

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 7, 2001

Prepared on November 5, 2001

ITEM: 30

SUBJECT: Executive Officer's Report to the Board

Brief discussion of some items of interest to the Board follow. Upon request, staff can provide more detailed information about any particular item.

Watershed and Cleanup Branch Reports

**REGULATION SUMMARY OF
SEPTEMBER/OCTOBER 2001**

[Corinne Huckaby 805/549-3504]

Orders

Reports of Waste Discharge Received	5
Requirements Pending	46
Inspections Made	62
Self-Monitoring Reports Reviewed (WB)	203
Self-Monitoring Reports Reviewed (CB)	115
Stormwater Reports Reviewed	200

Enforcement

Non-Compliance Letters Sent:	
NPDES Program	2
Non-Chapter 15 WDR Program	12
Chapter 15 Program	0
Unregulated	5
Stormwater	35
CAOs Issued	0
ACL Complaints	4

WATER QUALITY CERTIFICATIONS

[Corinne Huckaby 805/549-3504]

In general, staff recommends "Standard Certification" when the applicant proposes adequate mitigation. Measures included in the application must assure that beneficial uses will be protected, and water quality standards will be met.

Conditional Certification is appropriate when a project may adversely impact surface water quality. Conditions allow the project to proceed under an Army Corps permit, while upholding water quality standards.

Staff will recommend "No Action" when no discharge or adverse impacts are expected. Generally, a project must provide beneficial use and habitat enhancement for no action to be taken by the Regional Board. A chart on the following page lists applications received through October 31, 2001.

WATER QUALITY CERTIFICATION APPLICATIONS FROM SEPTEMBER 22, 2001 THROUGH OCTOBER 31, 2001

Date Received	Applicant	Project Description	Project Location	Receiving Water	Action Taken
September 26, 2001	Templeton USD	Templeton HS Multipurpose Building	Templeton	Unnamed tributary to Salinas River	Standard Certification
September 27, 2001	SLO County Dept. GS	Lampton Park Drainage Improvement Project	Cambria	drainage swale	
September 27, 2001	John & Maxine Dav	Habitat Restoration Plan	Moss Landing	McClusky Slough	
September 28, 2001	SLO County PWD	Bridge repair and maintenance	Creston	Huerhuero Creek	
September 28, 2001	SB County PWD	Repairs to Happy Canyon Road Bridge	Santa Ynez	Santa Agueda Creek	
September 28, 2001	SLO County Planning/Building	Avila Flood Gate Replacement Project	Avila	San Luis Obispo Creek	
October 2, 2001	San Luis Obispo County	Road repair and culvert installation at Mill Road	Paso Robles	Dry Creek	
October 2, 2001	San Luis Obispo County	Geneseo Road Repair	Creston	Huerhuero Creek	
October 3, 2001	Venoco	Repair 10 Inch Incoming Gas Line Supports and	Carpinteria	Pacific Ocean	
October 5, 2001	SLO County Planning/Building	Rebuild washed crossing of Huerhuero Creek	Paso Robles	Huerhuero Creek	
October 10, 2001	Morro Bay Fuel Dock, Inc.	Repair and Replacement of Existing Structures	Morro Bay	Morro Bay	Standard Certification
October 10, 2001	San Luis Obispo County	Pine Creek Bank Stabilization Project	Paso Robles	Pine Creek	
October 15, 2001	Coast Guard	Add floating dock	Monterey	Monterey Bay	
October 15, 2001	Nuevo Energy	Point Pedernales Pipeline Flange Repair		Pacific Ocean	
October 25, 2001	Charles Zanolli	Zanolli Fish Habitat Improvement Project	San Luis Obispo	San Luis Obispo Creek	
October 26, 2001	Vandenberg Air Force Base	El Rancho Road Bridge Replacement	Vandenberg AFB	San Antonio Creek Pacific Ocean	
October 26, 2001	Santa Barbara Airport	Aviation Facilities Plan/Runway Safety Area and Taxiway M	Santa Barbara	Tecolotito and Los Carneros Creeks	

WATERSHED BRANCH REPORTS

Status Reports

Mount Hermon Conference Center, Santa Cruz County [Todd Stanley 805/542-4769]

The San Lorenzo Wastewater Management Plan (Plan), adopted by the Santa Cruz County Board of Supervisors, was approved by the Regional Board as Resolution No. 95-04 on April 5, 1995. The Plan includes findings and recommendations resulting from the investigation of elevated nitrate levels in surface water and groundwater in the San Lorenzo River watershed. The Plan recommended that the Regional Board require nitrogen control measures in the issuance of new or revised waste discharge requirements. The Plan's goal is for at least 50 percent reduction in nitrogen from disposal systems located in the San Lorenzo Valley. The subsurface disposal area utilized by the Mount Hermon Conference Center (Mount Hermon) is located within the San Lorenzo River watershed.

In accordance with Resolution No. 95-04, new and revised Waste Discharge Requirements (WDR) for wastewater discharges in the San Lorenzo Valley have been modified to include nitrogen reduction requirements. The purpose of this report is to inform the Regional Board of staff's intent to effect prescribed monitoring and reporting program modifications pursuant to a previously adopted WDR Order.

