



DEPARTMENT OF PLANNING AND BUILDING

THIS IS A NEW PROJECT REFERRAL

DATE: 3/11/2014

TO: \_\_\_\_\_

FROM: Ryan Hostetter (805-788-2351 or rhostetter@co.slo.ca.us)  
Coastal Team / Development Review

**PROJECT DESCRIPTION:** DRC2013-00080 UNION OIL – Proposed minor use permit for remediation facilities for hydrocarbon recovery in the Avila Terminal Cliff Area. Site location is 10 San Rafael St, Avila Beach. APN: 076-181-062

Return this letter with your comments attached no later than: 14 days from receipt of this referral. CACs please respond within 60 days. Thank you.

PART 1 - IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?

- YES (Please go on to PART II.)
- NO (Call me ASAP to discuss what else you need. We have only 10 days in which we must obtain comments from outside agencies.)

PART II - ARE THERE SIGNIFICANT CONCERNS, PROBLEMS OR IMPACTS IN YOUR AREA OF REVIEW?

- YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less-than-significant levels, and attach to this letter)
- NO (Please go on to PART III)

PART III - INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reasons for recommending denial.

IF YOU HAVE "NO COMMENT," PLEASE SO INDICATE, OR CALL.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name

\_\_\_\_\_  
Phone

# GENERAL APPLICATION FORM

San Luis Obispo County Department of Planning and Building

AS CAZ EX IND LCP

### APPLICATION TYPE - CHECK ALL THAT APPLY

- Emergency Permit
- Tree Permit
- Plot Plan
- Zoning Clearance
- Site Plan
- Minor Use Permit
- Variance
- Other
- Conditional Use Permit/Development Plan
- Surface Mining/Reclamation Plan
- Curb, Gutter & Sidewalk Waiver
- Modification to approved land use permit

### APPLICANT INFORMATION Check box for contact person assigned to this project

Landowner Name Union Oil of California Daytime Phone (805) 546-6908  
 Mailing Address P O. Box 1332, San Luis Obispo CA Zip Code 93406  
 Email Address: nikwilliams@chevron.com

Applicant Name Chevron Environmental Management Company Daytime Phone (805) 546-6908  
 Mailing Address P O. Box 1332, San Luis Obispo CA Zip Code 93406  
 Email Address: nikwilliams@chevron.com

Agent Name Avocet Environmental, Inc Daytime Phone (949) 298-0977  
 Mailing Address 1 Technology Drive Suite C515 Irvine CA Zip Code 92618  
 Email Address: rvanhuyning@avocatenv.com

### PROPERTY INFORMATION

Total Size of Site: Approximately 4 acres Assessor Parcel Number(s): Portion of 076-181-062

Legal Description: Former Union Oil Avila Terminal

Address of the project (if known): 10 San Rafael Street Avila Beach, CA

Directions to the site (including gate codes) - describe first with name of road providing primary access to the site, then nearest roads, landmarks, etc.: Entrance to Former Avila Terminal is at 10 San Rafael St. corner of San Rafael St. and Front St

Describe current uses, existing structures, and other improvements and vegetation on the property:

Idle petroleum storage and terminal facility

### PROPOSED PROJECT

Describe the proposed project (inc. sq. ft. of all buildings): Remediation facilities for hydrocarbon recovery in the Avila Terminal Cliff Area Refer to Project Description document.

### LEGAL DECLARATION

I, the owner of record of this property, have completed this form accurately and declare that all statements here are true. I do hereby grant official representatives of the county authorization to inspect the subject property.

Property owner signature *Nik Williams* Date 3/7/14

REAL PROPERTY OFFICER

### FOR STAFF USE ONLY

Reason for Land Use Permit: \_\_\_\_\_

# LAND USE PERMIT APPLICATION

San Luis Obispo County Department of Planning and Building

File No \_\_\_\_\_

Type of project:  Commercial  Industrial  Residential  Recreational  Other

Describe any modifications/adjustments from ordinance needed and the reason for the request (if applicable): NA

Describe existing and future access to the proposed project site: Access from Front Street and San Rafael

Surrounding parcel ownership: Do you own adjacent property?  Yes  No  
If yes, what is the acreage of all property you own that surrounds the project site? Union Oil Property surrounds the Cliff Area

Surrounding land use: What are the uses of the land surrounding your property (when applicable, please specify all agricultural uses):

North: Private recreation

South: Pacific Ocean

East: Undeveloped land

West: Residential

### For all projects, answer the following:

Square footage and percentage of the total site (approximately) that will be used for the following:

Buildings: NA sq. feet \_\_\_\_\_ % Landscaping: NA sq. feet \_\_\_\_\_ %

Paving: Repaving 7400 sq. feet 4.2 % Other (specify) Utility Corridor, equipment pads, wells, 12.5%

Total area of all paving and structures: 0.66  sq. feet  acres

Total area of grading or removal of ground cover: NA  sq. feet  acres

Number of parking spaces proposed: NA Height of tallest structure: NA

Number of trees to be removed: None Type: \_\_\_\_\_

Setbacks: Front NA Right NA Left NA Back NA

Proposed water source:  On-site well  Shared well  Other \_\_\_\_\_

Community System - List the agency or company responsible for provision: ABSD, existing connection

Do you have a valid will-serve letter?  Yes  No (If yes, please submit copy)

Proposed sewage disposal:  Individual on-site system  Other \_\_\_\_\_

Community System - List the agency or company responsible for sewage disposal: \_\_\_\_\_

Do you have a valid will-serve letter?  Yes  No (If yes, please submit copy)

Fire Agency: List the agency responsible for fire protection: Cal Fire

### For commercial/industrial projects answer the following:

Total outdoor use area: NA  sq. feet  acres

Total floor area of all structures including upper stories: NA sq. feet

### For residential projects, answer the following:

Number of residential units: NA Number of bedrooms per unit: \_\_\_\_\_

Total floor area of all structures including upper stories, but not garages and carports: \_\_\_\_\_

Total of area of the lot(s) minus building footprint and parking spaces: \_\_\_\_\_

# ENVIRONMENTAL DESCRIPTION FORM

San Luis Obispo County Department of Planning and Building

File No \_\_\_\_\_

The California Environmental Quality Act (CEQA) requires all state and local agencies to consider and mitigate environmental impacts for their own actions and when permitting private projects. The Act also requires that an environmental impact report (EIR) be prepared for all actions that may significantly affect the quality of the environment. The information you provide on this form will help the Department of Planning and Building determine whether or not your project will significantly affect the quality of the environment.

