Califo. .a Regional Water Quality Control Boa.
North Coast Region

CLEANUP AND ABATEMENT ORDER NO. R1-2003-0121

FOR

CHEVRON PRODUCTS COMPANY
AND
TOM BRANTLEY

12 WEED BOULEVARD, SOUTH
WEED, CALIFORNIA

Siskiyou County

The Regional Water Quality Control Board, North Coast Region, (hereinafter Regional Water Board) finds that:

1. Chevron Products Company (Chevron) owned and operated a Chevron brand service station at 12 South Weed Boulevard in Weed, California (hereinafter the Site), until the mid 1980s (Attachment A). Chevron sold the Site to Tom Brantley who has owned and operated the Site as a Chevron brand service station from the mid-1980s to the present. Both Chevron and Tom Brantley are hereinafter referred to as the Dischargers.

2. The Siskiyou County Health Department reported a large release of gasoline at the Site to the Regional Water Board in 1985. Free product was observed in groundwater at a thickness of up to 2 feet, and dissolved petroleum hydrocarbons including gasoline, diesel, and benzene were detected in groundwater at concentrations significantly above water quality objectives. The release was detected during tank removal work performed by Chevron.

3. Cleanup and Abatement Order No. 90-189 was issued to Chevron in September 1990 and required Chevron to define the extent of contamination and to submit a cleanup plan. Chevron installed groundwater monitoring wells and a groundwater extraction system, and began extraction and treatment of free product and dissolved gasoline in groundwater. The groundwater extraction and treatment system operated intermittently from 1986 to 1997.

4. In July 1997, free product was present in four monitoring wells (MW-5, MW-9, MW-11, RW-1) at the Site at a thickness of up to approximately one inch. On September 25, 1997, the Dischargers submitted a Modified Corrective Action Plan (modified CAP). The modified CAP proposed discontinuing the groundwater extraction and treatment, continuing manual and/or passive removal of free product, and relying on intrinsic bioremediation as the primary petroleum hydrocarbon remediation mechanism.

5. In letters dated January 23, 1998, and June 10, 1998, Regional Water Board staff informed the Dischargers that the Site was not a low-risk groundwater Site, that it remains a high priority for cleanup, and that a passive remediation approach is unacceptable. The Dischargers were also informed that the modified CAP did not address attainment of water quality objectives in a reasonable amount of time and other remedial actions had to be evaluated. At a minimum, alternative remedial approaches must cleanup groundwater to

background levels, cleanup groundwater to water quality objectives, and cleanup groundwater to levels attainable through application of best practicable remedial technology. Staff requested submittal of a workplan to address the removal of free product and the remediation of dissolved hydrocarbon contamination in groundwater.

6. Cleanup and Abatement Order No. 98-74 was issued to Chevron and Tom Brantley on June 24, 1998. Cleanup and Abatement Order No. 98-74 required the Dischargers to submit a workplan by July 31, 1998, for installation and operation of an engineered soil and groundwater remediation system.

7. In response to Cleanup and Abatement Order No. 98-74, the Dischargers submitted a Remedial Action Plan (RAP) proposing installation of an air-sparge and soil vapor extraction system to cleanup contaminated soil and groundwater. In October 1998, Regional Water Board staff concurred with implementation of the RAP. Operation of the air-sparge and soil-vapor extraction system started in June 1999. Operation of this extraction system was suspended in December 1999 when low hydrocarbon removal rates indicated the extraction system was no longer effective. The system was restarted for the period of May 2000 through November 2000, and once again shut down due to low hydrocarbon removal rates. The air-sparge and soil vapor extraction system operated a total of 317 days and removed approximately 110 pounds of hydrocarbons from the subsurface.

8. Floating product was not measured in any monitoring wells at the Site when the extraction system was shut down in November 2000. In November 2001, floating product was present in monitoring well MW-5 at a thickness of over one foot. Floating product has consistently been measured in monitoring well MW-5 at a thickness of up to three inches and monitoring well MW-11 at a thickness of up to one inch. Groundwater at the Site also contains significant concentrations of dissolved petroleum hydrocarbons. The highest concentrations of total petroleum hydrocarbons as gasoline, total petroleum hydrocarbons as diesel, benzene, toluene, ethylbenzene, xylenes, and methyl-tertiary-butyl-ether detected in groundwater samples collected in May 2003 were 16,000 ppb, 160,000 ppb, 16 ppb, 270 ppb, 520 ppb, 3,000 ppb, and 150 ppb respectively.

