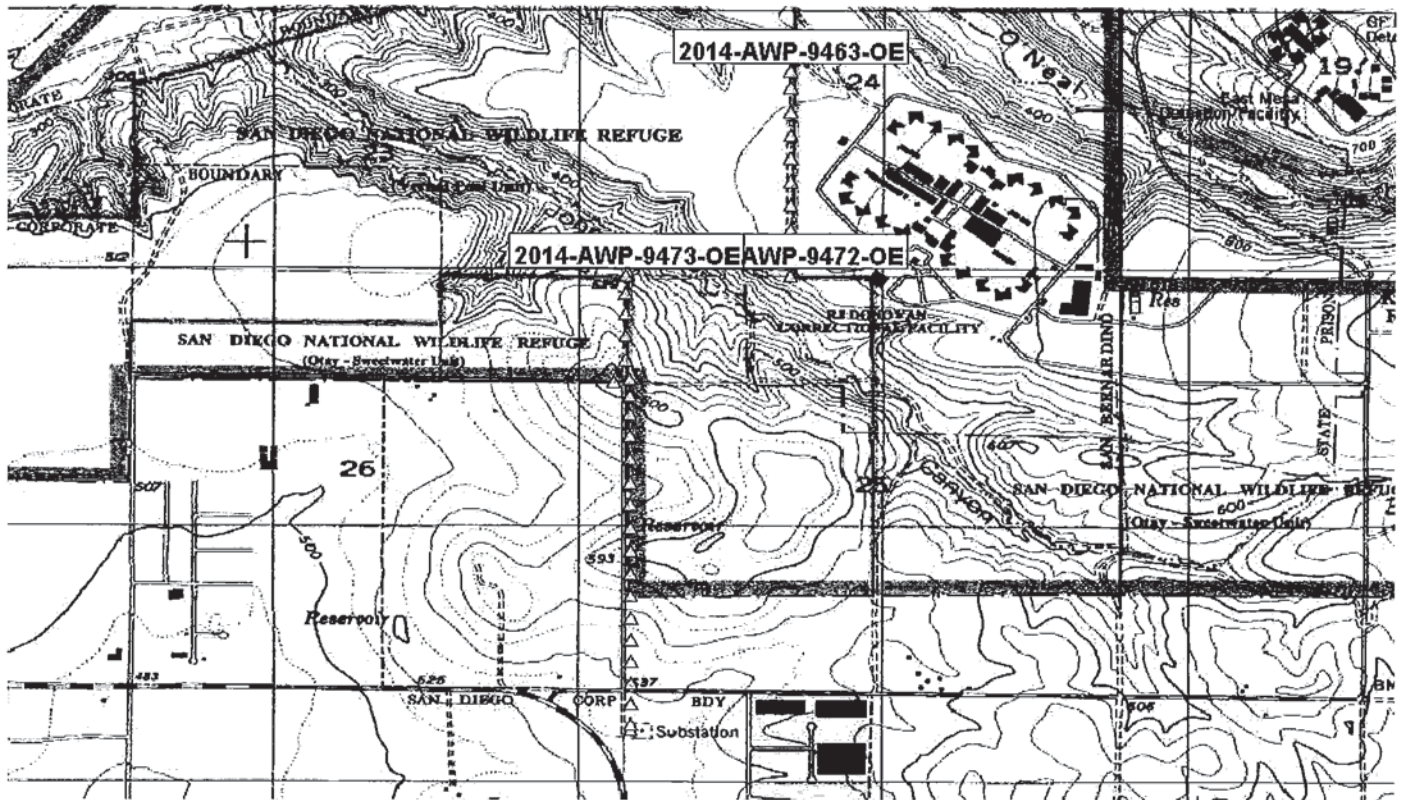
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9483-OE

Replacing and increasing the height of an existing 55 ft. AGL wood 69kV transmission pole with a steel 75 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9483-OE





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9484-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31755 - TL649
Location:	San Diego, CA
Latitude:	32-34-29.46N NAD 83
Longitude:	116-56-41.75W
Heights:	557 feet site elevation (SE) 70 feet above ground level (AGL) 627 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9484-OE.

Signature Control No: 236531623-244358105

(DNE)

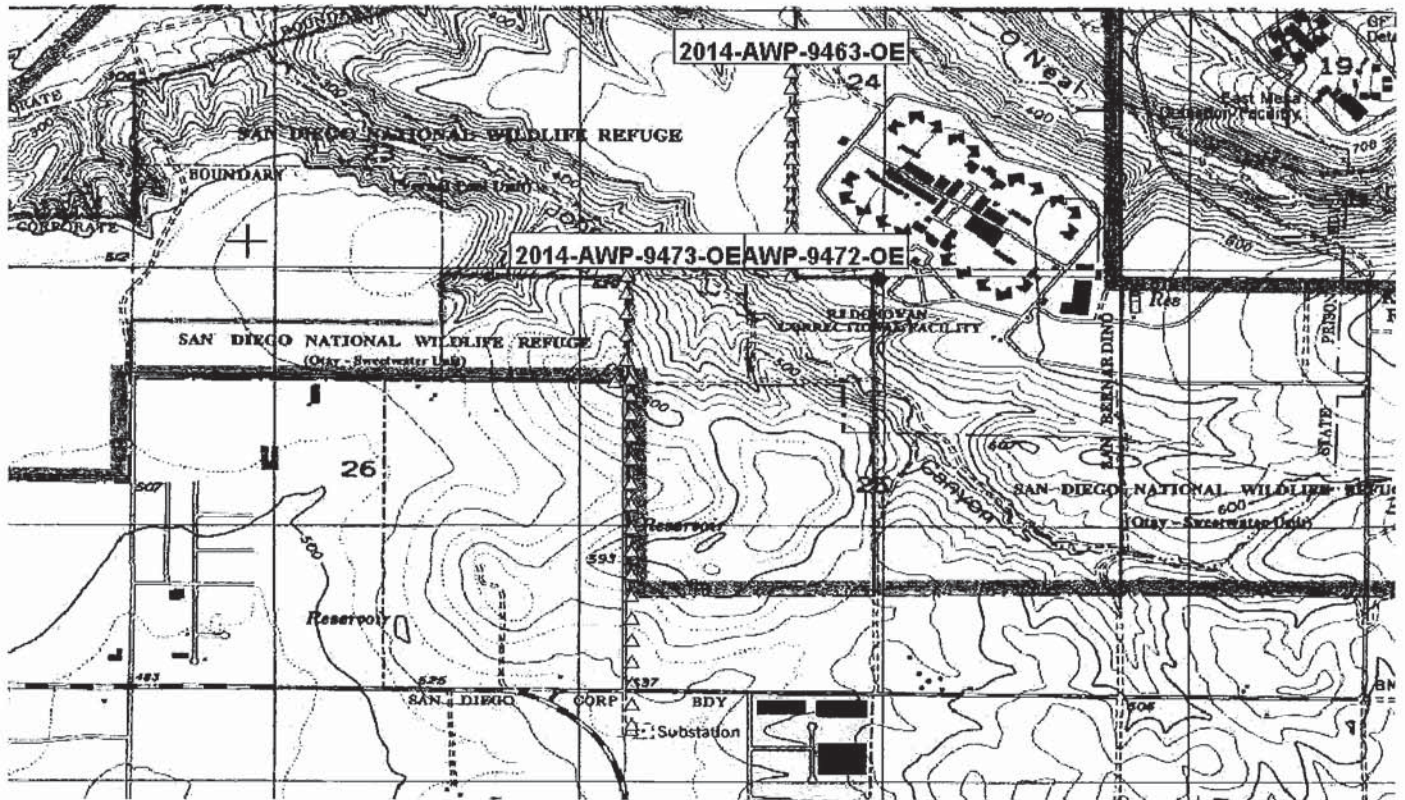
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9484-OE

