California Regional Water Quality Control Board
North Coast Region

CLEANUP AND ABATEMENT ORDER NO. R1-2000-22

FOR

THOMAS J. WHITELEY, INCORPORATED
AND
THOMAS J. AND BARBARA A. WHITELEY
AND
SHELL OIL COMPANY
800 HIGHWAY 101, SOUTH
CRESCENT CITY, CALIFORNIA

Del Norte County

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

1. Property located at 800 Highway 101 South in Crescent City, California (APN#117-180-7 and 117-180-6) operated as a bulk petroleum storage and distribution facility from 1929 until 1993. Gasoline, diesel, kerosene, oil and other hydrocarbons were stored at the site in 15 steel aboveground storage tanks (ASTs). The ASTs ranged in size from 750 gallons to 24,900 gallons. Six ASTs contained gasoline for a total storage amount of 80,000 gallons. Two ASTs contained diesel for a total storage of 34,200 gallons. One 24,300 gallon AST contained kerosene and six ASTs have no product storage information for a total capacity of 13,750 gallons.

2. In 1929, Shell Oil Products Company (Shell) purchased the property and developed the fuel storage and distribution facility. Shell operated the plant until a sale in 1972 to the Manosaur family. The Manosaur family operated the plant until 1983 when the property was sold to La Mesa Petroleum. Later in 1983, La Mesa Petroleum sold the property to Thomas J. and Barbara A. Whitely. Thomas J. Whiteley, Incorporated operated the facility until 1991. In 1993, the last of the ASTs were dismantled and removed from the site.

3. No secondary containment was used around the aboveground tanks during the early operations or later, based on aerial photographs from 1964 and 1985. The Regional Board staff requested in 1990 and 1993 that Shell submit plans and specifications for construction of the bulk plant. Shell indicated that no plans or specifications could be located. Without secondary containment, spills or drippage associated with fuel transfer operations are not prevented from discharging to soils. Discharges of fuel products to soils allow fuel to migrate through soil and threaten shallow groundwater.

4. The Regional Water Board has not been able to determine the location of the Manosaur family or La Mesa Petroleum. Shell Oil Company, Thomas J. Whiteley, Barbara A.

Whiteley, and Thomas J. Whiteley Incorporated are hereinafter identified as the dischargers. Between 1929 and 1993, the dischargers caused or permitted the discharge of an unknown quantity of petroleum products and other chemicals to soils, groundwaters, and surface waters at the site.

5. On March 11, 1989, Regional Water Board staff inspected the property and observed approximately 25 fifty-five gallon drums stacked on the ground surface. Leaks or spills of petroleum product were observed staining the soils around and under the stack of drums. Also noted was a petroleum sheen and odor on the surface water ponded under two of the ASTs.

6. On September 13, 1989, Regional Water Board staff requested that Mr. Whiteley perform a hydrogeologic investigation of the discharge of petroleum products. Work was conducted at the site in December of 1989 on behalf of Thomas J. Whitely and revealed soil and groundwater contamination by various hydrocarbons, including separate-phase product observed on soil and in the very shallow groundwater.

7. On April 5, 1990, the Regional Water Board staff requested that Thomas J. Whiteley complete a hydrogeologic investigation, which would include determination of the groundwater gradient and groundwater monitoring. Additional information was submitted to the Regional Water Board confirming soil and groundwater contamination by various hydrocarbons including the presence of diesel in an on-site domestic well. This well was not being used at the time.

8. On June 6, 1990, Regional Water Board staff again requested a workplan for a complete hydrogeologic investigation of the release of petroleum products discharged to waters of the State. A workplan was submitted on September 4, 1990, subsequently revised, and Regional Water Board staff concurred with the workplan on May 2, 1991.

9. On June 17 and 18, 1992, four monitoring wells were installed at the site. The report of field activities was received on December 22, 1995. Several inches of separate-phase petroleum hydrocarbons were identified in monitoring well MW-4.