**To ensure that your environmental review is completed as quickly as possible, please remember to:**

- a. Answer **ALL** of the questions as accurately and completely as possible.
- b. Include any additional information or explanations where you believe it would be helpful or where required. Include additional pages if needed.
- c. If you are requesting a land division or a re-zoning, be sure to include complete information about future development that may result from the proposed land division or rezoning.
- d. Include references to any reports or studies you are aware of that might be relevant to the questions asked or the answers you provide.

Should a determination be made that the information is inaccurate or insufficient, you will be required to submit additional information upon request.

## Physical Site Characteristic Information

**Your site plan will also need to show the information requested here:**

1. Describe the topography of the site:  
Level to gently rolling, 0-10% slopes: 1.3 acres  
Moderate slopes of 10-30%: 0.9 acres  
Steep slopes over 30%: 1.8 acres
2. Are there any springs, streams, lakes or marshes on or near the site?  Yes  No  
If yes, please describe: Groundwater springs along the cliff face.
3. Are there any flooding problems on the site or in the surrounding area?  Yes  No  
If yes, please describe: \_\_\_\_\_
4. Has a drainage plan been prepared?  Yes  No  
If yes, please include with application.
5. Has there been any grading or earthwork on the project site?  Yes  No  
If yes, please explain: Yes, from former terminal operations. See MUP DRC2009-00052 and Grading Permit PMT2010-01514.
6. Has a grading plan been prepared?  Yes  No  
If yes, please include with application.
7. Are there any sewer ponds/waste disposal sites on/adjacent to the project?  Yes  No
8. Is a railroad or highway within 300 feet of your project site?  Yes  No
9. Can the proposed project be seen from surrounding public roads?  Yes  No  
If yes, please list: \_\_\_\_\_

**Water Supply Information**

- 1. What type of water supply is proposed?  
 Individual well     Shared well     Community water system
- 2. What is the proposed use of the water?  
 Residential     Agricultural - Explain \_\_\_\_\_  
 Commercial/Office - Explain \_\_\_\_\_  
 Industrial – Explain \_\_\_\_\_
- 3. What is the expected daily water demand associated with the project? NA
- 4. How many service connections will be required? NA
- 5. Do operable water facilities exist on the site?  
 Yes     No    If yes, please describe: \_\_\_\_\_
- 6. Has there been a sustained yield test on proposed or existing wells?  
 Yes     No    If yes, please attach.
- 7. Does water meet the Health Agency's quality requirements?  
Bacteriological?     Yes     No  
Chemical?     Yes     No  
Physical     Yes     No  
Water analysis report submitted?     Yes     No
- 8. Please check if any of the following have been completed on the subject property and/or submitted to County Environmental Health.  
 Well Driller's Letter     Water Quality Analysis     OK or     Problems  
 Will Serve Letter     Pump Test \_\_\_\_\_ Hours \_\_\_\_\_ G.P.M.  
 Surrounding Well Logs     Hydrologic Study     Other \_\_\_\_\_

**Please attach any letters or documents to verify that water is available for the proposed project.**

**Sewage Disposal Information**

**If an on-site (individual) subsurface sewage disposal system will be used:**

- 1. Has an engineered percolation test been accomplished?  
 Yes     No    If yes, please attach a copy.
- 2. What is the distance from proposed leach field to any neighboring water wells? \_\_\_\_\_ feet
- 3. Will subsurface drainage result in the possibility of effluent reappearing in surface water or on adjacent lands, due to steep slopes, impervious soil layers or other existing conditions?  
 Yes     No
- 4. Has a piezometer test been completed?  
 Yes     No
- 5. Will a Waste Discharge Permit from the Regional Water Quality Control Board be required?  
 Yes     No (a waste discharge permit is typically needed when you exceed 2,500 gallons per day)

**If a community sewage disposal system is to be used:**

- 1. Is this project to be connected to an existing sewer line?     Yes     No  
Distance to nearest sewer line: \_\_\_\_\_ Location of connection: \_\_\_\_\_
- 2. What is the amount of proposed flow? NA \_\_\_\_\_ G.P.D.
- 3. Does the existing collection treatment and disposal system have adequate additional capacity to accept the proposed flow?     Yes     No

**Solid Waste Information**

- 1. What type of solid waste will be generated by the project?  
 Domestic    Industrial    Agricultural    Other, please explain? Well cuttings, removal of temporary facilities
- 2. Name of Solid Waste Disposal Company: Well cuttings to licensed facility and temporary facilities to be re-used or recycled.
- 3. Where is the waste disposal storage in relation to buildings? \_\_\_\_\_
- 4. Does your project design include an area for collecting recyclable materials and/or composting materials?    Yes    No

**Community Service Information**

- 1. Name of School District: San Luis Coastal
- 2. Location of nearest police station: San Luis Obispo
- 3. Location of nearest fire station: Avila Beach
- 4. Location of nearest public transit stop: \_\_\_\_\_
- 5. Are services (grocery/other shopping) within walking distance of the project?    Yes    No  
 If yes, what is the distance? \_\_\_\_\_ feet/miles

**Historic and Archeological Information**

- 1. Please describe the historic use of the property:  
Accumulation and transfer point for petroleum from oil fields in Santa Barbara and Kern County, a refinery, and a petroleum storage facility
- 2. Are you aware of the presence of any historic, cultural or archaeological materials on the project site or in the vicinity?    Yes    No  
 If yes, please describe: Chumash archaeological sites
- 3. Has an archaeological surface survey been done for the project site?    Yes    No  
 If yes, please include two copies of the report with the application.

**Commercial/Industrial Project Information**

**Only complete this section if you are proposing a commercial or industrial project or zoning change.**

- 1. Days of Operation: NA (Short-term construction only)   Hours of Operation: \_\_\_\_\_
- 2. How many people will this project employ? NA
- 3. Will employees work in shifts?    Yes    No  
 If yes, please identify the shift times and number of employees for each shift \_\_\_\_\_
- 4. Will this project produce any emissions (i.e., gasses, smoke, dust, odors, fumes, vapors)?  
 Yes    No   If yes, please explain: Vehicle emissions and dust from short-term construction
- 5. Will this project increase the noise level in the immediate vicinity?    Yes    No  
 If yes, please explain: Short-term construction-related noise  
 (If loud equipment is proposed, please submit manufacturers estimate on noise output.)
- 6. What type of industrial waste materials will result from the project? Explain in detail: \_\_\_\_\_  
Soil/bedrock cuttings from drilling, petroleum impacted groundwater during system operation
- 7. Will hazardous products be used or stored on-site?    Yes    No  
 If yes, please describe in detail: \_\_\_\_\_
- 8. Has a traffic study been prepared?    Yes    No   If yes, please attach a copy.