Replacing and increasing the height of an existing 56 ft. AGL wood 69kV transmission pole with a steel 70 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9484-OE





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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9485-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31756 - TL649
Location:	San Diego, CA
Latitude:	32-34-26.69N NAD 83
Longitude:	116-56-41.74W
Heights:	562 feet site elevation (SE) 70 feet above ground level (AGL) 632 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9485-OE.

Signature Control No: 236531624-244358106

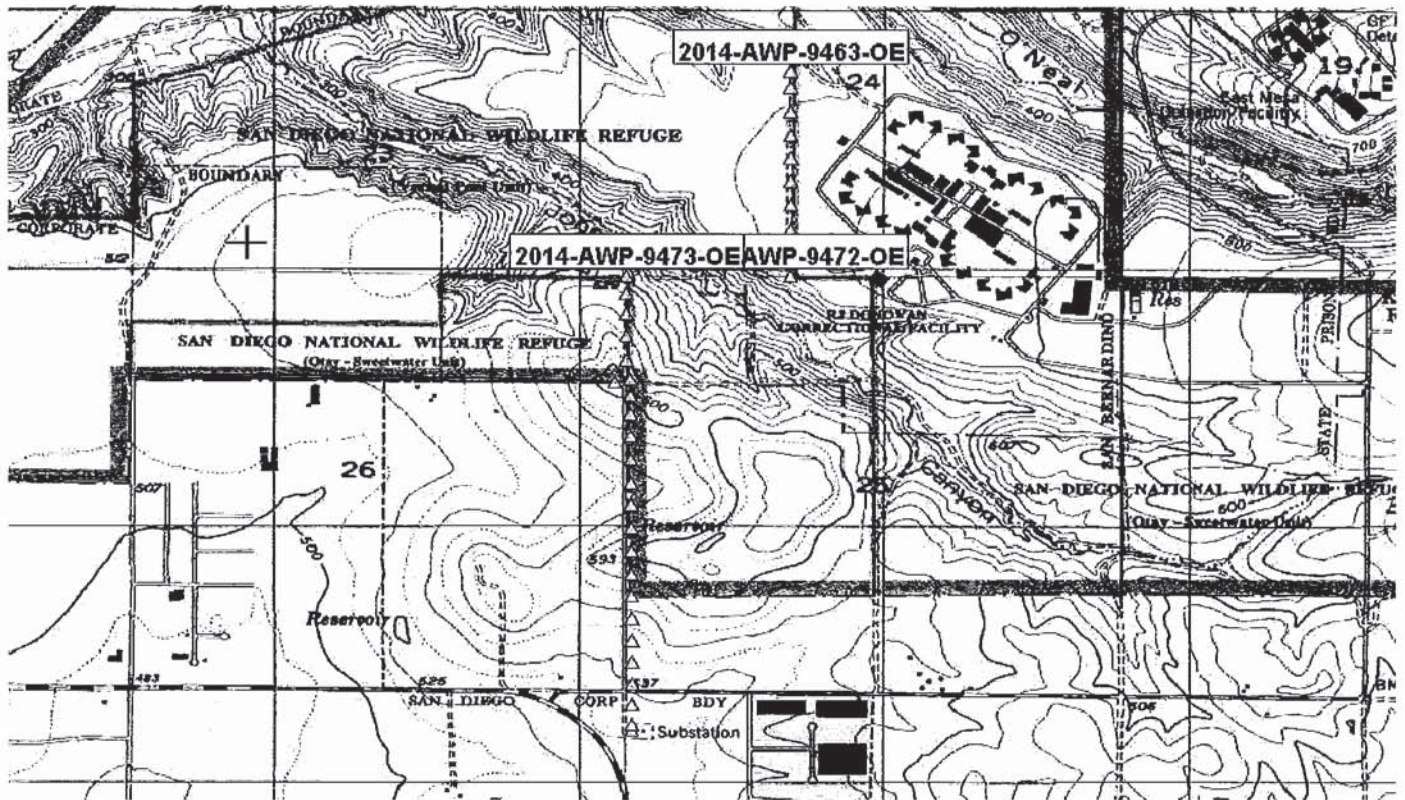
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9485-OE

Replacing and increasing the height of an existing 56 ft. AGL wood 69kV transmission pole with a steel 70 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9485-OE



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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9486-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31757 - TL649
Location:	San Diego, CA
Latitude:	32-34-23.71N NAD 83
Longitude:	116-56-41.72W
Heights:	578 feet site elevation (SE) 79 feet above ground level (AGL) 657 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9486-OE.

Signature Control No: 236531625-244358108

(DNE)