The discharge of treated wastewater from Mount Hermon is regulated through WDR Order No. 99-93, which was adopted by the Regional Board on October 22, 1999. Of the various facilities that were affected by Resolution No. 95-04, Mount Hermon is the first to complete the 18-month monitoring period prescribed in the discharger's Order. Although the Regional Board has already adopted Orders providing for the modification of nitrogen sampling, staff intends to report such modifications to the Regional Board before enacting the changes.

In accordance with Resolution No. 95-04, Order No. 99-93 requires at least a 50 percent reduction in nitrogen in wastewater effluent. To demonstrate the wastewater treatment plant's (WWTP) ability to consistently achieve this, Monitoring and

Reporting Program (MRP) No. 99-93 requires the discharger to monitor the WWTP nitrogen reduction efficiency, flow rate to the leachfield, and leachfield performance for a minimum of 18 months. An intensive nitrogen-monitoring schedule was also established for this period, requiring the discharger to sample wastewater influent and effluent every two weeks for the analysis of nitrogen reduction.

After the 18-month monitoring period, the discharger was then required to submit a report analyzing the WWTP performance. MRP No. 99-93 states that Regional Board staff will evaluate the report to determine the need and frequency for continued nitrogen monitoring.

By letter dated May 28, 2001, the discharger submitted its 18-month monitoring report. Regional Board staff has determined that the discharger's WWTP has consistently achieved at least a 50 percent reduction in nitrogen in its wastewater effluent, and that the leachfield performance has been satisfactory.

In accordance with MRP No. 99-93, and staff's evaluation of the discharger's 18-month nitrogen reduction monitoring report, staff intends to make the following modifications to MRP No. 99-93:

- A. Change the wastewater influent and effluent nitrogen sampling frequency from every two weeks to monthly, and;
- B. Change the monitoring report submittal frequency from semi-annual to quarterly.

In addition, Order No. 99-93 establishes a time schedule for the connection of existing sources of septic tank effluent into the existing treatment system [seven existing facilities, six of which are scheduled to be connected by October 15, 2007, the other scheduled for connection by October 15, 2010, contributing a total of 26,100 gallons per day]. This additional wastewater flow will not exceed the wastewater treatment facility's design capacity of 63,000 gallons per day.

In recognition of the scheduled increase in waste loading to the WWTP, staff also intends to modify MRP No. 99-93 to reinstate the intensive wastewater influent and effluent nitrogen monitoring and reporting for three months after

each additional facility is connected to the WWTP. This will allow the discharger and Regional Board staff to monitor and evaluate the treatment system's continued ability to achieve the required 50 percent nitrogen reduction.

CLEANUP BRANCH REPORTS

Corrective Action Plan Approvals

Staff regularly provides the Board with brief overviews of corrective action plans for underground tank cleanup cases. These reports are intended to keep the Board apprised of proposed cleanup activities as well as to comply with public notification requirements of the California Code of Regulations, Title 23, Chapter 16, Section 2728.

Under the public notification requirements, anyone may request review of information and decisions concerning the corrective action plan and the Board may hold a public meeting when requested, if there is sufficient public interest in the plan.

Underground Tank Program

BP Oil Facility No. 11240, 2178 41st Avenue, Capitola, Santa Cruz County [Burton Chadwick 805/542-4786]

In 1987, as a result of a leak detected during tank integrity testing, three gasoline underground storage tanks (UST) were removed and replaced on the subject property. During UST removal, approximately 750 cubic yards of hydrocarbon-impacted soil was removed and the UST cavity was over-excavated to approximately 15- to 20-feet below ground surface. In 1995, the dispenser piping was upgraded, a waste-oil UST was removed, and more than 100 cubic yards of impacted soil were removed from these areas. The USTs are upgraded to meet 1998 leak detection and prevention standards.

Several phases of initial soil and groundwater investigation were conducted between 1987 and 1997. Additional monitoring wells MW-8, MW-9, and MW-10 were installed in 1999. Vapor extraction well VW-1 and downgradient groundwater monitoring wells MW-11 and MW-12 were installed in 2000. Based on recent (July 3,

2001) quarterly groundwater monitoring results, monitoring wells MW-4 and MW-5 contained 2.1 feet and 1.75 feet of free-phase hydrocarbon product, respectively. Groundwater samples collected from well MW-9 indicated total petroleum hydrocarbons as gasoline at 10,000 µg/L and methyl-*tertiary*-butyl ether (MTBE) at 14,700 µg/L; benzene was not detected above the detection limit of 0.5 µg/L. Recently installed downgradient well MW-12 had a detected concentration of MTBE at 375 µg/L. Based on the results of a soil vapor extraction test, well VW-1 has a radius of influence of approximately 65 to 205 feet; well VW-1 is located within 40 feet of monitoring wells MW-4, MW-5 and MW-9.

The Responsible Party has proposed a Corrective Action Plan consisting of soil vapor extraction using well VE-1, and quarterly bailing of free product from wells MW-4 and MW-5 in conjunction with regularly scheduled quarterly groundwater monitoring. Regional Board staff has agreed to the proposed soil vapor extraction, however, has directed the Responsible Party to conduct the following additional remedial actions: (1) more aggressive and prompt removal of the observed free product in wells MW-4 and MW-5, and (2) groundwater extraction from well MW-9 to more rapidly remove dissolved phase contaminant mass and to control plume migration. The Responsible Party has also been directed to install a downgradient well(s) in order to fully delineate the extent of the groundwater plume.

