

San Luis Carspo, CA 93.

October 21, 2008 Project No. 0201-1504

California Environmental Protection Agency California Regional Water Quality Control Board Central Coast Region 895 Aerovista Place, Suite 101 San Luis Obispo, California 93401-7906

Attention: Mr. Richard Chandler, P.G.

Engineering Geologist Site Cleanup Program

Subject:

FINAL Technical Work Plan / Site Health and Safety Plan, Chlorinated Pesticide-Containing Surface Soil Removal Plan and Associated Engineering Controls, Carpinteria Oil and Gas Processing Facility, 5675 Carpinteria Avenue, Carpinteria, Santa Barbara County, California, CAO No. R3-2004-0081, dated August 2008

Dear Mr. Chandler:

Padre Associates, Inc. (Padre), on behalf of Chevron Environmental Management Company (Chevron) and Venoco, Inc. (Venoco), has prepared the following responses to the Santa Barbara Channelkeeper's (SBCK) September 23, 2008 comments on the FINAL Technical Work Plan / Site Health and Safety Plan for the Carpinteria Oil and Gas Processing Facility located at 5675 Carpinteria Avenue, Carpinteria, Santa Barbara County, California, dated August 15, 2008.

#### INTRODUCTION

In considering SBCK's comments, there are several overarching facts that should be considered.

- First, Carpinteria was an agricultural area during a time period when DDT and other chlorinated pesticides were widely used. As a result of historical agricultural activities, there are concentrations of DDT and other chlorinated pesticides in soils throughout the Carpinteria area that are unrelated to the operations of either Chevron or Venoco.
- Second, the residual pesticide concentrations in the Carpinteria area appear to be well below residential cleanup standards, including the vast majority of the site (U.S. EPA's PIRG residential cleanup standard of 1,700 micrograms per kilogram).



- Third, the issues raised by SBCK are potentially applicable to numerous other
  properties located in and around the City of Carpinteria, including residential areas.
  California State Water Resources Control Board Resolution 92-49 requires that the
  California Regional Water Quality Control Board Central Coast Region's (Regional
  Board) application of its Cleanup and Abatement Order authority occur in a
  consistent manner.
- Finally, the Final Technical Work Plan submitted by Chevron and Venoco is fully
  compliant with all applicable legal requirements, including the Basin Plan. However,
  if all properties in and around Carpinteria were required to follow the same standards
  being applied to Chevron and Venoco, the financial impacts on many residents of the
  community would be significant and the loading on the State of California's landfill
  capacity would be staggering.

### There is No Need for Additional Site Characterization

SBCK argues that additional site characterization should occur before the Regional Board approves the Final Technical Work Plan. Additional site characterization is not necessary because confirmation sampling will occur at the site during excavation to ensure the contemplated removal levels are achieved. In addition, SBCK's request for further soil assessment activities would delay approval of the Final Technical Work Plan.

## The Sediment Filter's Sole Function is to Serve as a Monitoring Device

SBCK argues that the Sediment Filter is a remedial device that is inadequately designed. SBCK's characterization of the Sediment Filter as a remedial device is inaccurate. The sole function of the Sediment Filter is to serve as a monitoring device to confirm the effectiveness of the soil remediation activities planed at the site.

The remedy proposed by Padre is the removal of all pesticide contaminated sediments from the site, as discussed in the Final Technical Work Plan (as opposed to collecting contaminated sediments in the Sediment Filter). Padre has proposed a Sediment Filter to capture sediment leaving the property and confirm that the sediment exiting the site has no detectable levels of chlorinated pesticides. The Sediment Filter's purpose is to monitor the effectiveness of the remedy, as well as to confirm the conclusions reached in the Geomega model.

# The Gate Valve will Provide Operational Flexibility and Control over the Release of Storm Water from the Site

SBCK has raised questions regarding the operation of the gate valve. The gate valve will provide operational flexibility and control over the release of storm water from the site. There are many variables that will enter into the timing of the closure of the gate valve including the timing, frequency and intensity of storm events; the time of day that samples are collected; the hours of operation of the analytical laboratory; and public and worker health and safety



issues related to extreme storm events. It is impossible to establish a rigid set of operational standards in advance for all situations that could exist in the future at the site.