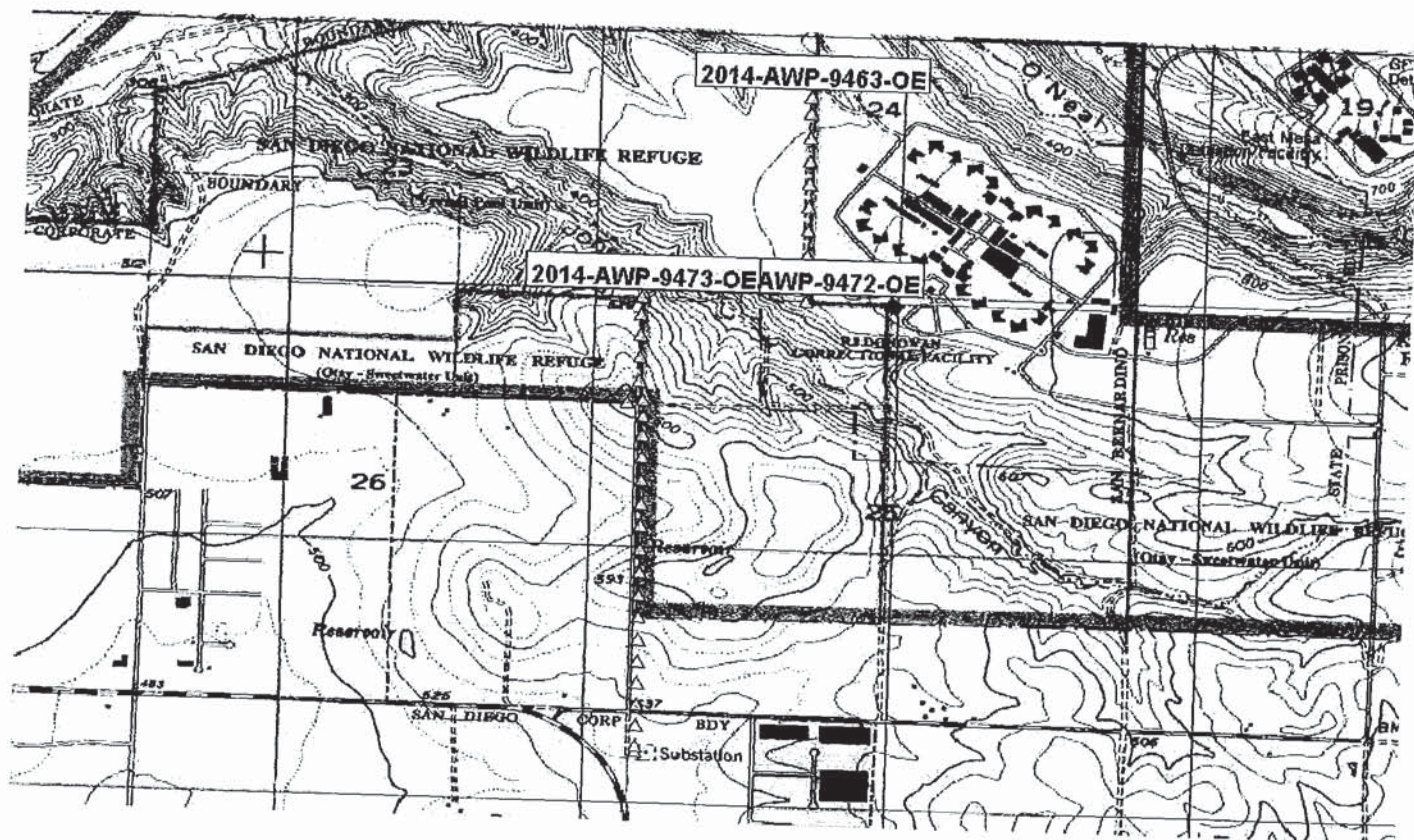
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9486-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a steel 79 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9486-OE





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9487-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31758 - TL649
Location:	San Diego, CA
Latitude:	32-34-20.79N NAD 83
Longitude:	116-56-41.70W
Heights:	599 feet site elevation (SE) 75 feet above ground level (AGL) 674 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- ☐ At least 10 days prior to start of construction (7460-2, Part 1)
☒ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 08/27/2016 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9487-OE.

Signature Control No: 236531626-244358110

(DNE)

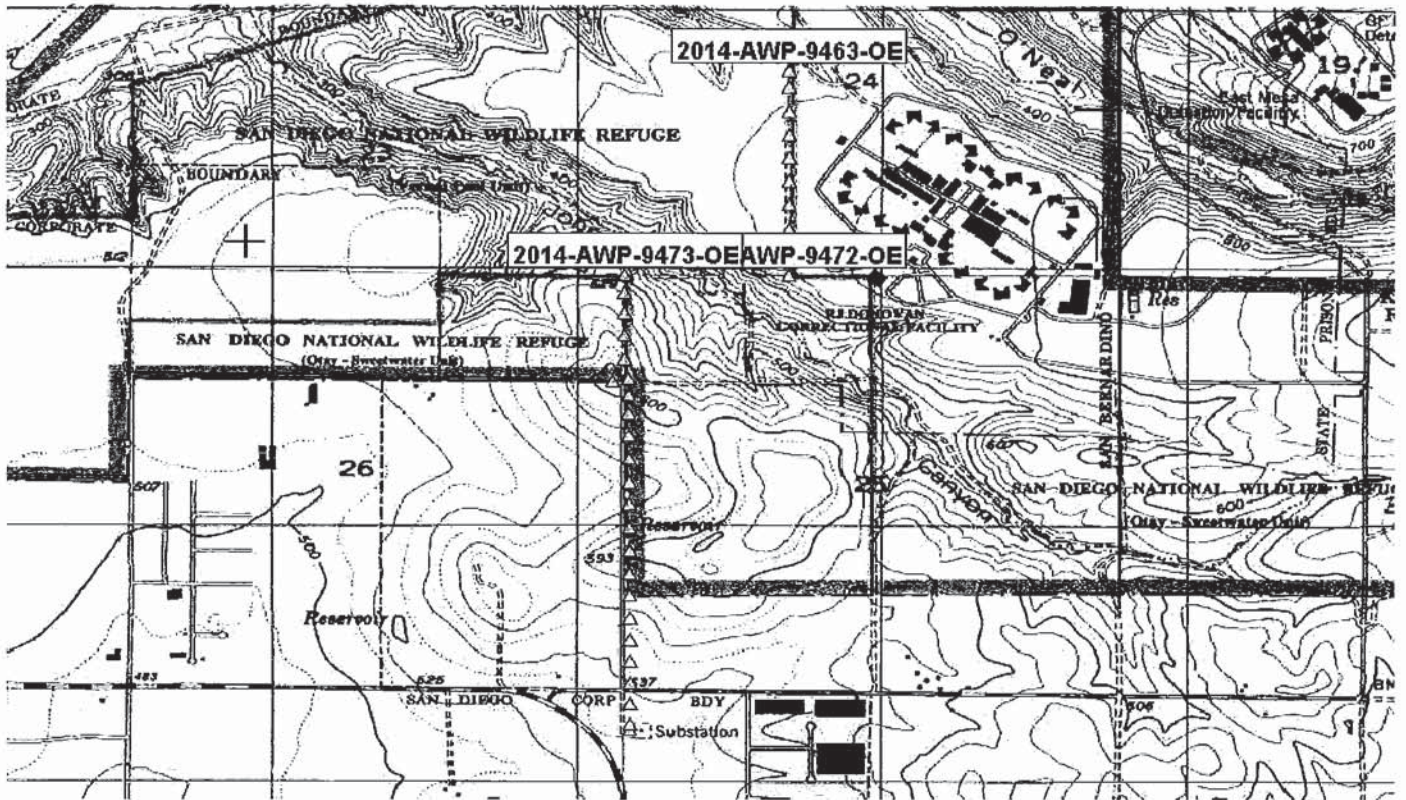
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9487-OE

Replacing and increasing the height of an existing 57 ft. AGL wood 69kV transmission pole with a steel 75 ft. AGL 69kV transmission pole.

Verified Map for ASN 2014-AWP-9487-OE





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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9488-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31759 - TL649
Location:	San Diego, CA
Latitude:	32-34-17.87N NAD 83
Longitude:	116-56-41.68W
Heights:	586 feet site elevation (SE) 70 feet above ground level (AGL) 656 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 70 feet above ground level (656 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9488-OE.