The nearest water supply well is a private domestic well located approximately 1,100 feet and generally downgradient of the subject site. The well, constructed in 1962, is 120 feet deep and has a 26 foot sanitary seal.

In order to monitor remedial activities, Regional Board staff has directed the Responsible Party to submit (initially) monthly remedial status reports describing the activities and results of the approved corrective actions. The first monthly remedial status report is due October 31, 2001. A report documenting the installation of downgradient well(s) is due November 30, 2001.

Artichoke Industries Facility (Former), 11599 Walsh Street, Castroville, Monterey County, [Burton Chadwick 805/542-4786]

An underground storage tank (UST) was removed from the site in December 1995. Soil samples collected below the removed UST indicated total

petroleum hydrocarbons as gasoline (TPH) up to 1,700 milligrams per kilogram (mg/kg), and low concentrations of toluene, ethylbenzene and xylenes. Benzene and methyl-*tertiary*-butyl ether (MTBE) were not detected. In January 1996, an initial soil and groundwater investigation was conducted using direct-push sampling techniques. TPH was detected in soil samples at a maximum concentration of 2,200 mg/kg. TPH and benzene were detected in groundwater grab samples at maximum concentrations of 81,000 micrograms per liter ($\mu\text{g/L}$) and 7,800 $\mu\text{g/L}$, respectively; MTBE was not detected. Groundwater monitoring wells were installed during several subsequent phases of the investigation in July 1996, October 1997, August 1998, May 2000, and March 2001; routine groundwater monitoring has been conducted since April 1997.

Recent and historic groundwater sampling data indicate an area of degraded groundwater near the former onsite underground storage tank (UST) and the area near monitoring wells MW-9, MW-10 and MW-11. In May 2001, well MW-10 contained total petroleum hydrocarbons as gasoline (TPHg) at 28,000 micrograms per liter ($\mu\text{g/L}$), benzene at 2,100 $\mu\text{g/L}$, toluene at 2,000 $\mu\text{g/L}$, ethylbenzene at 1,800 $\mu\text{g/L}$, and xylenes at 5,600 $\mu\text{g/L}$. MTBE has not been detected. This Regional Board's water quality objectives for these contaminants are 1,000 $\mu\text{g/L}$, 1 $\mu\text{g/L}$, 150 $\mu\text{g/L}$, 680 $\mu\text{g/L}$, and 1,750 $\mu\text{g/L}$, respectively. Based on the results of pilot tests conducted in conjunction with the Corrective Action Plan, air sparging with soil vapor extraction appears to be the most feasible remedial alternative.

The Responsible Party's consultant has proposed a Corrective Action Plan consisting of air sparging and soil vapor extraction and recommends that the next step in the corrective action process is to prepare detailed plans showing the cleanup process and instrumentation, cleanup well construction details, piping layout and details, cleanup system equipment layout and construction details, air pollution control equipment specifications, and an operation and monitoring plan to install the air sparging and soil vapor extraction system described in the Corrective Action Plan.

Regional Board staff agrees with the proposed Corrective Action Plan and recommendations, and the Responsible Party has been requested to

proceed with implementation of the approved plan. Quarterly Remedial System Installation Progress Reports will be submitted in conjunction with regularly scheduled groundwater monitoring reports.

SLIC Closed Case

Former Cal-Agra, Inc. Site, 640 McCray Street, Hollister, San Benito County [John Mijares 805/549-3696]

This site is owned by Union Pacific Railroad and leased by Jim Tavares, president of Cal-Agra, Inc., which used it as a retail fertilizer and pesticides facility. The company also offered commercial application of fertilizer using ground application equipment. Rinsing of fertilizer equipment was mostly done in the field. However, fertilizer mixing, equipment rinsing, cleaning, and accidental spills generated fertilizer-contaminated rinsewater at the site. The rinsewater was either used as makeup water for fertilizer blends or applied to farmlands. The operational area of the facility was paved with asphalt in 1991 to facilitate cleaning and containment of accidental rinsewater and fertilizer spills. Operation at the facility was regulated by Waste Discharge Requirements Order No. 91-34.

On March 10, 1997, Cal-Agra ceased operation at the facility and moved its office, equipment, and operation to 2790 Buena Vista Road, Hollister. Operation at the new facility is regulated under Waste Discharge Requirements Order No. 97-40, which was adopted by the Regional Board on September 9, 1997.

On December 5, 1997, the Regional Board rescinded Order No. 91-34 since all operations related to the storage, handling and application of fertilizer and pesticides were terminated at this facility. However, Cal-Agra was required to conduct a site assessment to determine whether their prior operation had impacted the facility or areas adjacent to it. Soil investigation identified an adjacent 25 by 80 ft area contaminated with nitrate. Cal-Agra excavated about 180 cubic yards of nitrate-contaminated soil and used it as a soil amendment by spreading it over 280 acres of non-irrigated grazing land during the spring of 2000. The excavation was backfilled with clean soil, compacted, and paved with asphalt and is now

used as a parking lot. Mr. Tavares still leases the site and currently operates a fitness center at this location.