9. Please estimate the number of employees, customers and other project-related traffic trips to or from the project: Between 7:00 - 9:00 a.m. \_\_\_\_\_ Between 4:00 to 6:00 p.m. \_\_\_\_\_
10. Are you proposing any special measures (carpooling, public transit, telecommuting) to reduce automobile trips by employees  Yes  No  
If yes, please specify what you are proposing: \_\_\_\_\_
11. Are you aware of any potentially problematic roadway conditions that may exist or result from the proposed project, such as poor sight distance at access points, connecting with the public road?  
 Yes  No If yes, please describe: \_\_\_\_\_

**Agricultural Information**

**Only complete this section if your site is: 1) Within the Agricultural land use category, or 2) currently in agricultural production.**

1. Is the site currently in Agricultural Preserve (Williamson Act)?  Yes  No
2. If yes, is the site currently under land conservation contract?  Yes  No
3. If your land is currently vacant or in agricultural production, are there any restrictions on the crop productivity of the land? That is, are there any reasons (i.e., poor soil, steep slopes) the land cannot support a profitable agricultural crop? Please explain in detail: \_\_\_\_\_

**Special Project Information**

1. Describe any amenities included in the project, such as park areas, open spaces, common recreation facilities, etc.(these also need to be shown on your site plan): \_\_\_\_\_  
NA
2. Will the development occur in phases?  Yes  No  
If yes describe: Temporary facilities will be removed when not needed, well construction will occur over time and will be destructed when no longer needed.
3. Do you have any plans for future additions, expansion or further activity related to or connected with this proposal?  Yes  No If yes, explain: \_\_\_\_\_
4. Are there any proposed or existing deed restrictions?  Yes  No  
If yes, please describe: \_\_\_\_\_

**Energy Conservation Information**

1. Describe any special energy conservation measures or building materials that will be incorporated into your project \*: NA

\*The county's Building Energy Efficient Structures (BEES) program can reduce your construction permit fees. Your building must exceed the California State Energy Standards (Title 24) in order to qualify for this program. If you are interested in more information, please contact the Building Services Division of the Department of Planning and Building at (805) 781-5600.

**Environmental Information**

1. List any mitigation measures that you propose to lessen the impacts associated with your project:  
Refer to Project Description document  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Are you aware of any unique, rare or endangered species (vegetation or wildlife) associated with the project site?  Yes  No

If yes, please list: Wetlands

3. Are you aware of any previous environmental determinations for all or portions of this property?

Yes  No

If yes, please describe and provide "ED" number(s): Cliff Area Access Road & 5 wells. Negative Declaration for Permit #DRC2009-00052

### **Other Related Permits**

1. List all permits, licenses or government approvals that will be required for your project (federal, state and local): Construction permit (Electrical), SLO Public Health (Well construction/destruction), SLO APCD (ATC for systems)

(If you are unsure if additional permits are required from other agencies, please ask a member of the Planning Department staff currently assigned in either Current Planning or the Environmental Division.)



March 7, 2014

Project No. 1252.011

Ms. Ryan Hostetter  
COUNTY OF SAN LUIS OBISPO  
CURRENT PLANNING AND PERMITTING  
Planning and Building Department,  
County Government Center  
San Luis Obispo, California 93408

**Project Description**  
**Minor Use Permit/Coastal Development Permit Application for**  
**Interim Remediation System Operation**  
**Avila Terminal Cliff Area**  
10 San Rafael Street  
Avila Beach, California

Dear Ms. Hostetter:

On February 5, 2014, the San Luis Obispo County Department of Planning and Building (Planning) issued Emergency Permit ZON2013-00416 (Emergency Permit) to Union Oil Company of California<sup>1</sup> for the construction of wells and cleanup of petroleum on a portion of the Avila Terminal site (Figure 1). The Emergency Permit applies to the approximately 4-acre area fronting the Pacific Ocean (Cliff Area) in the southern portion of the Avila Terminal site. The Emergency Permit states in Item 5 that, within 30 days of February 5, 2014, the permittee shall apply for a regular Coastal Development Permit, if required. This application is submitted to meet that requirement.

In 2013, Chevron Environmental Management Company (CEMC) began a pilot study to evaluate the effectiveness of vapor extraction as a remedial technology at the Cliff Area (Figure 2). On December 11, 2013 we met with you to discuss the Regional Water Quality Control Board-Central Coast Region (RWQCB) request that we continue operating the vapor extraction remediation system as an interim action following completion of the pilot test. In accordance with Title 23 §23.03.045 of the San Luis Obispo County Code, the Coastal Zone Land Use Ordinance (CZLO), your department issued the Emergency Permit. CEMC began operating the system in accordance with the Emergency Permit conditions on March 4, 2014.

Following consultation with your office and the RWQCB, CEMC is submitting a separate permit application for the Cliff Area remediation effort from the broader remediation and development project for the Avila Point Property. CEMC is proceeding in this manner for the following reasons.

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<sup>1</sup> Chevron is the parent company of Union Oil Company of California.

## **Minor Use Permit/Coastal Development Permit Application Remediation System Operation**

Avila Terminal Cliff Area  
Avila Beach, California

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- The RWQCB is assessing Cliff Area remediation separately from the remainder of the site through a site-specific Feasibility Study and Remedial Action Plan and had directed CEMC to perform remediation in the Cliff Area as quickly as possible;
- The RWQCB is expected to review the Cliff Area remediation plan with much faster timing than the remainder of the site;
- The RWQCB and CEMC want to ensure that processing of the larger site application does not unnecessarily delay or constrain actions at the Cliff Area; and
- CEMC wants to ensure that additions or alterations to the Cliff Area work based on the results of on-going remediation activities do not impede processing of the larger site application.

As noted above, the Cliff Area remediation activities are underway and on a much faster track than the activities to be conducted under the larger site application. The final remedial actions for the Cliff Area are expected to be approved by the RWQCB before the end of this year and implemented in early 2015. Conversely, permitting for the entire Avila Point Property is anticipated to take 2-3 years to complete.

The principal action of this project is to continue operating the existing remediation system in the Avila Terminal Cliff Area. This document describes the need for the work, the components of the system, and the related work activities. The work includes the following upgrades intended to make the operation more efficient and to occupy a smaller footprint:

- Supplying electrical service to replace the propane generator;
- Temporarily increasing propane storage to sustain operations;
- Consolidating the water tanks at the equipment pad;
- Installing additional wells;
- Improving the water handling process and operation; and
- Re-paving the steep access road to ensure all weather access to the equipment pad.