Signature Control No: 236531627-244357643

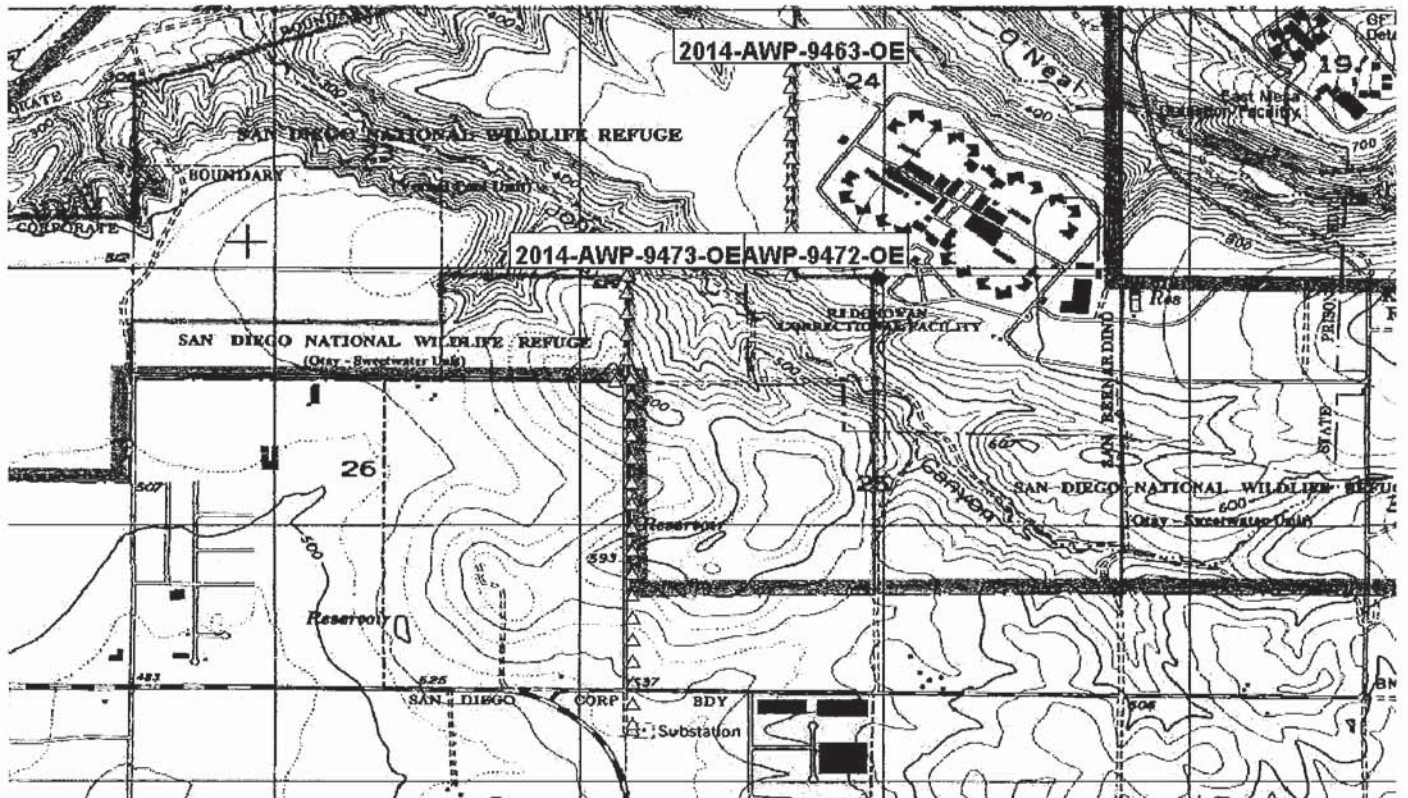
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9488-OE

Please review this existing 70 ft. AGL 69kV transmission structure in conjunction with this larger project. No changes will be made to this structure.

Verified Map for ASN 2014-AWP-9488-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
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Aeronautical Study No.
2014-AWP-9489-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31760 - TL649
Location:	San Diego, CA
Latitude:	32-34-15.11N NAD 83
Longitude:	116-56-41.67W
Heights:	569 feet site elevation (SE) 57 feet above ground level (AGL) 626 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 57 feet above ground level (626 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9489-OE.

Signature Control No: 236531628-244357642

(DNE)

Karen McDonald

Specialist

Attachment(s)

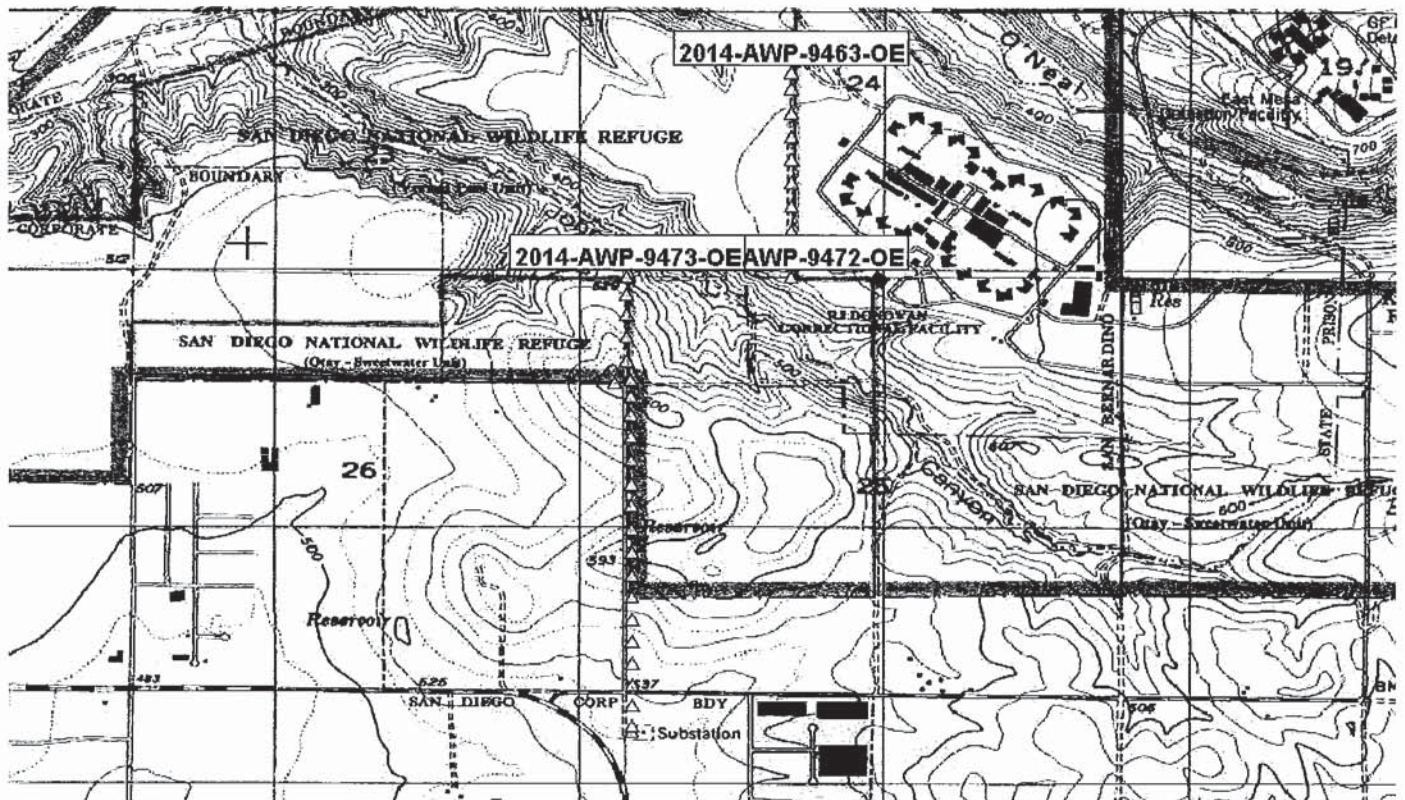
Case Description

Map(s)