# The Second Surface Water Discharge Conveyance will Prevent Off-Site Contaminants from Recontaminating Drainage Area No. 4

SBCK questions the need for the construction of the second surface water conveyance. This second surface water conveyance consists of a new culvert that will isolate off-site storm water flowing onto the site in a closed pipe that runs across the southern portion of the Buffer Zone Area. Currently, storm water containing pesticide contaminated sediments from off-site enters the site adjacent to Dump Road and flows across the property through the open ditch where it has the potential to contaminate soils in Drainage Area No. 4. The sole function of the new culvert will be to keep these contaminated off-site sediments from contacting the clean soils at the site after the excavation activities are completed in Drainage Area No. 4.

# The Geomega Model Indicates that there is No Reasonable Potential for Contaminated Sediments in Watershed Nos. 1, 2, and 3 to Migrate to Waters of the State

SBCK argues that the Geomega model demonstrates erosion of pesticide contaminated sediments from Watersheds Nos. 1-3 will result in the transport of such sediments to Drainage Area No. 4. SBCK's interpretation of the results from the Geomega model is incorrect.

#### All Pesticide Contaminated Sediments will be Removed from On-Site Waters of the State

SBCK seeks to have all detectable concentrations of pesticide contaminated sediments (Dieldrin, Lindane, Chlordane, and other chlorinated pesticides) removed from the on-site waters of the State. There is no dispute on this point - the Final Technical Work Plan proposes such removal.

The Removal of Pesticide Contaminated Sediments from Drainage Area No. 4 must be Consistent with Both CEQA Mitigation Measures in Permits Issued by the City of Carpinteria and the Basin Plan

The Final Technical Work Plan allows the Regional Board staff limited flexibility in defining excavation parameters in Drainage Area No. 4. SBCK questions whether the Regional Board staff should be given such flexibility.

The need for Regional Board staff flexibility relates to the City of Carpinteria's permitting process, which must be complied with in order to secure authorization for the excavation of the contaminated soil. The City's permitting process will trigger CEQA, which will require an evaluation of the excavation impacts on all trees, potential habitat, and other environmental assets. The CEQA process must consider all ecological impacts and will result in legally binding mitigation requirements being imposed in the City's grading/excavation permit(s). The Regional Board staff will need to ensure that the excavation of Drainage Area No. 4 complies with all legal requirements in the City's permit(s). This balancing could, among other things,



limit excavation that will damage or require removal of trees and possibly critical habitat in areas where such excavation is not required to maintain compliance with the Basin Plan.

The Final Technical Work Plan also recognizes that the Regional Board staff cannot allow any contaminated sediments to remain in Drainage Area No. 4 that would cause violations of the Basin Plan - and nothing in the Final Technical Work Plan suggests otherwise. In this regard, the applicable Basin Plan provisions require that discharges from the Site not exacerbate the chlorinated pesticide levels in "waters of the State." Because of historical agricultural activities in the region, there are pesticide contaminated sediments throughout the watershed in which the site is located. Even after Chevron and Venoco perform the remediation outlined in the Final Technical Work Plan, there will be pesticide contaminated sediments in the watershed up-gradient from the site that will migrate through the watershed due to erosion. Under the Basin Plan, Chevron and Venoco cannot allow discharges from the site to exacerbate the pesticide concentrations in the watershed down-gradient from the property.

#### The Calculations In The Final Technical Work Plan Are Accurate

SBCK asserts that the lower remediation goals in the Former Nursery Area proposed in the Final Technical Work Plan will not be low enough when the additive toxicity equation is applied. SBCK's comments relate to the excavation in the portion of the site, where the Geomega model indicates that there is no reasonable potential for sediments migrating offsite. Chevron's proposed remediation in this area is predicated on the Chevron's internal policies as opposed to requirements of the Cleanup and Abatement Order.

In addition, SBCK's analysis of additive toxicity is inaccurate:

 SBCK's calculations of 116 μg/kg for DDT and DDE, and 163 μg/kg for DDD are incorrect. The Channelkeeper's evaluation has not taken into account the additional calculation and further delineation of log<sub>10</sub> K<sub>ow</sub> values that are included in the Hoke et al., paper in Appendix C of Geomega's DDX modeling document. For example, for DDD:

$$log_{10} K_{ow} = 6.7$$
  
 $log_{10} K_{oc} = 0.00028 + (0.983 \times 6.7) = 6.59$   
 $K_{d} = f_{oc} \times K_{oc} = 108028$   
 $C_{s} = C_{w} \times K_{d} = 0.00083 \times 108028 = 90 \text{ µg/kg}$ 

In addition to incorrectly calculating the proposed remediation goals, SBCK has also
incorrectly applied the additive toxicity equation. Referring back to finding #29 of the
Regional Board's 2004 Cleanup and Abatement Order, this equation is to be applied
to the California Toxics Rule directly, i.e., to water quality standards and not to
soil/sediment quality standards as used by SBCK.