On October 5, 2001, Regional Board staff issued a closure letter to Jim Tavares of Cal-Agra confirming completion of site investigation and remedial action at the former Cal-Agra site, 640 McCray Street, Hollister.

Status Reports

Unocal Guadalupe Oil Field, San Luis Obispo County [Katie DiSimone 805/549-3690]

Summary - The following is a status report of Unocal's Guadalupe oil field cleanup. This information was current on November 1, 2001.

Unocal has submitted, through the mediation process, draft reports to evaluate natural attenuation of diluent contamination and confining unit integrity. Natural attenuation evaluation will be performed to assess the occurrence of natural attenuation mechanisms, determine the rates of attenuation, and evaluate its further use as a remedial option at the site.

The confining unit is the low-permeability stratum that separates the contaminated dune sand aquifer from the regional aquifer. The current evaluation will assess the depositional environment of the confining unit, potential spatial variations in confining unit thickness, and the potential for water and contaminant transport through the confining unit to the principal aquifer. These evaluations will be important for determining future cleanup options and priorities at the site.

Other ongoing studies include human health and ecological risk assessments and an evaluation of surface-water bodies that includes an inventory and an assessment of the potential for diluent spills to reach surface water. Excavations remain on hold while soil reuse and disposal options are studied

Chevron Estero Bay, San Luis Obispo County, Sheila Soderberg 805/549-3592]

Chevron Pipeline Company operated a Marine Terminal located at 4000 Highway 1 north of Morro Bay. The Terminal facility, which

comprises approximately 300 acres within Chevron's 2,200 acres of coastal and inland property, was operated from 1929 to 1999, and consists of the Hill and Shore Plants as shown on **Attachment 1**. Since 1994, Regional Board staff has worked with Chevron in an attempt to adequately assess and cleanup the site. Progress has stalled since 1998, pending resolution of issues regarding Chevron's appeal of an Executive Officer issued Cleanup or Abatement Order.

Crude oil was transported via pipelines from the San Joaquin Valley and San Ardo oilfields to the Hill Plant, where it was stored in several aboveground storage tanks (AGTs) in the inland hills. Oil from the Hill Plant was transferred via aboveground and underground pipelines to the Shore Plant, where crude oil was subsequently transferred to oil tankers via aboveground and offshore sub-sea pipelines. The Shore Plant also has AGTs which were used to store crude oil and cutter stock. The cutter stock or diluent (e.g., diesel grade petroleum) is used to thin heavy crude oil that is transported through pipelines to the terminal. Two clay-lined ponds at the east end of the Shore Plant were used to store and aerate tanker ballast (e.g., seawater). The Shore Plant is located within an area of a former Native American (Chumash) village and existing Snowy Plover habitat. The Shore Plant is bounded by Toro Creek to the north, and Atascadero Beach and the Pacific Ocean to the west as shown on **Attachment 2**. Oil storage and transfer activities were discontinued in 1999, and Chevron is currently in the process of decommissioning the facility. As shown on **Attachment 3**, Chevron has performed numerous subsurface investigations to determine the extent of petroleum hydrocarbon impacts to soil and groundwater from spills at the facility. Since 1995, Chevron has collected quarterly groundwater samples from the existing monitoring wells, extraction wells, monitoring points, and from four locations within Toro Creek.

Historical records indicate that on June 6, 1990, approximately 15 barrels or 630 gallons of cutter stock overflowed from the cutter stock pump located at the eastern end of the shore plant, located approximately 200 feet northwest of AGT No. 901. The sump was used to contain pump drippings or overflows. Chevron reportedly excavated all saturated soils and replaced a faulty check valve, which caused the sump to overflow. In late 1994, Chevron began investigating an

approximately 3,500-gallon release of cutter stock due to the defective sump. In 1995, Chevron investigated crude oil seeps near former AGT nos. 386 and 387 by trenching. Separate-phase hydrocarbons were noted in several of the trenches and soil samples were collected in several locations (PH-1 through PH-25). The sources of the seeps are believed to have resulted from historical pipeline releases, with surface spills accumulating in the low-lying area of the facility, adjacent to AGTs.

Chevron and Regional Board staff have collected samples of separate-phase cutter stock (diluent) collected from groundwater monitoring wells at Chevron's terminal. Laboratory analyses indicate that the cutter stock consists of diesel-range petroleum hydrocarbons, which contain relatively low or non-detectable concentrations of aromatic hydrocarbon compounds (e.g., BTEX) and non-carcinogenic polynuclear aromatic hydrocarbons (e.g., anthracene, pyrene, etc.). Chevron's cutter stock differs in composition than cutter stock at Unocal's Guadalupe Oilfield. Unocal's cutter stock contains carcinogenic polynuclear aromatic hydrocarbons and polychlorinated biphenols (e.g., PCBs). Laboratory analysis of separate-phase hydrocarbons (both cutter stock and crude oil) from groundwater samples at Chevron's terminal collected during the second and third quarter groundwater sampling events in 2001 did not contain detectable concentrations of PCBs.

From 1995 through 1996, Chevron installed 79 temporary well points (WP-1 through WP-79). Based on the presence of separate-phase hydrocarbons in the temporary well points and dissolved-phase groundwater sample results from selected wells points, Chevron installed groundwater monitoring wells (MW-1 through MW-16), extraction wells (EW-1 through EW-7), monitoring points P-1 and P-2, then decommissioned the temporary well points. In 1995, Chevron began passive separate-phase hydrocarbon removal from groundwater in selected wells.