Case Description for ASN 2014-AWP-9489-OE

Please review this existing 57 ft. AGL 69kV transmission structure in conjunction with this larger project. No changes will be made to this structure.

Verified Map for ASN 2014-AWP-9489-OE





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9490-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31761 - TL649
Location:	San Diego, CA
Latitude:	32-34-12.34N NAD 83
Longitude:	116-56-41.65W
Heights:	556 feet site elevation (SE) 56 feet above ground level (AGL) 612 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 56 feet above ground level (612 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9490-OE.

Signature Control No: 236531629-244357638

(DNE)

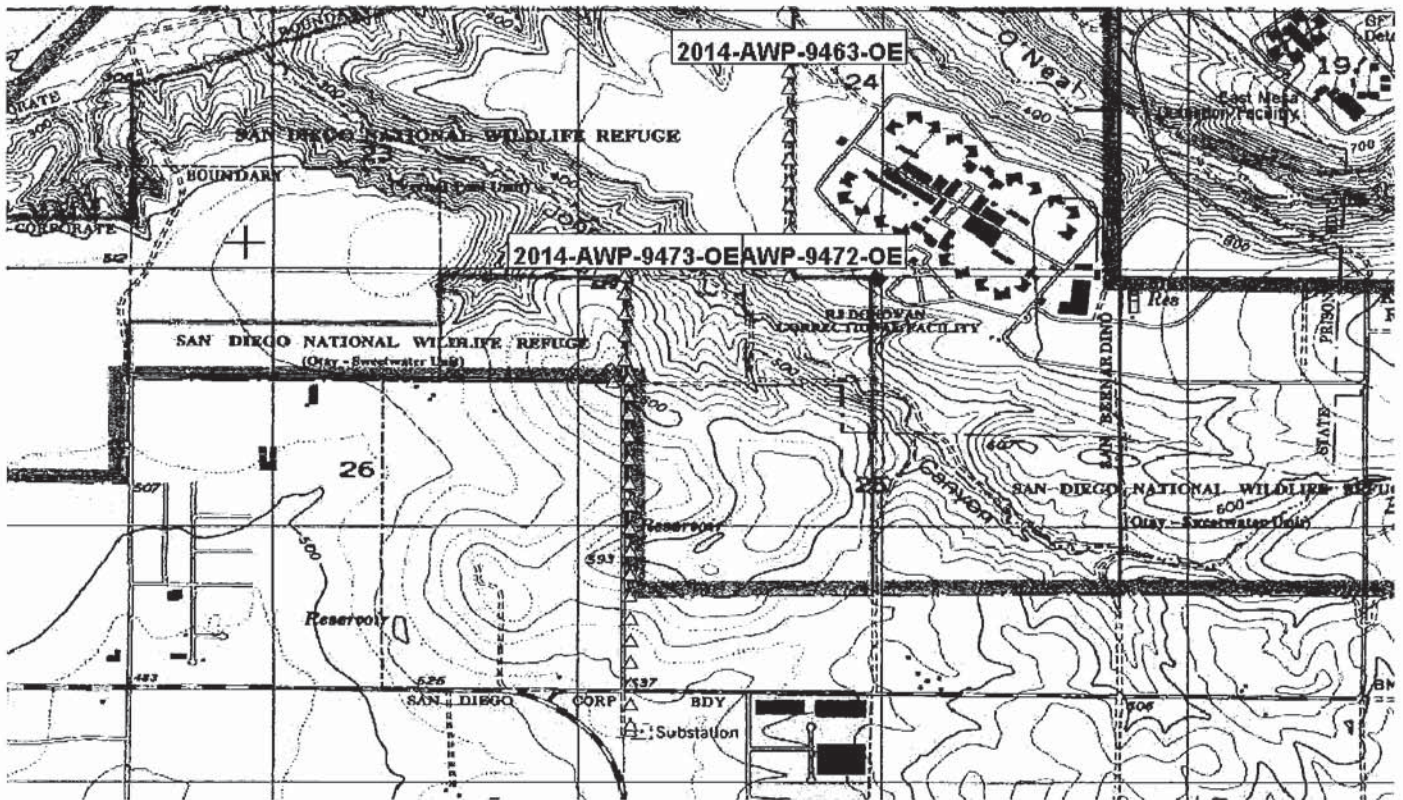
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9490-OE

Please review this existing 56 ft. AGL 69kV transmission structure in conjunction with this larger project. No changes will be made to this structure.

Verified Map for ASN 2014-AWP-9490-OE





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
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Aeronautical Study No.
2014-AWP-9491-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31762 - TL649
Location:	San Diego, CA
Latitude:	32-34-09.56N NAD 83
Longitude:	116-56-41.63W
Heights:	549 feet site elevation (SE) 56 feet above ground level (AGL) 605 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 56 feet above ground level (605 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9491-OE.

Signature Control No: 236531630-244357641

(DNE)