## The Final Technical Work Plan Will Eliminate Significant Storm Water Flow on to the Site

SBCK questions Geomega's conclusion that it will require at least 3 to 4 inches of rain to generate enough runoff to produce a discharge from the site. In questioning Geomega's statement, SBCK cites water samples it states that SBCK collected from the outfall during less intense storm events, which it asserts invalidate Geomega's conclusion.

SBCK's comments do not take into account the reduction in run-off from the site that will result due to the Second Surface Water Discharge Conveyance. Currently, much of the watershed up-gradient of the site flows through the open ditch on-site. In addition, Venoco drains uncontaminated storm water from bermed areas at its facility through the open ditch. These historical flows will be eliminated once the Second Surface Water Discharge Conveyance has been installed. Geomega's model focuses on the magnitude of rainfall events required to cause off-site flow following the construction of the Second Surface Water Discharge Conveyance. SBCK's stated observations relate to storm events before such installation.

Geomega's conclusion that it requires at least 3 to 4 inches of rain to generate enough runoff to produce a discharge from the site is based on Figure 4-9 of the Geomega report, which is the United States Department of Agriculture (USDA) Soil Conservation Service (SCS) runoff curve number (RCN) solution (USDA, 1986, Technical Release 55: Urban Hydrology for Small Watersheds, 2<sup>nd</sup> Edition). That is, runoff (in inches) is calculated based on rainfall (P), the potential maximum retention after runoff begins (S), and the sum of all water losses before runoff begins (I<sub>a</sub>). S is a function of the RCN, which is dependent upon many factors, including permeability of the soil surface, soil covering, and soil treatment. As it is impossible to determine an exact value of RCN for any given region due to the inherent variability of reality, ranges of RCN must be considered. The Geomega report determined that the appropriate range for this site is ~50 to 80. A rainfall of 3 to 4 inches to generate runoff is based on the lower end of this RCN range.

#### Sand Blast Area

SBCK raises concern about confirmation sampling and noise in the Sand Blast Area. As stated in the Final Technical Work Plan, a series of confirmation soil samples will be collected for chemical analyses to validate and verify that all elevated concentrations of metals-containing soil has been adequately removed at the Former Sandblast Area. Based on the analytical results of the confirmation soil samples, the need for additional remediation activities (i.e., additional soil excavation) will be discussed with the Regional Board field staff as requested by the Regional Board.

At the request of the Regional Board, Padre has previously collected soil samples representative of naturally-occurring, background concentrations from adjacent coastal bluff areas that have been undisturbed by historical development, farming activities. These metals concentrations can be utilized to determine the naturally-occurring, background concentrations to be used as a remediation target(s).



It is anticipated that the soil remediation activities planned at the Sandblast Area will be completed over an approximately three to four day period outside the period of the harbor seal rookery season, and therefore with minimal impact to the harbor seals. Additionally, it should be noted that the potential noise levels generated from the soil removal activities are not anticipated to be any louder than the daily activities performed at the adjacent Casitas Pier and associated parking lot area.

#### Closure

Attached to this letter as Attachment A are Chevron, Venoco, Padre, and Geomega's technical responses to the issues raised by SBCK in their September 23, 2008 letter to the Regional Board.

Chevron, Venoco, Padre, and Geomega appreciate the opportunity to present the responses presented herein. We trust that the supplemental information provided to the Regional Board is helpful, and adequately satisfies the Regional Board's requirements for the ultimate approval of the Final Technical Work Plan. If you have any questions or require additional information, please contact me at 805-644-2220, ext. 17 or jsummerlin@padreinc.com.

Sincerely,

PADRE ASSOCIATES, INC.

EG NO. 1950 CERTIFIED

GEOLOGIST DEFOME K. SUI

erome K. Summerlin, C.E.G., C.Hg., R.E.A. II

Principal

JKS:av

#### Attachment A

c: Rich Hill, Chevron EMC
Michael Boisvert, Chevron EMC
Steve Greig, Venoco, Inc.
Jerry Ross, Pillsbury-Winthrop
Dr. Andy Davis, Geomega
Dr. Susan McCaffery, Geomega
Alan Emslie, Padre Associates, Inc.
Dave Durflinger, City of Carpinteria
Jackie Campbell, City of Carpinteria
Tom Rejzek, County of Santa Barbara Fire Department



#### ATTACHMENT A

Response to Comments Received by the RWQCB from Santa Barbara ChannelKeepers (SBCK), September 23, 2008

Padre's responses are generally presented in the order of issues raised in the September 23, 2008 SBCK letter.