### **PROJECT DESCRIPTION**

The purpose of this project is to remove contaminant mass from the fractured bedrock beneath former Tank No. 201104 and in the adjacent shallow terrace deposits. This will be achieved through a dual-phase extraction (DPE) process in the bedrock, and a soil vapor extraction (SVE) process in the terrace deposits. The principal differentiation between the two processes is that DPE removes groundwater in addition to soil vapor, whereas SVE is a soil vapor only process. Since groundwater occurs in the deeper bedrock DPE is the appropriate process, whereas the lack of groundwater in the terrace deposits makes SVE a suitable technology.

## Minor Use Permit/Coastal Development Permit Application Remediation System Operation

Avila Terminal Cliff Area  
Avila Beach, California

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The next section describes the components of the existing system used to conduct the pilot test. Subsequent sections describe the minor refinements that are proposed to make the operation safer, more reliable, and more efficient and can be maintained over a long period of time. It is expected that this work will occur in previously disturbed areas of the site that have been cleared for cultural and biological resources. If work must occur in an area that has not been cleared, it will be conducted in accordance with the procedures described below under Environmental Protection.

### Existing System

The current system (shown in Figures 3 and 4) includes the following components:

- Extraction and observation wells;
- Down-hole pneumatic pumps (at the DPE extraction well);
- Air compressors;
- Air supply piping for pumps;
- Water conveyance pipeline;
- Water storage tanks (1 upper and 1 lower tank with interconnected plumbing system);
- Vapor conveyance pipeline;
- Electrical conduits for power, instrumentation and control systems;
- Utility corridor, including pipelines, conduits and pipe supports;
- Mobile Remediation Trailer (MRT);with an electric catalytic (E-CAT) oxidizer;
- Trailer mounted, propane fueled, thermal oxidizer;
- Secondary containment (berms, spill pads, or dual-wall piping);
- Access roads and facility pad locations;
- Trailer mounted Propane generator as the electrical power source; and
- Propane supply and delivery (pipeline) and storage (bullets).

Each process is applied at one or more dedicated wells as shown in Figure 3. The SVE wells are highlighted as green, and the DPE wells are identified with a purple or blue. Each set of wells currently consists of one extraction well and four observation wells. However, each observation well is identical in construction to its corresponding extraction well and may be put into service for that purpose.

A pneumatically powered pump is used in the DPE extraction well to remove groundwater. The air supply line connects the pump to an air compressor located in the MRT. The pump includes integral level controls that automate operation. The water collection pipeline connects the pump to the water storage tanks. At present the lower storage tank (Figure 4) accumulates water from the down-hole pump. A transfer pump was designed to convey the water to the upper storage tank if necessary prior to implementation of the pilot test. The pilot test demonstrated that

## Minor Use Permit/Coastal Development Permit Application Remediation System Operation

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significant water flows cannot be achieved in these formations so this additional transfer system and secondary tank at top of the hill is not necessary. The collected water is considered non-hazardous, but untreated is not suitable for discharge to the storm drains or the local publically operated treatment works (POTW). Consequently, the water is hauled off-site for disposal. Trucks access the site via the Cave Landing Road entrance (Figure 2). During the pilot test water generation required approximately 1.5 to 2 semi-truck trips per week to accommodate offsite disposal. It is anticipated that these water collection rates will continue during extended operation.

A 4-inch diameter aboveground pipeline connects both the SVE and DPE well heads to the blower system. The blowers are mounted in the MRT and pass the extracted vapors to one of two treatment systems. One treatment system is a trailer mounted thermal oxidizer located adjacent to the MRT. It is used when the extracted vapor contains high concentrations of volatile compounds. It uses propane as a supplemental fuel, and burns the contaminants at a controlled temperature. The second treatment system is the E-CAT. The catalyst allows the reaction process to occur at a much lower temperature which can be achieved with electricity rather than fuel combustion. Either system may be used as appropriate to treat the collected vapor. Typically, the thermal oxidizer is used until the influent concentration of volatile compounds decreases to an appropriate threshold, at which point the E-CAT is used for treatment.

At present, power is supplied to the MRT and the E-CAT by a propane fueled generator. The generator is mounted on a separate trailer adjacent to the MRT (Figure 3). Fuel for the generator, and the thermal oxidizer, is provided by a set of propane tanks located approximately 270 feet away across from the former loading rack (Figure 3). Propane is delivered to the generator and the thermal oxidizer via an aboveground pipeline. Operation of this generator is permitted by the San Luis Obispo Air Pollution Control District (APCD).

### **Layout and Process Equipment Changes**

To facilitate long-term operation the following process changes will be implemented. These are illustrated on Figure 5. The changes are:

- **Installation of Additional Wells.** Under this permit, CEMC seeks permission to construct up to 30 additional wells to support this project. It is expected that these wells will be needed to support the long-term remediation plan in the Cliff Area that will be approved by the RWQCB later this year. Piping modifications will be made to connect the individual wellheads to a common header. Isolation valves will be provided between the wellheads and the header pipe to provide operational flexibility. Piping will predominantly be above ground.
- **Electrical Scope.** To facilitate the electrical work scope, the SLO APCD extended the propane fired generator permit for 120 days. CEMC will extend aboveground conductors along existing poles or within conduits placed on the existing pipe stanchions as shown in Figure 5. The conductors will deliver 400 amp service to the MRT location through a transformer placed on a pre-formed pedestal, and 200 amp service to the Tank

**Minor Use Permit/Coastal Development Permit Application  
Remediation System Operation**

Avila Terminal Cliff Area  
Avila Beach, California

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No. 201104 site. If additional power poles are required to be installed, poles will be located in areas of prior disturbance and/or near existing access roads, to the extent possible.