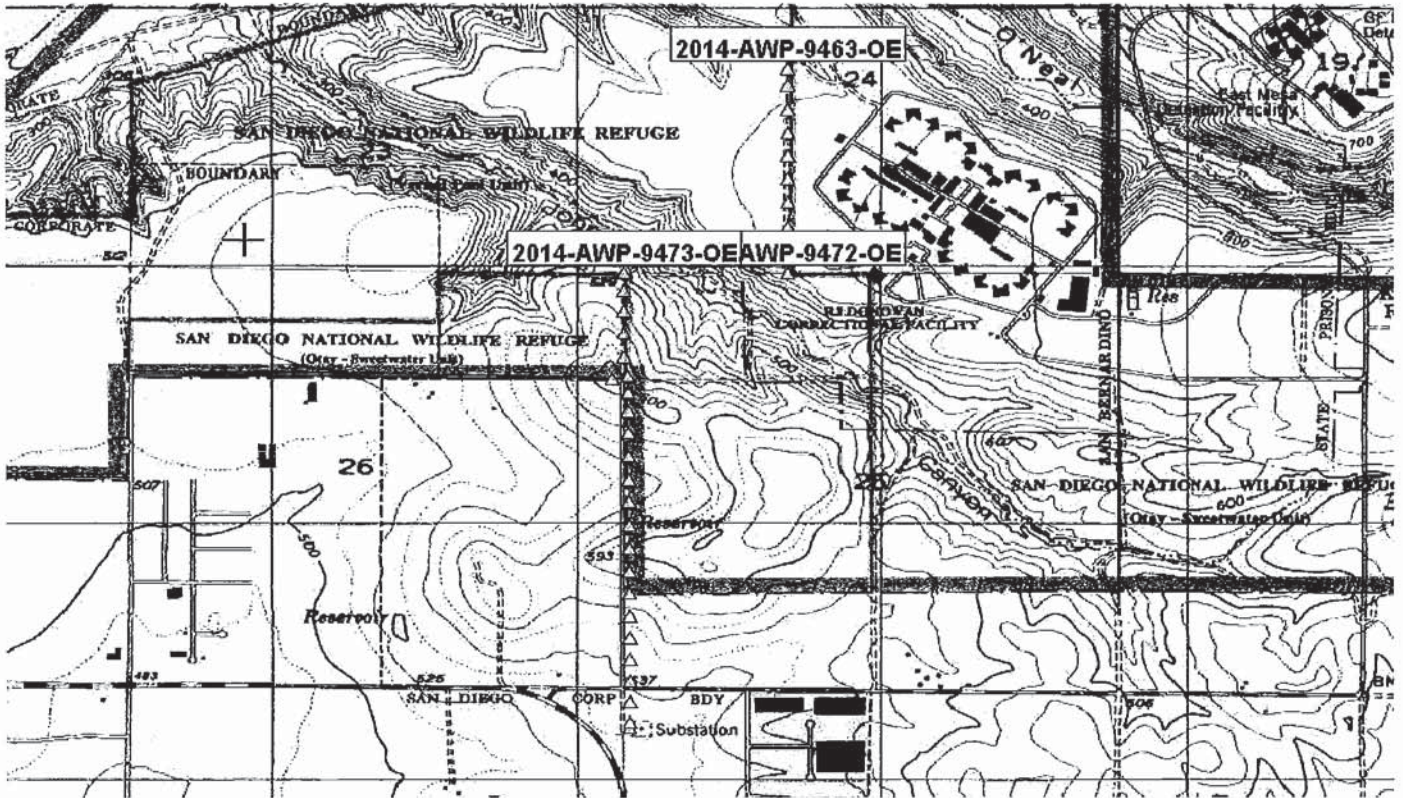
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9491-OE

Please review this existing 56 ft. AGL 69kV transmission structure in conjunction with this larger project. No changes will be made to this structure.

Verified Map for ASN 2014-AWP-9491-OE





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-9492-OE

Issued Date: 02/27/2015

Joe Zulauf
San Diego Gas & Electric
8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31763 - TL649
Location:	San Diego, CA
Latitude:	32-34-06.80N NAD 83
Longitude:	116-56-41.62W
Heights:	546 feet site elevation (SE) 57 feet above ground level (AGL) 603 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 57 feet above ground level (603 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9492-OE.

Signature Control No: 236531631-244357640

(DNE)

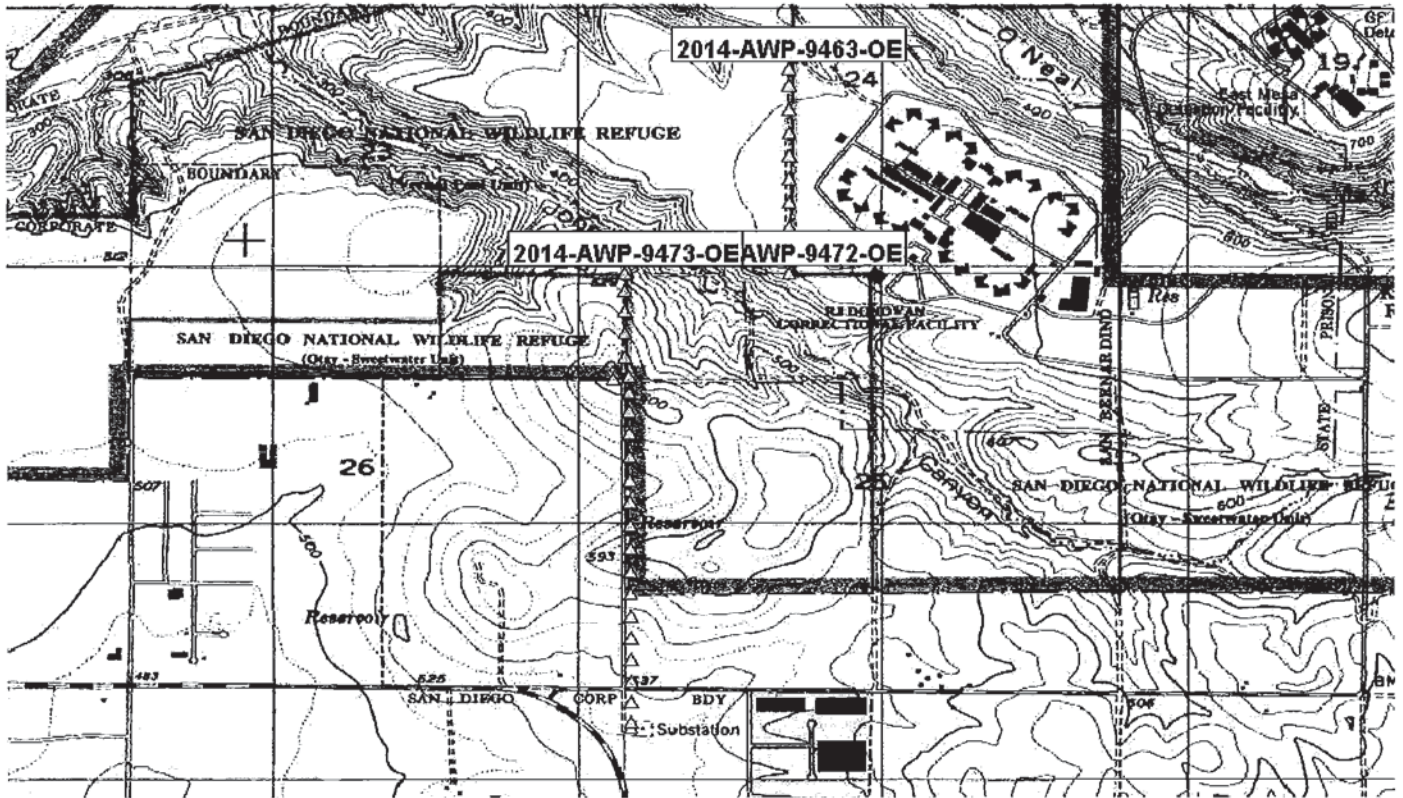
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9492-OE

Please review this existing 57 ft. AGL 69kV transmission structure in conjunction with this larger project. No changes will be made to this structure.