In February 1996, Chevron excavated approximately 70 cubic yards of soil containing crude oil-range petroleum hydrocarbons from a portion of Atascadero Beach adjacent to their offshore loading line. During excavation activities, separate-phase hydrocarbons were observed on groundwater within the excavation.

Using a vacuum truck, Chevron estimated that between 46 to 68 gallons of oil were removed. As shown on **Attachment 3**, Chevron collected soil samples (SB-1 through SP-28) to verify excavation of soils containing petroleum hydrocarbons associated with crude oil and cutter stock. Chevron's investigation indicated that petroleum hydrocarbons in soil and groundwater extended west from the terminal facility, under Highway 1, onto Atascadero Beach and adjacent to Toro Creek.

In a September 24, 1996 letter, the Regional Board required Chevron to submit a cleanup plan to address remaining petroleum-contaminated groundwater at the facility. On March 31, 1997, Chevron submitted a report entitled Draft for Discussion Study, Feasibility Study of Remedial Alternatives and Remedial Action Plan (draft FS/RAP). In the draft FS/RAP, Chevron identified petroleum hydrocarbons in soil at concentrations ranging from less than 1 milligram per kilogram (ppm) to over 10,000 ppm as shown on **Attachment 4**. The maximum total petroleum hydrocarbon concentration was 46,000 ppm at sample location WP-41 at a five-foot depth. Separate-phase and dissolved phase hydrocarbons in groundwater are shown on **Attachment 5**. The Executive Officer's July 15, 1997 review letter to Chevron identified deficiencies regarding the draft FS/RAP. In addition, the Executive Officer requested a work plan for additional investigation and submittal of a quality assurance and quality control (QA/QC) plan for subsequent field activities.

On August 12, 1997, Chevron and Regional Board staff met in a follow-up meeting to discuss the draft FS/RAP. Specifically, Regional Board staff was concerned that Chevron concluded groundwater was not adversely affected by the presence of separate-phase hydrocarbons beneath the facility. Chevron contended the separate-phase hydrocarbons, as crude oil and cutter stock oil, were immobile and did not dissolve into groundwater. In addition, Chevron concluded the risk to human health and environment were greatly reduced because dissolved-phase aromatic hydrocarbon compounds (BTEX) were limited to only a few onsite wells and non-carcinogenic polynuclear aromatic hydrocarbons were associated with the separate-phase hydrocarbon-bearing wells.

In response, the Executive Officer issued Monitoring and Reporting Program No. 97-102 on August 28, 1997, which required quarterly groundwater sampling of all groundwater-monitoring wells, including those wells containing separate-phase hydrocarbons. Collecting groundwater samples and analyzing samples from the separate-phase bearing wells is unusual. However, this unusual approach was necessary because Chevron took the position that in areas where separate-phase product existed they presumed there was no dissolved product in ground water. Normally the presumption is the opposite, that separate-phase product indicates the presence of dissolved product. Since Chevron would not agree to the normal assumption, Regional Board staff's intent was to have Chevron demonstrate that the presence of the separate-phase hydrocarbons in groundwater degraded the groundwater quality. In addition, the Executive Officer's letter identified an extensive list of deficiencies in the investigations performed to-date and required Chevron to address these deficiencies.

In October 1997, Chevron repaired a leak from their loading line No. 2 at the facility and performed limited excavation of petroleum hydrocarbon bearing soils in this area on Atascadero Beach. Because of unclear agency notification on Chevron's part, Chevron did not perform the excavation under Regional Board direction nor under the direction of a State of California registered engineer or geologist. As a result of the Executive Officer's letter identifying deficiencies in this investigation, Chevron revised their agency notification procedures and submitted a work plan to evaluate the effectiveness of the excavation and install a passive oil collection system in one of the separate-phase bearing wells on Atascadero Beach.

In an effort to evaluate Chevron's new QA/QC procedures, Regional Board staff began collecting split groundwater samples during the third quarter 1997 groundwater sampling event.

In the Executive Officer's December 1, 1997 and February 5, 1998 letters to Chevron, the Executive Officer pointed out numerous deficiencies that occurred during quarterly groundwater monitoring activities and the lack of cleanup progress site-wide. In addition, Regional Board staff noted inconsistencies between Chevron and the Regional

Board's analytical laboratory data for the split-groundwater sampling events.

On September 3, 1998, the Executive Officer issued Cleanup and Abatement Order No. 98-091 (Order). The Order, **Attachment 6**, requires Chevron to clean up the discharge of petroleum hydrocarbon constituents to soil and ground water beneath their bulk fuel marine terminal. On October 3, 1998, Chevron filed a petition with the State Board challenging this Regional Board's Order. Chevron's petition was held in abeyance, but on September 8, 1999, Chevron requested that the State Board review the petition. The petition requested the State Board to perform a Review of Adequacy of their FS/RAP.