- **Propane supply.** In the short-term, additional propane storage is needed to ensure that operation can continue uninterrupted over a period of several days (i.e. weekends). Storage will be reconfigured for additional capacity (up to 5,000 gallons) to improve delivery logistics. Once PG&E supplied electricity is available, and the thermal oxidizer is no longer needed, the propane system and delivery pipeline will be removed.
- **Water storage tank relocation.** To consolidate operations, CEMC will relocate the upper water storage tank to the facilities pad near the existing lower storage tank and MRT.
- **Skid mounted blower and carbon treatment system.** It is expected that continued operation of the DPE system in the bedrock will remove the volatile compounds relatively quickly. Initial treatment of the higher concentration vapors will continue to use the thermal oxidizer. At lower concentrations, the E-CAT equipment can be used for treatment. The concentrations may decrease to a point where the E-CAT is no longer an efficient treatment device, but vapor extraction remains feasible. If this occurs, a skid mounted blower and vapor-phase carbon treatment system may be positioned near the well head. The system would be plumbed into the pipeline, and powered by a 200 amp electrical service.
- **Access Road Improvement.** To facilitate removal of produced groundwater at the lower and consolidate storage tank location, CEMC will re-pave the existing access road. The access road is currently overlain with gravel that was placed over the original weathered asphalt road. It provides insufficient traction for a loaded truck to climb safely. Re-paving will ensure all-weather access to the equipment pad, and lessens the potential for spills or releases by reducing the amount of piping in the overall system. The re-paving will be a surface application with no significant grading. Loose material will be removed from the surface, and the resulting subgrade will be scarified, moisture conditioned, and compacted. A 3-inch layer of asphalt will be placed and compacted over the subgrade.

During the operational life of the Avila Terminal, the entire Cliff Area was involved in some type of industrial activity. To the extent practical, the activities described in this project description will occur on previously disturbed areas. Approximately 0.66 acre of the Cliff Area will be used, as summarized on the table below.

**Minor Use Permit/Coastal Development Permit Application  
Remediation System Operation**

Avila Terminal Cliff Area  
Avila Beach, California

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<b>Summary of Uses</b>		
Type of Use	Description	Area (sf)
Improvement of Existing Road	Remove surface debris along existing access road, fill in potholes and repave.	7,400
Utility Corridor	Install surface utility lines, primarily adjacent to existing access roads.	5,250
Equipment Pads	Place equipment on improved pads within former tank rings or on the paved area near the pump house	15,500
Wells	Install wells, primarily on the existing access road or within the former tank ring.	480
<b>Total</b>		<b>28,630 (0.66 ac)</b>

## ENVIRONMENTAL PROTECTION

As noted above, it is expected that all of the work for this project will occur in areas that have been cleared previously for cultural or biological resources. It is possible, though, that new construction may be necessary in an area that has not been cleared. Under those circumstances, CEMC will use the procedures described in their previous MUP application<sup>2</sup>.

## SCHEDULE

The system had been idled since December 20, 2013 as the allowable run-time for the propane generator permitted under the Authority to Construct (ATC) issued by the APCD had been reached. A letter requesting a 120 day extension of that run-time was submitted to the APCD in early January and approval from the APCD dated February 4<sup>th</sup>, 2014 was received.

The data from the pilot test have not been fully evaluated; however, a preliminary review suggests that the system will operate in its current configuration using thermal oxidation or E-CAT for vapor treatment for at least 12-18 months, at least to the Spring or Summer of 2015. Insufficient information is available to determine the effectiveness of a carbon only system.

The various system modifications described above (except for the carbon treatment change-over and installation of the additional wells) will occur in the first two quarters of 2014 as weather permits.

Installation of supplemental wells will occur later this year in consultation with the RWQCB.

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<sup>2</sup> See Project Description and application prepared by Padre Associates, Inc., *Former Union Oil Avila Tank Farm Monitoring Well Construction/Destruction and Fuel Loading Rack Demolition, 10 San Rafael Street, Avila Beach, California, Project Description*, April 16, 2012.

**Minor Use Permit/Coastal Development Permit Application  
Remediation System Operation**

Avila Terminal Cliff Area  
Avila Beach, California

Page 7  
March 7, 2014

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If you have any questions regarding this plan or require additional information, please do not hesitate to call.

Respectfully submitted,

AVOCET ENVIRONMENTAL, INC.



Robert Van Hyning, P.E.  
Principal

RVH:TH

cc: Rik Williams – Chevron EMC (PDF via e-mail only)  
Greg Underwood – Chevron EMC (PDF via e-mail only)  
Bill Almas – Chevron BRES (PDF via e-mail only)  
Kim Tulledge – Chevron BRES (PDF via e-mail only)  
Jaydeep Purandare – Avocet Environmental, Inc.  
Todd Porter - Stantec  
Louis Cappel – Padre

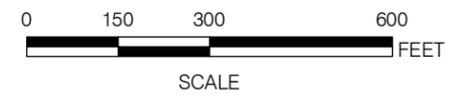
S:\Projects\1252 Chevron EMC-Avila\CliffAreaRemedialActions\SLOCoPlanning\_SVECoastalPermit\Supporting Documents\Project Description for Coastal Development  
Permit\_7March2014\_Final.docx

S:\GIS\1252\_Chevron EMC-Avila\1252.011\_Avila\_2014\_Support\ArcMap\Documents\04\_1252.011\_Site\_Plan-Current\_Conditions.mxd(3/5/2014)