9. Discharge prohibitions contained in the Water Quality Control Plan for the North Coast Region (Basin Plan) apply to the Site. State Water Resources Control Board Resolution 68-16 applies to the Site. State Water Resources Control Board Resolution 92-49 applies to the Site and sets out the "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Section 13304 of the California Water Code."

10. The investigation and remediation of discharges of hazardous substances from underground storage tanks is governed by the procedures and requirements specified in Title 23, Chapter 16, California Code of Regulations. Key regulations specific to these activities are contained in Title 23, Chapter 16, Article 11, California Code of Regulations.

11. The California Water Code, and regulations and policies developed thereunder, requires cleanup and abatement of discharges and threatened discharges of waste to the extent feasible. Cleanup to background levels is the presumptive standard. Any proposed alternative that will not achieve cleanup to background levels must be supported with

evidence that it is technologically or economically infeasible to achieve background levels, and that the pollutant will not pose a substantial present or potential hazard to human health or the environment for the duration of the exceedence of background levels. (SWRCB Res. 68-16 and 92-49, and Title 23, California Code of Regulations section 2550.4, subdivisions (c) & (d).)

12. Background groundwater concentrations for the constituents of concern at the Site are established by considering the background quality of groundwater and surface water (i.e., water that has not been affected by waste constituents). For petroleum hydrocarbon contaminants that are not naturally occurring in groundwater or surface water, background water quality is considered to be at levels below the lowest practical analytical detection limits.

13. The Site is located in the Shasta River watershed and is adjacent to Boles Creek, a tributary to the Shasta River. Beneficial uses of Boles Creek and the Shasta River as established in the Basin Plan include:

    a. municipal and domestic supply
    b. agricultural supply
    c. industrial service supply
    d. industrial process supply
    e. groundwater recharge
    f. freshwater replenishment
    g. hydropower generation
    h. water contact recreation
    i. non-contact water recreation
    j. warm freshwater habitat
    k. cold freshwater habitat
    l. wildlife habitat
    m. fish migration
    n. fish spawning
    o. aquaculture

14. The Site is located in the Shasta Valley Hydrologic Area. The Site overlies shallow groundwater less than 10 feet below the ground surface. The beneficial uses of groundwater in the Shasta Valley Hydrologic Area as established in the Basin Plan include:

    a. municipal and domestic supply
    b. agricultural supply
    c. industrial service supply
    d. industrial process supply

15. The Dischargers named in this Order have caused or permitted, cause or permit, or threaten to cause or permit waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and create, or threaten to create, a condition of pollution or nuisance. The discharge and threatened discharge of contaminants has unreasonably affected water quality in that the discharge or threatened discharge is deleterious to the above described beneficial uses of State waters, and has impaired water

quality to a degree which creates a threat to public health and public resources and therefore, constitutes a condition of pollution or nuisance. These conditions threaten to continue unless the discharge or threatened discharge is permanently cleaned up and abated.

16. Water quality objectives in the Basin Plan are adopted to ensure protection of the beneficial uses of water. The most stringent water quality objectives for protection of all beneficial uses are selected as the protective water quality criteria. Alternative cleanup and abatement actions must evaluate the feasibility of, at a minimum: (1) cleanup to background levels, (2) cleanup to levels attainable through application of best practicable technology, and (3) cleanup to protective water quality criteria levels. **Exhibit 1** attached to and made part of this Order, sets out the water quality objectives for groundwater.

17. The workplan and CAP required by this Order are necessary to ensure that the prior harm and future threat to water quality created by the discharges described above are properly abated and controlled. More detailed information is available in the Regional Water Board's public file on this matter.