From December 1995 to July 1999, Chevron removed approximately 46 gallons of separate-phase hydrocarbons from EW-1, located adjacent to the former cutter stock sump, using a passive recovery canister. In July 1999, Chevron performed a high vacuum dual phase extraction (high vac) test on five onsite wells (e.g., EW-1, EW-7, EW-6, MW-1, and MW-32). During the high vac test, Chevron removed approximately 55 gallons of separate-phase hydrocarbons from EW-1 and approximately 47 gallons from EW-7, located near the main office. The high vac test did not recover a measurable quantity of oil from the other three wells tested. Based on cumulative volume of oil removed from the recovery canister, results of the high vac test, and Chevron's calculation that only 70-gallons of oil remain in saturated soils in the vicinity of EW-1, Chevron concluded that further remedial measures were not warranted in the vicinity of EW-1. In addition, Chevron estimated that only 140 gallons of oil remained in the soils near EW-7 and that an eight-day high vac event would remediate remaining separate-phase hydrocarbons in groundwater in this area.

In August 1999, Chevron spilled an estimated 4.5 barrels or 170 gallons of diesel-range oil during pipeline decommissioning activities. These light-end hydrocarbons also included BTEX and the fuel additive methyl tertiary-butyl ether (MTBE). Because the area contains cultural resources, thirty-six borings were hand-augered, with three well points and eleven temporary extraction wells installed as shown on **Attachment 7**. In response to this recent spill, from September 16, 1999 until April 17, 2001, Chevron has performed periodic

high vac events in this area and has removed approximately 290 gallons of petroleum hydrocarbons.

In compliance with this Regional Board's monitoring and reporting program, Chevron continues to perform quarterly groundwater sampling at the facility. Chevron continues to collect and analyze groundwater samples from the separate-phase hydrocarbon bearing wells. Petroleum hydrocarbons continue to be detected in these wells, despite Chevron's attempt to remove the layer of separate-phase hydrocarbons. During the September 2001 groundwater-sampling event, the depth to groundwater at the Shore Plant ranged from approximately 8 to 18 feet below ground surface and the groundwater flow direction was to the west/southwest as shown on Attachment 8. The groundwater surface beneath the site fluctuates due to seasonal variations, with only a portion of the site adjacent to the beach influenced by tidal fluctuations. Separate-phase hydrocarbon and dissolved-phase hydrocarbons were detected in groundwater as shown on Attachment 9. When contrasted with Attachment 5, the extent of the groundwater plumes depicted in Attachment 9 is a function of the groundwater monitoring wells being sampled and may not be representative of site-wide conditions.

In March 2001, the State Board staff reviewed Chevron's appeal and issued a Draft Order for consideration before the State Board. On May 29, 2001, State Board, Regional Board, and Chevron representatives met to discuss the Draft Order, but without significant progress from the discussion. A State Board workshop to consider a Draft Order is tentatively scheduled for January 2002.

Conclusion:

This site is contaminated with petroleum products ranging from crude oil to light-end hydrocarbons, with a predominance of the contamination consisting of diesel-range products. The 1999 pipeline oil release also contained BTEX and MTBE. Petroleum products have saturated the subsurface soil and in some places the contamination extends below the groundwater surface. Consequently, groundwater in contact with contaminated soil becomes contaminated with separate-phase hydrocarbons and/or dissolved-phase hydrocarbons. The site needs extensive remediation to curtail groundwater contamination and threats to surface water bodies, Toro Creek

and the Pacific Ocean. State Board resolution 92-49 requires cleanup to background or to the most stringent level technically and economically achievable. In no case can remediation be less stringent than necessary to protect beneficial uses. So far, Chevron has performed minimal remediation and has made a series of proposals to do minimal additional remediation (basically more vacuum extraction and a relatively small amount of excavation). Instead of proposing the most stringent clean up feasible they have made a series of proposals based on the minimum possible effort to protect beneficial uses excluding the Municipal supply beneficial use designated in the Basin Plan. Staff continues to seek a plan from Chevron that is consistent with SWRCB resolution 92-49 and protective of the Basin Plan designated beneficial uses. We expect Chevron to propose a workable plan to clean up this site. Regional Board staff will provide a future update to the Regional Board after the State Board considers their Draft Order.

(See Attachment Nos. 1 through 9)

Buena Vista Landfill [Michael LeBrun 805/542-4645]

The Executive Officer issued a minor (\$2,400) complaint to Santa Cruz County for reporting violations and the matter was settled as discussed at the Regional Board meeting in September. As a follow-up report, Santa Cruz County Public Works is now back in compliance with self-monitoring reporting requirements at their Buena Vista Landfill. The County hired Geosyntec consultants to prepare future monitoring reports until County vacancies could be filled. The Second Semi-annual/Annual 2000 monitoring report was submitted on time in October 2001.

Underground Tanks Summary Report dated October 19, 2001 [Jay Cano 805/549-3699]

(See Attachment No. 10).