Verified Map for ASN 2014-AWP-9492-OE





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Southwest Regional Office
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Fort Worth, TX 76193

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2014-AWP-9493-OE

Issued Date: 02/27/2015

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**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31764 - TL649
Location:	San Diego, CA
Latitude:	32-34-04.05N NAD 83
Longitude:	116-56-41.60W
Heights:	543 feet site elevation (SE) 57 feet above ground level (AGL) 600 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 57 feet above ground level (600 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9493-OE.

Signature Control No: 236531632-244357636

(DNE)

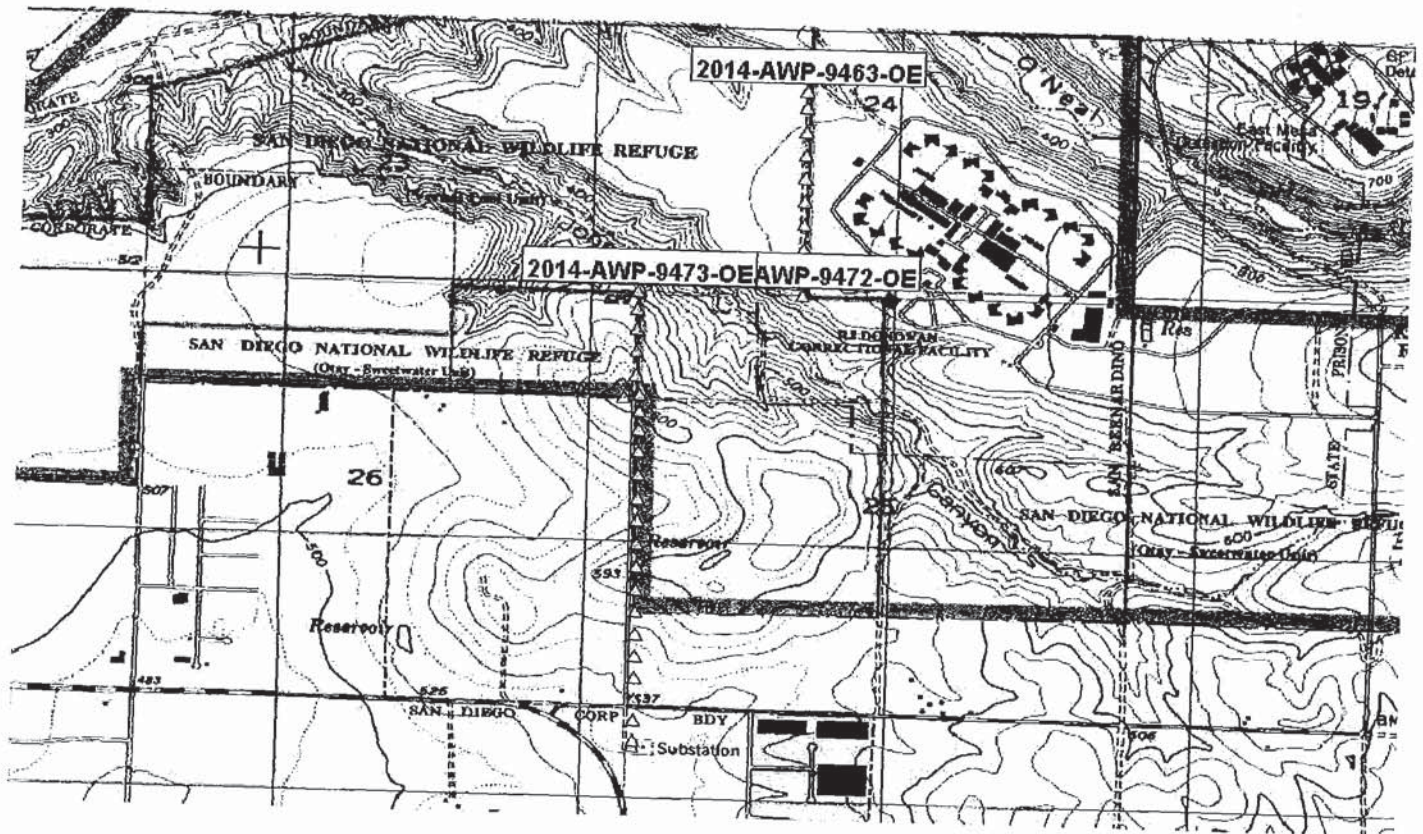
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9493-OE

Please review this existing 57 ft. AGL 69kV transmission structure in conjunction with this larger project. No changes will be made to this structure.

Verified Map for ASN 2014-AWP-9493-OE





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Southwest Regional Office
Obstruction Evaluation Group
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Aeronautical Study No.
2014-AWP-9494-OE

Issued Date: 02/27/2015

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**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31765 - TL649
Location:	San Diego, CA
Latitude:	32-34-01.46N NAD 83
Longitude:	116-56-41.63W
Heights:	543 feet site elevation (SE) 55 feet above ground level (AGL) 598 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 55 feet above ground level (598 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9494-OE.

Signature Control No: 236531633-244357639

(DNE)

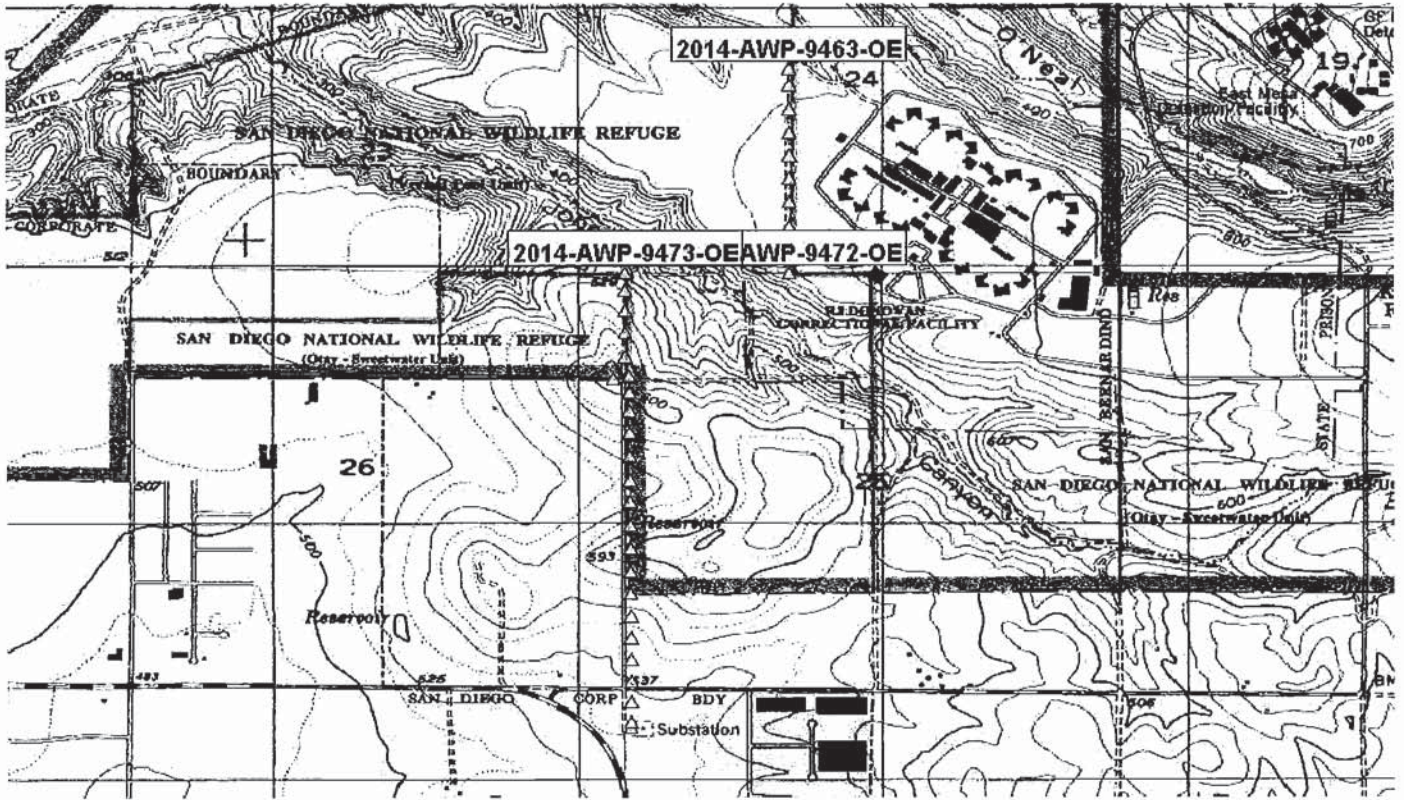
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9494-OE