#### Soil Assessment

- As previously discussed with RWQCB staff, as well as described in several sections
  of the Final TWP/HSP, following the excavation and removal of chlorinated pesticidecontaining soil from the targeted areas of the site, a series of confirmation soil
  samples will be collected for chemical analyses to validate and verify that all
  chlorinated pesticide-containing soil at concentrations in excess of the applicable
  remediation goals have been successfully removed. Based on the analytical results
  of the confirmation soil samples, the need for additional remediation activities (i.e.,
  additional soil excavation) will be discussed with the RWQCB field staff as requested
  by the RWQCB. The excavation activities will not be considered complete until
  RWQCB staff approve of the analytical results of the confirmation soil samples.
- In general, the soil samples collected at depth across the Project Site have not indicated elevated concentrations of chlorinated pesticides at depths of greater than approximately 6 inches to 12 inches. As a part of the proposed soil remediation system QA/QC procedures, confirmation soil samples will be collected across the areas to be excavated to verify that the chlorinated pesticides containing soils at concentrations in excess of the target remediation goals have been successfully removed to the satisfaction of RWQCB staff.

#### Sediment Filter Design

SBCK objects to characterizing the sediment filter as a monitoring device.

• As noted in multiple places in the Final TWP/HSP, the remedial action designed to achieve compliance with the Cleanup and Abatement Order (CAO) is the removal of contaminated sediments from Drainage Area No. 4 and areas of the Former Nursery Area. The sediment filter is a monitoring device to confirm the efficacy of the remedial action. In addition to serving as a monitoring device, the sediment filter will have the incidental value of providing redundant sediment control even though modeling performed by Geomega concludes that there is no reasonable potential of chlorinated pesticide-containing soil located within the Former Nursery Area and the Buffer Zone Area located outside of Drainage Area No. 4 from being transported to waters of the State.



SBCK notes that after the remedial action is completed some contaminated soil will remain and that the soil retention rate of the sediment filter is only 90%.

• Modeling performed by Geomega concludes that there is no reasonable potential of chlorinated pesticide-containing soil located within the Former Nursery Area and the Buffer Zone Area located outside of Drainage Area No. 4 from being transported to waters of the State. Even so, the multiple segments of the sediment filter will provide a means of catching 95% or more of any sediment that might not be present in runoff samples collected for chemical analyses. In addition, the sediment filter will slow down the velocity of the run-off in the southwest area of the site, which will result in smaller size sediment settling out upstream of the sediment filter prior to reaching the discharge point.

SBCK indicates that the Final TWP/HSP does not provide the necessary details of the sediment filter.

- As noted in the previous response to SBCK's letter of April 24, 2008, according to
  tests completed at the San Diego State University Soil Erosion Research Laboratory
  on behalf of Caltrans, the sediment control effectiveness for Fiber Rolls is 95%.
  Water must pass through a minimum of two Fiber Rolls and three silt fences before
  discharge to the culvert in the southwest corner of the site. Therefore the overall
  sediment control effectiveness will approach 100%.
- According to tests completed at the San Diego State University Soil Erosion Research Laboratory for Caltrans, the sediment retention capacity of Fiber Rolls is 30 pounds per linear foot. The Sediment Filter includes 600 feet of fiber rolls. Therefore the sediment retention capacity is 18,000 pounds or 9 tons.

The sediment filter will slow down the velocity of the run-off in the southwest area of the site which will result in smaller size sediment settling out upstream of the sediment filter prior to reaching the discharge point. The sediment filter fulfills the design requirements included in the Caltrans Storm Water Quality Handbook. The expected flow rates, volumes of runoff, and sediment loads at the Sediment Filter are included within the fate and transport modeling completed by Geomega (Appendix G of the Final TWP/HSP).

SBCK questions the description of the operation of the gate valve that is downstream of the Sediment Filter.