10. On October 5, 1995, the Executive Officer issued Monitoring and Reporting Program No. 95-91. On December 22, 1995, LACO Associates on behalf of Thomas J. Whiteley developed the first monitoring report. Dissolved petroleum contamination was detected in groundwater and up to six feet of separate-phase petroleum hydrocarbons were detected in monitoring well MW-4. The dissolved petroleum contamination had migrated over 100 feet to the east since 1992.

11. On February 20, 1996, January 24, 1997, March 20, 1997, July 25, 1997, and October 24, 1997, Regional Water Board staff requested that Mr. Thomas J. Whiteley continue implementation of Monitoring and Reporting Program No. 95-91 and determine the complete horizontal and vertical extent of contamination.

12. On November 7, 1997, Regional Water Board staff received the report of field activities for work that had been conducted during 1997 at the site. Separate-phase petroleum

hydrocarbons had been remediated from the site and excavation work had been completed. All of the activities had been performed without Regional Water Board concurrence of a workplan.

13. On January 13, 1998, Regional Water Board staff requested that Shell and Mr. Whiteley submit a workplan to determine the complete horizontal and vertical extent of contamination. Monitoring and Reporting Program No. 95-91 was revised and reissued as Monitoring and Reporting Program No. 98-19 to incorporate changes in the chemical analysis of groundwater samples.

14. On May 13, 1998, Pacific Environmental Group, Incorporated, on behalf of Shell submitted a workplan for further investigation of the extent of contamination. Regional Water Board staff concurred with the workplan on June 8, 1998. Work completed under this workplan and reported on October 8, 1998, indicates that petroleum contamination has extended to the south on parcels adjacent to the site at levels significantly above water quality objectives.

15. Mr. Thomas J. Whitely signed the acknowledgement form to enter into the cost recovery program for aboveground storage tanks in 1991. Mr. Whitely paid the invoices for oversight until 1998. On July 19, 1999, Shell and Mr. Whitely were requested to sign a new acknowledgement form for responsibility of invoice payment. A signed form has not been received.

16. On January 4, 1999, Pacific Environmental Group, Incorporated, on behalf of Shell submitted a workplan for further investigation of the extent of contamination. Regional Water Board staff concurred with the workplan on January 20, 1999. The plan has not been implemented.

17. The dischargers 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 creates, or threatens to create, a condition of pollution of nuisance. Continuing discharges are in violation of the Porter-Cologne Water Quality Control Act and provisions of the *Water Quality Control Plan for the North Coast Region.*

18. The site is located on coastal terrace deposits along the Pacific Ocean. These deposits consist of clays, sands, and gravels, overlying fractured meta-graywacke bedrock. Groundwater is very shallow, and is found at depths of less than three (3) feet below the surface.

19. The site is located within 1,000 feet of the Pacific Ocean. The beneficial uses of ocean waters and bays as established in the *Water Quality Control Plan for the North Coast Region include*:

    a. navigation
    b. water contact recreation
    c. noncontact water recreation
    d. ocean commercial and sport fishing
    e. saline water habitat

f. wildlife habitat
g. preservation of rare and endangered species
h. marine habitat
i. fish migration
j. fish spawning
k. industrial service supply
l. industrial process supply
m. preservation of areas of special biological significance

20. The areal groundwater supports domestic, agricultural, and industrial water supplies. An on-site well is located at the facility and is contaminated with petroleum hydrocarbons as diesel.

21. State Water Resources Control Board Resolution No. 68-16 and State Water Resources Control Board Resolution No. 92-49 ("Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Section 13304 of the California Water Code.") apply to this site

22. Water Quality Objectives exist to ensure protection of the beneficial uses of water. Several beneficial uses of water exist, and 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 need to be considered that 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 objectives. The following table sets out the protective water quality objectives for surface and groundwaters at the site:

Constituent of Concern	Background Level ug/l	Water Quality Objective ug/l	Reference for Objective
Total Petroleum Hydrocarbons as diesel (TPH-d)	$\leq$50	56.0	USEPA health advisory of September 4, 1992, Suggested No Adverse Response Level (SNARL)of 56 ug/l which is applied to narrative TOXICITY water quality objective for domestic supply in the Basin Plan
Total Petroleum Hydrocarbons as gasoline (TPH-g)	$\leq$50	50.0	Published literature provides a taste and odor threshold of 5 ug/l which is applied to the narrative TASTE and ODOR objective of the Basin Plan for domestic supply, but detection limit is 50 ug/l and is controlling
Total Petroleum Hydrocarbons as motor oil (TPH-mo)	$\leq$175	50.0	USEPA National Ambient Water Quality Criteria, Freshwater Aquatic Life Protection, May 1, 1986. SNARL of 0.1 ug/l to 1.0 ug/l is applied to the narrative TOXICITY objective in the Basin Plan and Oil and Grease criteria of the Basin

Constituent of Concern	Background Level ug/l	Water Quality Objective ug/l	Reference for Objective
			Plan, but detection limit is 175 ug/l and is controlling
Methyl-tertiary butyl ether (MTBE)	≤5	13	California Office of Environmental Health Hazard Assessment Public Health Goal; applied to the TOXICITY water quality objective for domestic supply.
Benzene	≤0.5	1.0	California DHS MCL, Title 22 of the California Code of Regulations, § 64444 is 1.0 ug/l for domestic supply; USEPA health advisory for cancer risk is 0.7 ug/l; applied to the narrative TOXICITY objective in the Basin Plan
Toluene	<0.5	42	California DHS MCL, Title 22 of the California Code of Regulations, § 64444 is 150 ug/l; USEPA taste and odor threshold of 42 ug/l, Federal Register 54(97):22064-22138; applied to the TASTE AND ODOR water quality objective for domestic supply in the Basin Plan
Ethylbenzene	≤0.5	29	California DHS MCL, Title 22 of the California Code of Regulations, § 64444 is 700 ug/l; USEPA taste and odor threshold of 29 ug/l, Federal Register 54(97):22064-22138; applied to the TASTE AND ODOR water quality objective for domestic supply in the Basin Plan
Xylene	<0.5	17	California DHS MCL, Title 22 of the California Code of Regulations, § 64444 is 1750 ug/l; USEPA taste and odor threshold of 17 ug/l, Federal Register 54(97):22064-22138; applied to the TASTE AND ODOR water quality objective for domestic supply in the Basin Plan

23. Reasonable costs incurred by Regional Water Board staff in overseeing cleanup or abatement activities are reimbursable under Section 13304 of the California Water Code and Section 25270.9 of the California Health and Safety Code.

24. 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.

25. 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 the

California Environmental Quality Act (Public Resources Code, Section 21000 et. seq.) in accordance with Section 15308 and 15321, Chapter 3, Title 14, California Code of Regulations.

THEREFORE, IT IS HEREBY ORDERED that pursuant to California Water Code Sections 13267(b) and 13304, Thomas J. Whiteley, Incorporated, Thomas J. and Barbara A. Whiteley and Shell Oil Company shall cleanup and abate the discharge and threatened discharge of petroleum hydrocarbons and other chemicals forthwith and shall comply with the following provisions of this order:

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

2. Comply forthwith of all provision of the January 13, 1998 Monitoring and Reporting Program No. 98-19 and subsequent revision thereof.

3. Implement by May 1, 2000 the workplan concurred with on January 20, 1999 for the further definition of soil and groundwater contamination.

4. Submit the report of field activities for the workplan described under Provision 3 by August 1, 2000. The report of field activities shall include at a minimum the final remedial action plan and a time schedule for implementation.

5. Promptly pay in accordance with the invoicing instructions all invoices for Regional Water Board oversight.

6. If for any reason, the dischargers are unable to perform any activity or submit any documentation in compliance with the schedule set forth herein or in compliance with any work schedule submitted in compliance with this Order and concurred in or revised by the Executive Officer, the dischargers may request, in writing, an extension of the time specified. The extension request must be submitted five days in advance of the due date and shall include justification for the 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 a new performance date for the due date in question and all subsequent dates dependent on the extension. A written extension may be granted for good cause, in which case this Order will be automatically revised.

Ordered By _____

Lee A. Michlin
Executive Officer

March 22, 2000

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