Please review this existing 55 ft. AGL 69kV transmission structure in conjunction with this larger project. No changes will be made to this structure.

Verified Map for ASN 2014-AWP-9494-OE





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Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
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Aeronautical Study No.
2014-AWP-9495-OE

Issued Date: 02/27/2015

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8315 Century Park Ct., CP21C
San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z31766 - TL649
Location:	San Diego, CA
Latitude:	32-33-58.83N NAD 83
Longitude:	116-56-41.65W
Heights:	538 feet site elevation (SE) 58 feet above ground level (AGL) 596 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 58 feet above ground level (596 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9495-OE.

Signature Control No: 236531634-244357637

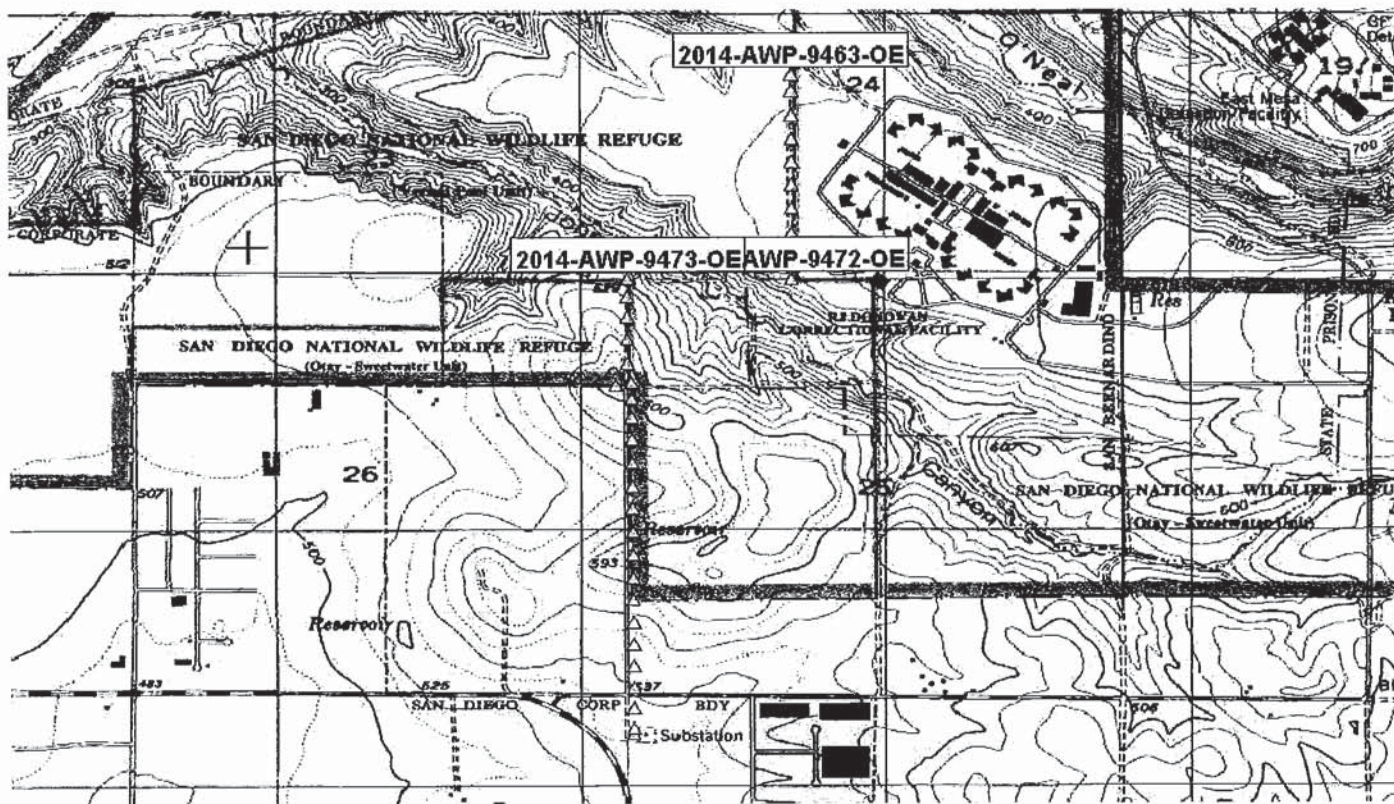
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9495-OE

Please review this existing 58 ft. AGL 69kV transmission structure in conjunction with this larger project. No changes will be made to this structure.

Verified Map for ASN 2014-AWP-9495-OE



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Aeronautical Study No.
2014-AWP-9496-OE

Issued Date: 02/27/2015

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San Diego, CA 92123

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Transmission Line Z100705 - TL649
Location:	San Diego, CA
Latitude:	32-33-58.13N NAD 83
Longitude:	116-56-41.66W
Heights:	537 feet site elevation (SE) 56 feet above ground level (AGL) 593 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 56 feet above ground level (593 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study included evaluation of a structure that exists at this time. Action will be taken to ensure aeronautical charts are updated to reflect the most current coordinates, elevation and height as indicated in the case description.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-9496-OE.

Signature Control No: 236531635-244357635

(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2014-AWP-9496-OE

Please review this existing 56 ft. AGL 69kV transmission structure in conjunction with this larger project. No changes will be made to this structure.