 SBCK makes the impractical request that the timing of closure of the gate valve be specifically stipulated in the Final TWP/HSP. There are many variables that will enter into the timing of the closure of the gate valve including the timing, frequency and intensity of storm events, the time of day that samples are collected, the hours of operation of the analytical laboratory, and public and worker health and safety issues related to extreme storm events.



SBCK suggests that when the gate valve is closed the impounded water be removed immediately.

This is an impractical suggestion. Many variables will affect the timing of the removal
of the impounded water, the most important of which will be public and worker health
and safety issues in an extreme storm event. Additionally, it is improbable that
impounded water could percolate to groundwater in this area within the short
duration of time that the effects of an extreme storm event may delay removal of the
impounded water.

SBCK requests an industrial wastewater treatment facility in place of the Sediment Filter.

• As noted in the previous response to SBCK's April 24, 2008 letter, the type of water treatment system described by SBCK is an industrial facility similar to a conventional water or wastewater treatment plant. It is unreasonable to require construction and operation of an industrial facility for treatment of this storm water. Such an industrial facility if required would likely be located in the Buffer Zone Area next to the adjacent neighborhood and would have a significant carbon footprint not only during construction but also during operation. Additionally, the notion that in this instance the City of Carpinteria (in conjunction with the California Coastal Commission) would ultimately approve the construction and "perpetual" operation of a new wastewater treatment plant on previously undeveloped coastal zone land directly adjacent to a residential neighborhood is unrealistic.

### Second Surface Water Discharge Conveyance Design Issues

SBCK fails to see the need for construction of the second surface water conveyance.

• Padre assumes that second surface water conveyance referred to by SBCK is the new culvert that runs across the southern portion of the Buffer Zone Area that replaces the existing earthen ditch in that area. The earthen ditch outlets to the existing culvert in the southwest corner of the Buffer Zone Area. The new culvert will outlet to that existing culvert in the southwest corner of the Buffer Zone Area just as the earthen channel has historically operated. This new culvert is not a new element in the Final TWP/HSP, and has been part of the TWP for a long period of time. This new culvert is needed so that Watershed No. 4 does not become re-contaminated with pesticides from sediments from off-site surface water sources that have historically flowed within the earthen channel. Without this new culvert offsite sources would re-contaminate Watershed No. 4 with pesticide-containing sediments.



Following the completion of the soil remediation activities specified in the Final TWP/HSP, and the construction of the various surface water control and containment features, including the proposed curb and gutter improvements, the temporary straw bale berms and silt fencing will be unnecessary. Therefore, as requested by Venoco, the City of Carpinteria, and the local residents, the temporary straw bale berms and silt fencing will be permanently removed. SBCK's recommendation that the existing straw bale berms and silt fences remain in-place at the Project Site is unnecessary and is not supported by SBCK's inaccurate interpretation of Geomega's modeling efforts.

## Removal of Detectable DDT, DDE, and DDD from On-Site Water of the State

Removal of detectable concentrations of DDT, DDE, and DDD from the on-site water
of the State will also include the removal of other chlorinated pesticides (Dieldrin,
Lindane, Chlordane, and other chlorinated pesticides), which will be documented
through the collection and chemical analyses of confirmation soil samples. All
confirmation soil samples will be chemically analyzed for the presence of chlorinated
pesticides using U.S. EPA method 1312/8081A, which includes analyses for the
following chlorinated pesticide constituents:

Aldrin α-BHC ß-BHC Lindane δ-BHC

Chlorobenzilate Chlordane

DBCP 4,4'-DDD 4,4'-DDE

4,4'-DDT Diallate Dieldrin Endosulfan I Endosulfan II Endosulfan Sulfate

Endrin

Endrin Aldehyde Endrin Ketone Heptachlor

Heptachlor Epoxide Hexchlorobenzene

Hexchlorocyclopentadiene

Isodrin Methoxychlor Toxaphene

### Railroad Drainage Ditch

• Collection of soil samples for chemical analyses for the presence of chlorinated pesticides within the drainage area downstream of the Railroad Drainage Ditch has previously been completed at the request of the RWQCB. These additional sample collection locations included the area on either sides of the railroad trestle, downstream from the railroad trestle towards the southern terminus of Calle Ocho, within Higgins Creek, and at the Higgins Creek outfall onto the beach at Tar Pits Park. The analytical results of soil samples collected at these locations did not indicate the presence of detectable concentrations of chlorinated pesticides using U.S. EPA method 8081A.