**EXPLANATION**

- INTERTIDAL ZONE MONITORING LOCATION
- ▭ CLIFF AREA

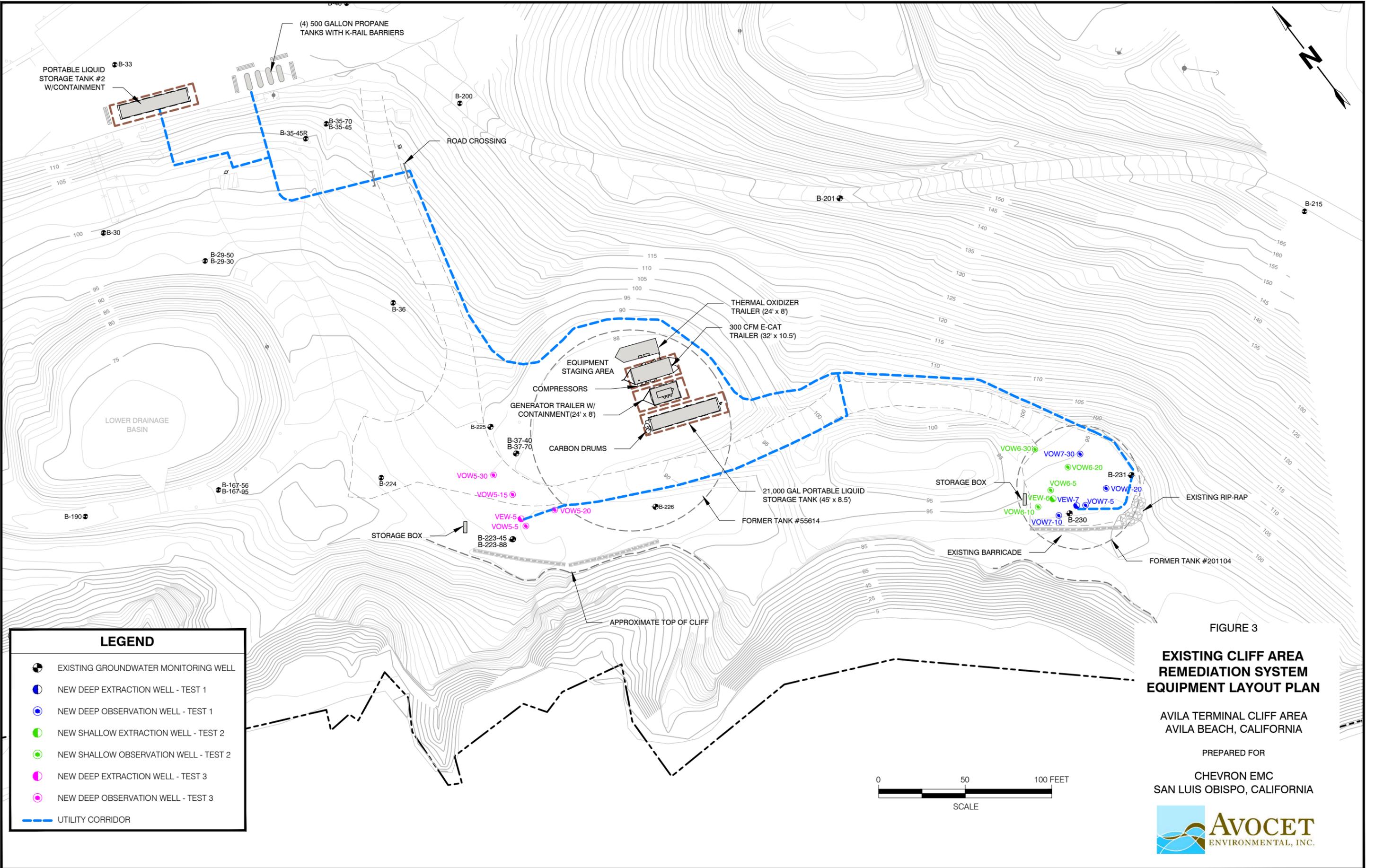


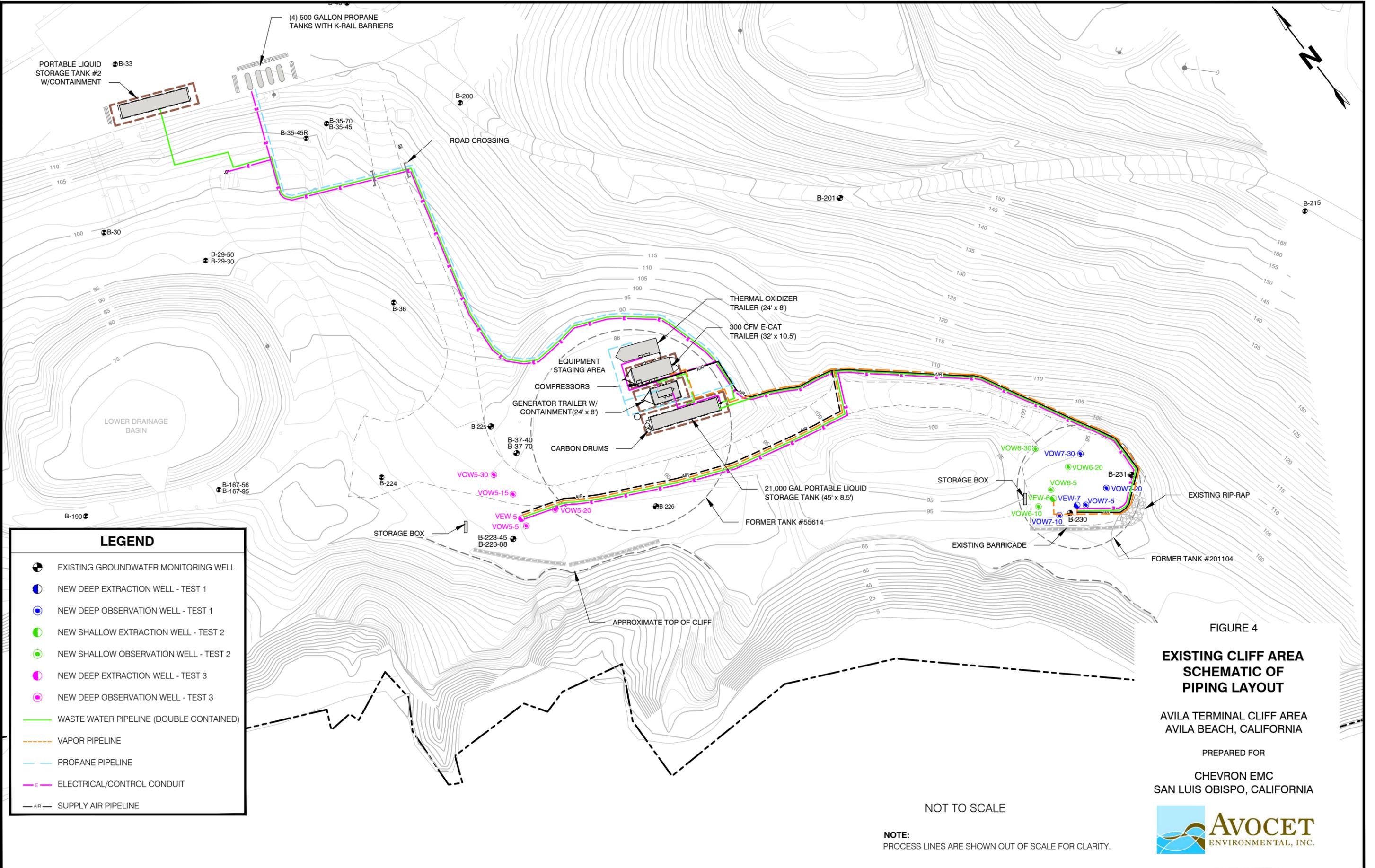
**FIGURE 2**  
**SITE PLAN - CURRENT CONDITIONS**