Regionwide Reports

Regional Monitoring [Karen Worcester 805/549-3333]

Central Coast Ambient Monitoring Program (CCAMP) staff attended the Southern Sea Otter Research Symposium, sponsored by the Monterey Bay Aquarium. Several talks focused on pathogens of concern, which include a number of organisms which may originate on land, like Cryptosporidium, Toxoplasma, and Sarcocystis. One study showed that over 30% of dead, recovered otters show evidence of Toxoplasma infection (though not necessarily as cause of death). This is a protozoan whose primary host organisms are cats (both wild and domestic). Another issue at the conference was related to the need for sufficient funding to conduct ongoing contaminant chemistry. The CCAMP program has begun funding some work of this nature and we are very interested in the outcome, because sea otters are such effective bioaccumulators. Karen Worcester also met with sea otter researchers and Mark Stephenson of the State Mussel Watch Program to discuss the possibility of utilizing Mussel Watch Endowment funds and other sources for continuing support for some aspects of sea otter research. Particularly, preliminary studies are showing unanticipated presence of several pathogenic organisms in sea otter prey items, including mussels and clams.

Karen Worcester has been in a dialogue with Pete Raimondi of U.C. Santa Cruz and Mario Tamburri with the Monterey Bay National Marine Sanctuary about organizing a workshop to develop focused CCAMP marine monitoring activities which fit within the framework of larger coastwide monitoring by programs like the Program for Interdisciplinary Study of Coastal Oceans (PISCO) and the Long-Term Ecological Research Network (LTER). We have developed a marine monitoring concept paper which describes problems, existing monitoring resources, and potential questions of interest to focus discussion at the workshop. Questions primarily center around detection of anthropogenic impacts associated with river mouths and urban areas.

Karen Worcester attended a workshop sponsored by Cal Trans on storm damage associated with Highway 1 slides along the Big Sur area. Cal Trans is developing a management plan for the area, which is addressing issues like emergency response to landslides and how to handle excess slide material. Karen recommended that nearshore monitoring be included as a component of the plan

and that Cal Trans coordinate with our nearshore monitoring program development.

CCAMP staff participated at a Joint Application Development meeting for the planned second phase of the State Water Information Management system (SWIM II). Region 3 data management needs were described with regard to our monitoring and assessment activities. It is currently proposed that the Environmental Protection Agency's Storage and Retrieval (STORET) system be integrated with SWIM II to serve as the ultimate water quality data storage structure.

SB390 Waiver Policy [Eric Gobler 805/549-3467]

The Porter-Cologne Water Quality Control Act (Section 13269) allows Regional Boards to waive regulation of a specific discharge or specific types of discharges, where such action is "not against the public interest." SB 390 (Alpert) revised Porter-Cologne Section 13269, requiring review of waivers and waiver policies. The bill was signed into law on October 6, 1999. Today's report is intended to identify the Regional Board's current "Waiver" policy and briefly summarize SB390 impacts.

On November 17, 1989, the Regional Board adopted Resolution No. 89-04, which approved the "Types and Nature of Waste Discharges Which Will Be Considered For Waiver of Regulation." This approval was identical to the list of waste discharges that could be waived, previously approved by the Regional Board on April 15, 1983. The Water Quality Control Plan (Basin Plan) Appendix A-23 (See Attachment No. 11) includes the current list of waste discharges considered for waiver of regulation, pursuant to Porter-Cologne Section 13269. Discharge types listed and typically waived pose a low threat to water quality.

SB390 requires each Regional Board to:

- **Review** the terms, conditions, and effectiveness of each type of "Waiver of Waste Discharge Requirements and Water Quality Certification" (hereafter "Waiver") included in their waiver policies [Basin Plan Appendix A-23 – See Attachment 11];

- **Readopt or terminate** waivers [previously adopted] by January 1, 2003 (failure to readopt waivers will automatically result in their termination);
- **Issue** Waste Discharge Requirements (WDRs) for on-going discharges whose waivers have purposely been terminated and where it is determined that WDRs would provide more appropriate and effective regulation;
- **Enforce** waivers [some waivers included conditional approval]; and,
- **Renew/terminate** waivers every five years [this will be ongoing].

Although the full intent and impact of SB390 are not clearly understood, its impacts are believed to be significant. The State Board staff, with Regional Board staff input, has estimated that well over 700,000 individual discharges exist statewide that are covered by Waivers. This large number seems reasonable given that on-site sewage systems and agricultural tail water discharges are typically covered by Waivers and that there are a very large number of these discharges statewide. In Region 3, we have identified more than 150 formally waived waste discharges during the past 15 years, excluding hundreds of approved septic systems and water quality certifications.

Initial workload estimates developed indicated that as many as 120 personnel years (PYs) may be required for full SB390 implementation statewide. Recent, more subjectively based estimates developed have ranged around 50 to 60 PYs. It should be noted that no funding or personnel resources were provided to implement SB390. Attempts by the State Board to secure necessary resources have been unsuccessful to date.

The State Board initially established the "Waiver Committee" to develop a statewide cost estimate for SB390 implementation. The Waiver Committee was composed of State Board and Regional Board representatives. Implementation cost estimates were developed by a few regions as part of these efforts. Table 1, below, identifies the staffing estimates, but are uncertain considering the universe of applicable Waivers has not been clearly established. Thus, a detailed statewide cost estimate was never developed.

Table 1

**Estimated Costs for SB 390 Implementation
For Regions Responding by September 25, 2001¹**
[Personnel Years, PYs]

Region	Fiscal Year 01/02	Fiscal Year 02/03	On Going
3	3.5	2.4	2.1
4	10.0	10.0	10.0
7	9.4	9.4	8.2
8	1.5	1.5	1.5
Totals	24.4	23.0	22.1

¹ These estimates do not include review time for individual sewage disposal systems or water quality certifications

Since SB390 implementation is complex, unfunded and legislatively time critical the State Board is restructuring the Waiver Committee into a SB390 Planning Team/Implementation Workgroup. A Workgroup Workplan (Draft attached – See Attachment No. 12) is being developed. The first Workgroup meeting is tentatively scheduled for November 30, 2001. Eric Gobler from Region 3 will participate.