18. The Regional Water Board will ensure adequate public participation at key steps in the remedial action process, and shall ensure that concurrence with a remedy for cleanup and abatement of the discharges at the Site shall comply with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA").

19. The issuance of this Cleanup and Abatement Order is an enforcement action being taken for the protection of the environment and, therefore, is exempt from the provisions of CEQA in accordance with Title 14, California Code of Regulations, Sections 15308 and 15321.

20. Any person affected by this action of the Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The State Water Board must receive the petition within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board, any person affected by this Order may request the Regional Water Board to reconsider this Order. To be timely, such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Regional Water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If you choose to appeal the Order, be advised that you must comply with the Order while your appeal is being considered.

THEREFORE, IT IS HEREBY ORDERED that, pursuant to California Water Code Sections 13267(b) and 13304, Cleanup and Abatement Order No. 98-74 is hereby rescinded and the Dischargers shall cleanup and abate the discharge and threatened discharge of waste described above and shall comply with the provisions of this Order:

1. The Dischargers shall conduct investigation and cleanup tasks under the direction of a California registered geologist or registered civil engineer experienced in soil, groundwater, and surface water assessment and remediation.

2. The Dischargers shall take no action that causes or permits or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be discharged into waters of the state.

3. The Dischargers shall comply with any Monitoring and Reporting Program issued in connection with the investigation and cleanup of contamination at the Site.

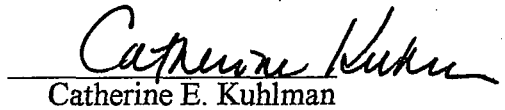
4. The Dischargers shall submit a workplan to the Executive Officer by December 15, 2003, to address the removal of free product from groundwater at the Site.

5. The Dischargers shall implement the workplan submitted under Provision 4 above within 30 days of concurrence by the Executive Officer.

6. The Dischargers shall conduct a feasibility study to evaluate alternatives for restoring the beneficial uses of groundwater beneath the Site. The Dischargers shall submit to the Executive Officer by February 15, 2004, a Corrective Action Plan (CAP) that includes the results of the feasibility study and identifies and evaluates at least two alternatives for restoring or protecting the beneficial uses of groundwater at the Site. The CAP shall also include a proposal to implement the most cost-effective corrective action and a time schedule for CAP implementation.

7. The Dischargers shall implement the CAP submitted under Provision 6 above within 90 days of receiving written concurrence from the Executive Officer.

8. If, for any reason, the Dischargers are unable to perform any activity or are unable to submit any documentation in compliance with the schedule set forth herein or in compliance with any work schedule submitted pursuant to this Order and concurred in by the Executive Officer, the Dischargers may request, in writing, an extension of time. The extension request must be submitted at least twenty (20) days in advance of the due date and shall include justification for any delay including a description of the good faith effort performed to achieve compliance with the due date. The extension request shall also include a proposed time schedule with new performance dates for the due date in question and dependent dates. An extension may be granted for good cause, as determined by the Executive Officer in his or her sole discretion, and this Order will be accordingly revised.

Ordered by 
Catherine E. Kuhlman
Executive Officer

October 14, 2003

(Q:/routine/acl/vath/chevronweed/chvronweedcao081203)

Exhibit 1

Groundwater Water Quality Objectives

Constituent	Practical Quantitation Limit[1] ug/l	Water Quality Objective ug/l
Gasoline	<50	5.0[a]
Diesel	<50	100[a]
Benzene	<0.5	1.0[b]
Toluene	<0.5	42[c]
Xylene	<0.5	17[c]
Ethylbenzene	<0.5	29[c]
Methyl-tertiary butyl ether (MTBE)	<0.5	5[a]

1 Practical quantitation limits are based on current technology. For instances where technology cannot achieve the water quality objective the practical quantitation limit will be used.

a Published literature provides a taste and odor threshold, which is applied to the narrative TASTE and ODOR water quality objective of the Basin Plan.

b California Maximum Contaminant Level (MCL) for protection of domestic supply, Title 22 Section 64444.5.

c US EPA Secondary MCLs provide a taste and odor threshold which is applied to the narrative TASTE and ODOR water quality objective of the Basin Plan.