AVILA TERMINAL CLIFF AREA  
AVILA BEACH, CALIFORNIA

PREPARED FOR  
CHEVRON EMC  
SAN LUIS OBISPO, CALIFORNIA







**LEGEND**

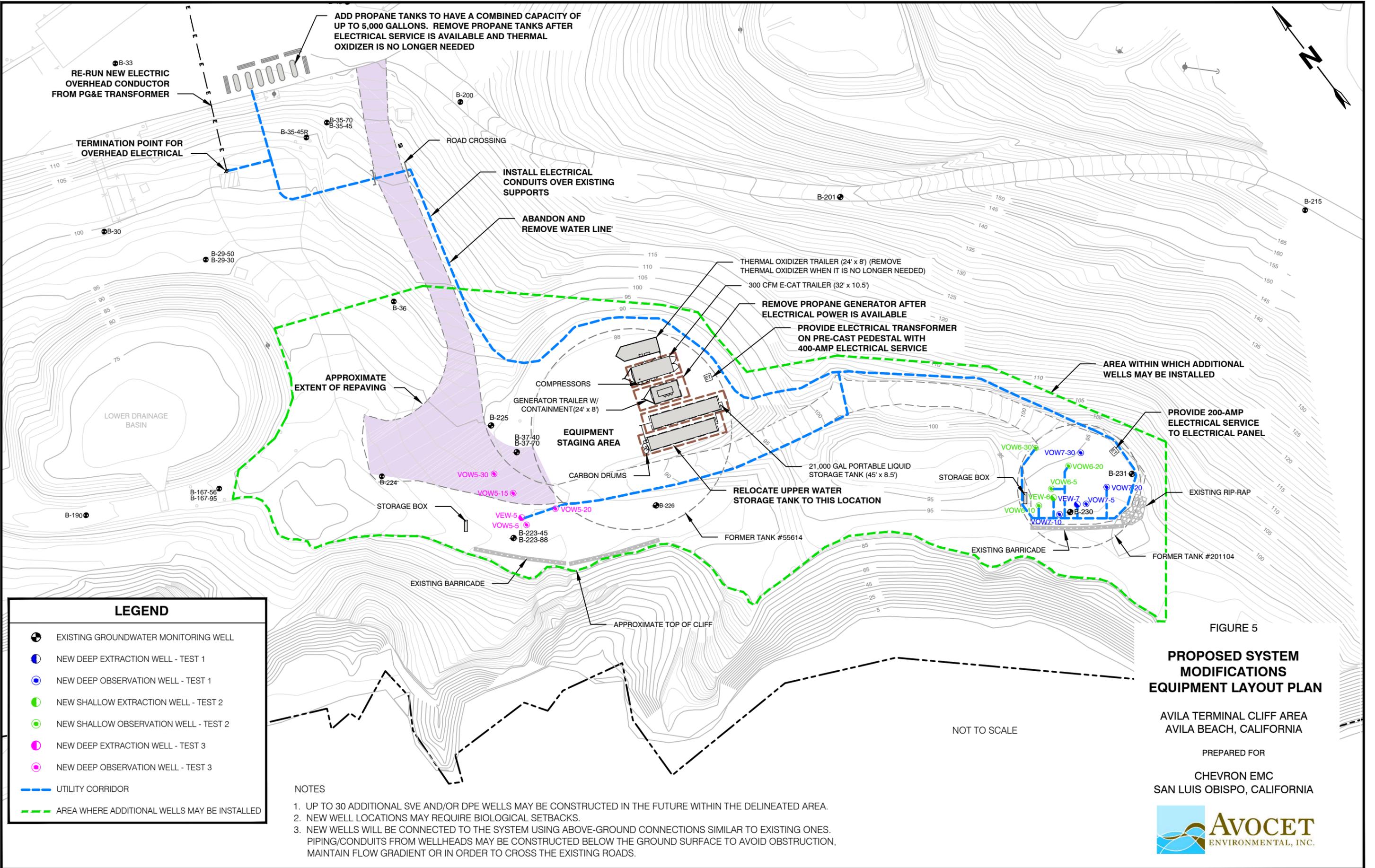
- EXISTING GROUNDWATER MONITORING WELL
- NEW DEEP EXTRACTION WELL - TEST 1
- NEW DEEP OBSERVATION WELL - TEST 1
- NEW SHALLOW EXTRACTION WELL - TEST 2
- NEW SHALLOW OBSERVATION WELL - TEST 2
- NEW DEEP EXTRACTION WELL - TEST 3
- NEW DEEP OBSERVATION WELL - TEST 3
- WASTE WATER PIPELINE (DOUBLE CONTAINED)
- VAPOR PIPELINE
- PROPANE PIPELINE
- ELECTRICAL/CONTROL CONDUIT
- SUPPLY AIR PIPELINE

**FIGURE 4**  
**EXISTING CLIFF AREA**  
**SCHEMATIC OF**  
**PIPING LAYOUT**  
 AVILA TERMINAL CLIFF AREA  
 AVILA BEACH, CALIFORNIA  
 PREPARED FOR  
 CHEVRON EMC  
 SAN LUIS OBISPO, CALIFORNIA

NOT TO SCALE

**NOTE:**  
 PROCESS LINES ARE SHOWN OUT OF SCALE FOR CLARITY.





**NOTES**

1. UP TO 30 ADDITIONAL SVE AND/OR DPE WELLS MAY BE CONSTRUCTED IN THE FUTURE WITHIN THE DELINEATED AREA.
2. NEW WELL LOCATIONS MAY REQUIRE BIOLOGICAL SETBACKS.
3. NEW WELLS WILL BE CONNECTED TO THE SYSTEM USING ABOVE-GROUND CONNECTIONS SIMILAR TO EXISTING ONES. PIPING/CONDUITS FROM WELLHEADS MAY BE CONSTRUCTED BELOW THE GROUND SURFACE TO AVOID OBSTRUCTION, MAINTAIN FLOW GRADIENT OR IN ORDER TO CROSS THE EXISTING ROADS.

FIGURE 5

**PROPOSED SYSTEM MODIFICATIONS EQUIPMENT LAYOUT PLAN**

AVILA TERMINAL CLIFF AREA  
AVILA BEACH, CALIFORNIA

PREPARED FOR

CHEVRON EMC  
SAN LUIS OBISPO, CALIFORNIA









# Parcel Summary Report For Parcel # 076-181-062

3/7/2014  
4:41:37PM

## San Luis Obispo County Department of Planning and Building

County Government Center

San Luis Obispo, California 93408

Telephone: (805) 781-5600

### People Information

#### Role    Name and Address

OWN    UNION OIL CO OF CA  
          PO BOX 1392 BAKERSFIELD CA 93302-1392

### Address Information

<u>Status</u>	<u>Address</u>
P	01717 CAVE LANDING RD AVLB
P	00010 SAN RAFAEL ST AVLB

### Lot Information:

<u>Tract / Twnshp</u>	<u>Block / Range</u>	<u>Section</u>	<u>Community:</u>	<u>Plan/Area:</u>	<u>Lue 1:</u>	<u>Lue 2:</u>	<u>Lue 3:</u>	<u>Lot:</u>	<u>Flags:</u>	<u>Misc</u>
RHOSNMIG 076181	0000 062	45P 0001			IND EX	LCP CAZ	AS	U N		D910257D / D930133V