## Removal of DDT, DDE, DDD and Other Chlorinated Pesticides from Drainage Area No. 4

There are two legal factors that will control the ultimate remediation of soil within Drainage Area No. 4:

- The first factor is a legal constraint that will limit the ability of the RWQCB staff to deviate from the approved Final TWP/HSP in Drainage Area No. 4. Under this legal constraint, RWQCB staff will be required to follow the provisions of the Basin Plan, which require that the discharges from the Project Site not exacerbate the chlorinated pesticide levels in "waters of the State." Even after Chevron and Venoco remove all detectable concentrations of pesticides from "waters of the State," the remediated offsite drainage areas immediately downgradient will become recontaminated due to pesticide contaminated soils from former off-site agricultural areas that exist topographically up-gradient from the Project Site. This topographically up-gradient area is located in a portion of the railroad ditch where surface water flows dissipate and sediments are deposited. Under the Basin Plan, Chevron cannot allow discharges from the Project Site to cause pesticide concentrations to exceed the inevitable recontamination levels that will occur due to the erosion of soils from topographically up-gradient, off-site areas. Under all circumstances, the Basin Plan must be complied with.
- The second factor relates to the City of Carpenteria's (City) permitting process, which must be complied with to secure authorization for the excavation of the contaminated soil. The City's permitting process will trigger CEQA, which will require an evaluation of the excavation impacts on all trees, potential habitat, and other environmental assets. While the result of the CEQA process must comply with the Basin Plan, it must also consider all other ecological impacts that will result in legally binding mitigation requirements being imposed in the City's grading/excavation permit(s). The RWQCB staff will need some flexibility to ensure that the excavation of Drainage Area No. 4 complies with all legal requirements, regardless of whether those requirements result from Basin Plan or mitigation requirements in the City's permit(s). This balancing could, among other things, limit excavation that will damage or require removal of trees and possibly critical habitat in areas where such excavation is not required to maintain compliance with the Basin Plan.



# Removal of DDT, DDE, DDD and Other Chlorinated Pesticide from Project Site

SBCK is concerned that the lower remediation goals proposed in the Final TWP/HSP will not be low enough when the additive toxicity equation is applied.

 SBCK's calculations of 116 µg/kg for DDT and DDE, and 163 µg/kg for DDD are incorrect. The SBCK evaluation has not taken into account the additional calculation and further delineation of log<sub>10</sub> K<sub>ow</sub> values that are included in the Hoke et al., paper in Appendix C of Geomega's DDX modeling document. For example, for DDD:

$$log_{10} K_{ow} = 6.7$$
  
 $log_{10} K_{oc} = 0.00028 + (0.983 \times 6.7) = 6.59$   
 $K_d = f_{oc} \times K_{oc} = 108028$   
 $C_s = C_w \times K_d = 0.00083 \times 108028 = 90 \mu g/kg$ 

In addition to incorrectly calculating the proposed remediation goals, SBCK has also
incorrectly applied the additive toxicity equation. Referring back to finding #29 of the
RWQCB's 2004 Cleanup and Abatement Order, this equation is to be applied to the
California Toxics Rule (CTR) directly, i.e. to water quality standards and not to
soil/sediment quality standards as used by SBCK.

#### Sandblast Area

- At the request of the RWQCB, Padre has previously collected soil samples representative of naturally-occurring, background concentrations from adjacent coastal bluff areas that have been undisturbed by historical development, farming activities. These metals concentrations can be utilized to determine the naturallyoccurring, background concentrations to be used as a remediation target(s).
- As stated by Padre throughout the Final TWP/HSP, a series of confirmation soil samples will be collected for chemical analyses to validate and verify that all elevated concentrations of metals containing soil has been adequately removed at the Former Sandblast Area. Based on the analytical results of the confirmation soil samples, the need for additional remediation activities (i.e., additional soil excavation) will be discussed with the RWQCB field staff as requested by the RWQCB.
- It is anticipated that the soil remediation activities planned at the Sandblast Area will be completed over an approximately three to four day period that outside the period of the harbor seal rookery season, and therefore with minimal impact to the harbor seals. Additionally, it should be noted that the potential noise levels generated from the soil removal activities are not anticipated to be any louder than the daily activities performed at the adjacent Casitas Pier and associated parking lot area.



 Based on potential safety concerns associated with the increased equipment and truck traffic required to complete the soil remediation activities, the public's current access to the trail that leads to the Harbor Seal Overlook area will be limited and possibly completely suspended during the course of this portion of the soil remediation project.