Given the relatively small amount of time remaining before the January 1, 2003 deadline, there is some doubt as to whether all waivers and waiver policies could be reviewed and readopted Statewide before the deadline, even if full funding were obtained today. Only limited SB390 implementation efforts have reportedly been undertaken by various regions, since the bill was signed due to the lack of funding and higher priorities. Factors that could prevent waiver re-adoptions by the deadline include investigative work and related documentation requirements, California Environmental Quality Act reviews, public hearings, hiring and training staff.

To date, Region 3 has conducted a preliminary review to identify previous Waivers and put together a preliminary resource need estimate. We have limited our time and effort for the following reasons:

1. Waivers, by definition, pose a low threat to water quality; staff is struggling to meet existing workplan priorities within our regulatory resource allocations; and unless additional resources are provided, SB390 implementation will require

redirection of resources (funds and staff) from currently underfunded regulatory programs, such as the NPDES, Waste Discharge Requirement and Water Quality Certification Programs

2. SB390 includes no funding or relief of other regulatory requirements.

Staff intends to participate in the SB390 Workgroup on a limited basis unless or until additional resources are provided.

We recommend the Update of Waiver Policy be incorporated into the Basin Plan triennial review process and be prioritized with other basin planning needs.

Administrative Reports

Presentations and Training [Roger Briggs 805/549-3140]

On October 25-26, 2001, Water Resources Control Engineer David Athey of the Land Disposal Unit, attended Landfill Liner Construction training. The training was sponsored by State Board and held in Sacramento.

On November 13, 2001, David Athey (Land Disposal Unit) and Matt Fabry (Northern Watershed) gave a permitting presentation to Dr. Nelson Yarrow's "Introduction to Environmental Engineering" class at California Polytechnic, San Luis Obispo. The presentation consisted of an overview of environmental regulations, types of

projects that need permitting, and ended with Regional Board specific permitting requirements. Mr. Athey's presentation was focused on permitting new and existing landfills and touched on groundwater cleanup sites. Mr. Fabry provided an overview of the regulations and spoke in detail regarding wastewater treatment plant permitting.

Carol Hewitt attended training on the Legislative Process on October 15, 2001 in Sacramento.

On October 27, Alison Jones attended the "Fields to Ocean" Farm Tour held in the Elkhorn Slough area. Ms. Jones participated and spoke in support of a 319 project that we have been managing as a pilot project to certify environmentally friendly farm products. The project has developed a product label and an extensive manual used to score participants on their farming practices, such as erosion control, fertilizer and pesticide management, etc. Ten farmers participated, with support from California Alliance with Family Farmers, National Resource Conservation Service, Resource Conservation Districts, Monterey Bay National Marine Sanctuary, Monterey County Ag Commissioner, and Regional Board staff. The pilot project has been successful. The challenge will be to take it to a wider audience. The field day was pretty well attended, with press coverage and a representative from Congressman Sam Farr's office.

Mark Angelo attended a week-long course on Fluvial Geomorphology at the University of

ATTACHMENTS

- 1) Entrix Figure 1, Site Location Map
- 2) Entrix Figure 2, Site Plan
- 3) Entrix Figure 3, Site Wide Sampling Locations
- 4) Entrix Figure 4, Extent of TPH in Soil
- 5) Entrix Figure 5, Dissolved Phase & Separate Phase Distribution Map
- 6) Regional Board September 3, 1998 Cleanup or Abatement Order No. 98-091
- 7) Entrix Figure 6, Piping Release
- 8) Entrix Figure 7, Potentiometric Surface Map, September 2001
- 9) Entrix Figure 8, Dissolved Phase & Separate Phase Distribution Map, September 2001
- 10) Underground Tanks Summary Report dated October 19, 2001
- 11) SB390 – Water Quality Control Plan (Basin Plan)
- 12) SB390 - Workgroup Workplan

California's White Mountain Research Station in Bishop, CA between September 30th and October 5th.

From October 30-31, 2001, Senior Engineer Geologist Gerhardt Hubner attended the 23rd Biennial Groundwater Conference and 10th Annual Meeting of the Groundwater Resources Association of California in Sacramento. The keynote speaker at the conference was Celeste Cantu', Executive Director of the State Water Resources Control Board. The main focus of the conference was to obtain a better understanding of the water quality and quantity of the State's groundwater basins. In addition, conference speakers presented these topics: new information and management tools for groundwater management, groundwater treatment and remediation, watershed effects on groundwater, and emerging contaminants and their impact on groundwater and the State's drinking water supply.

On October 23-24, 2001, this Regional Board's Nonpoint Source team (Sorrel Marks, Julia Dyer, Bill Hoffman, Amanda Berns, Alison Jones) attended the California Nonpoint Source Conference in Sacramento. Several of our 319(h) grant funded projects were highlighted as success stories. Lisa McCann, our TMDL coordinator, moderated one of the sessions.