### Parcel Information

<u>Status</u>	<u>Description</u>
Active	RHO SAN MIG PTN LTS 45 & 47

### Notes

#### Tax Districts

SAN LUIS COASTAL  
SAN LUIS OBISPO JT(27,40)  
COUNTY-ZONE NO. 03  
COUNTY-ZONE NO. 09  
AVILA BEACH  
SAN LUIS  
NO. 03  
AREA NO. 12



# Parcel Summary Report For Parcel # 076-181-062

3/7/2014  
4:41:37PM

## San Luis Obispo County Department of Planning and Building

County Government Center

San Luis Obispo, California 93408

Telephone: (805) 781-5600

AREA NO. 21

### Case Information

**Case Number:**

**Case Status:**

63214 FNL Primary Parcel

**Description:**

INSTALL METER FOR PG & E

89109 FNL Primary Parcel

**Description:**

VAPOR EXTRACTION SYSTEM

93332 FNL Primary Parcel

**Description:**

DEMOLISH AN 80,000 BARREL TANK

95480 FNL Primary Parcel

**Description:**

INSTALL UTILITY WATER PUMP

97652 FNL Primary Parcel

**Description:**

INSTALL 6'SATELLITE COMMUNICATION DISH

99249 FNL Primary Parcel

**Description:**

GRADE & INSTALL LINER IN EXIST. BASIN

99397 FNL Primary Parcel

**Description:**

STOCKPILE SAND OFF SITE FOR USE DURING BAD WEATHER

A2566 FNL Primary Parcel

**Description:**

DEMO & REMOVE 12 FUEL STORAGE TANKS

A4909 FNL Primary Parcel

**Description:**

IMPROVERMENTS TO SITE ROADS, STOCKPILE AREAS

A5000 FNL Primary Parcel

**Description:**

37 WELLS FOR MONITORING SUBSURFACE GROUND WATER

A5001 FNL Primary Parcel

**Description:**

DEMO & REMOVE 2 FUEL STORAGE TANK



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County Government Center

San Luis Obispo, California 93408

Telephone: (805) 781-5600

A5639 FNL Primary Parcel

**Description:**

STOCKPILE OF CLEAN MATERIAL AT AVILA TANK FARM

A5729 FNL Primary Parcel

**Description:**

STOCKPILE OF AFFECTED & BUFFER ZONE MATERIAL

A5741 FNL Primary Parcel

**Description:**

TEMP. CANOPY TO COVER CONTAMINATED TANK FARM AREA 75% OF SIDES TO BE OPENED W/12 400W HPS FIXTURES

A5742 FNL Primary Parcel

**Description:**

ELECT. SERVICE TO 3 SUMP PUMPS IN TANK FARM AREA

A5886 FNL Primary Parcel

**Description:**

1 TEMP CONSTRUCTION TRAILER 10'X24' FOR CLEAN UP LOCATED AT AVILA TANK FARM

A6048 FNL Primary Parcel

**Description:**

1 TEMP CONSTRUCTION TRAILER 10'X32' FOR CLEAN UP LOCATED AT AVILA TANK FARM SAFETY-KLEEN #691948

C2732 FNL Primary Parcel

**Description:**

ELECTRICAL UPGRADE

C4877 FNL Primary Parcel

**Description:**

1-12'X42 MODULAR W/BATHROOM FOR CLEAN UP & ELECTRICAL 225A PANEL 3-125A PANELS

C7789 FNL Primary Parcel

**Description:**

STOCKPILE OF CLEAN SOIL 19,500 CUBIC YARDS DURATION:UNKNOWN/KIM TULLEGE,RCE & CANNON

D930133V INH Primary Parcel

**Description:**

VARIANCE FOR SLOPE > 30%

DRC2009-00052 APV Primary Parcel

**Description:**

MUP TO CONSTRUCT ACCESS ROAD, DRILL AND CONSTRUCT FIVE GROUND WATER MONITORING WELLS.

DRC2011-00088 APV Primary Parcel

**Description:**

DEMOLISH FUEL LOADING RACK-CONSTRUCT UP TO 15 MONITORING WELLS & DEMOLITION OF MONITORING WELLS AFTER MONITORING COMPLETE



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DRC2012-00048      INH      Primary Parcel

**Description:**

SITE REMEDIATION TO ACCOMMODATE FUTURE DEVELOPMENT

DRC2013-00080      REC      Primary Parcel

**Description:**

REMEDATION FACILITIES FOR HYDROCARBON RECOVERY IN THE AVILA TERMINAL CLIFF AREA.

LRP2012-00003      INH      Primary Parcel

**Description:**

CHANGE FROM INDUSTRIAL TO RECREATIONAL

PMT2002-10351      EXP      Primary Parcel

**Description:**

WELLS TO MONITOR SUBSURFACE GROUNDWATER (9 WELLS) AT TANK FARM AVILA SITE

PMT2002-24126      REC      Primary Parcel

**Description:**

GRADING (AS-BUILT)

PMT2002-27084      EXP      Primary Parcel

**Description:**

16 WELLS TO MONITOR SUBSURFACE GROUND WATER AT AVILA TANK SITE

PMT2010-01514      FNL      Primary Parcel

**Description:**

MAJOR GRADING FOR ACCESS ROAD FOR DRILL RIG AND FIELD CREWS TO INSTALL AND MONITOR GROUNDWATER MONITORING WELLS PADRE ENGINEERING, JEFFREY T. DAMRON, RCE (DRC2009-00052)

PRE2006-00150      REC      Primary Parcel

**Description:**

PRE2012-00001      REC      Primary Parcel

**Description:**

CHEVRON RE-USE PROJECT

ZON2013-00416      APV      Primary Parcel

**Description:**

EMERGENCY PERMIT FOR MONITORING WELLS AND PETROLEUM CLEANUP.

A0512      FNL      Related Parcel

**Description:**

13 WELLS & STILLING PIPES/WEATHER STATION

D920068P      CMP      Related Parcel

**Description:**

CLEAN UP DUE TO OIL SPILL



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P960321E            APP            Related Parcel

**Description:**

SAND AUGMENTATION PROJECT

PMT2002-22529        EXP            Related Parcel

**Description:**

GRADING FOR PIPELINE REPLACEMENT

PMT2002-23612        EXP            Related Parcel

**Description:**

EXPIRED -GRADING FOR CLEAN UP OF OIL PIPELINE SPILL