

California Regional Water Quality Control Board
North Coast Region

Cleanup and Abatement Order No. R1-2009-0021

and

ORDER REQUIRING TECHNICAL AND/OR MONITORING REPORTS FOR THE
INVESTIGATION OF POLLUTION

For

Chevron Corporation, Union Oil Company and Unocal Corporation,

And

KFD Enterprises, Incorporated,

dba

Norman's Dry Cleaners and Laundry
2907 E Street
Eureka, California

Humboldt County

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

1. KFD Enterprises, Incorporated operates Norman's Dry Cleaners and Laundry located at 2907 E Street in Eureka, California, identified as Assessor Parcel Nos. 10-252-020, 10-252-021, and 10-252-022, hereinafter Site, (**Attachment A**). The cleaning solvent tetrachloroethene (PCE) was used in the fabric cleaning process at the Site. Site operations include a dry-to-dry cleaning system. From 1980 until approximately 1984, during operation of the dry-to-dry system, used filters and wastes from distilling PCE during daily operations containing PCE were discarded at the rear of the building in a dumpster for disposal at the local landfill. Reports of spills of fluids containing PCE to the ground surface and disposal of wastes into the sanitary sewer system by KFD staff have been submitted. Since 1984, the used filters and distilling waste have been transported and recycled by Safety Kleen Corporation. Site operations included the use of PCE until 2004. From 2004 to 2006 on-site dry cleaning was not conducted. In 2006, dry cleaner operations began using a silicon-based operation.
2. From 1964 to 1979 Unocal Corporation (Unocal) operated a petroleum retail sales facility at the Site that also included automotive repair activities. Petroleum underground storage tanks (UST) and a waste oil UST were removed from the Site prior to 1979. No environmental sampling was conducted at the time of tank removals. KFD Enterprises, Incorporated (KFD)

purchased the Site from Unocal in 1979 and constructed the present building, which houses a dry cleaning facility.

3. The initial environmental samplings at the site occurred in April of 1998, when consultants for KFD installed seven borings to ascertain the impact on soil and groundwater from any potential discharges associated with historical petroleum resale operations and dry cleaning operations. Soil samples were collected at depths of five-and-one-half feet below the ground surface with laboratory analytical results indicating PCE at 90 parts per billion (ppb). Laboratory analytical results from a grab groundwater sample from boring B-7 indicated 880 ppb of PCE, and 60 ppb of the breakdown compounds trichloroethene (TCE) and cis-1,2-dichloroethene (DCE). Laboratory analytical results from a grab groundwater sample from boring B-1 indicated 75 ppb of benzene, and 1,300 ppb of xylene which are components of gasoline.
4. On May 22, 2000, Unocal assumed responsibility for investigation of the petroleum-retail-sales-related discharges at the Site after being informed of the 1998 findings by KFD. At that time, KFD assumed responsibility for the investigation and cleanup of the cleaning solvent PCE and its breakdown products.
5. On October 17, 2000, consultants for Unocal installed a monitoring well at the Site (MW-1). Laboratory analytical results for groundwater from monitoring well MW-1 indicated 95 ppb of Total Petroleum Hydrocarbons (TPH) as gasoline. On October 20, 2000, consultants for KFD installed two monitoring wells at the Site (MW-2 and MW-3). Laboratory analytical results for groundwater from monitoring well MW-2 indicated 1.3 ppb of PCE. Laboratory analytical results for groundwater from monitoring well MW-3 indicated 6,600 ppb of TCE, 150 ppb of DCE, and 9,600 ppb of TPH-gasoline.
6. On XXX XX, xxxx, Chevron Corporation acquired interest of Unocal Corporation.
7. Prior to July 24, 2007, oversight of the UST investigation was conducted by the Humboldt County Division of Human Health Services, Department of Environmental Health staff. Due to the complexity of the commingled contaminant plume and the complexity of PCE investigations, the oversight for UST petroleum investigation was referred to the authority of the Regional Water Board. The Regional Water Board concurred with the referral by letter on August 2, 2007.
8. Numerous investigations of the vertical and horizontal extent of contamination have occurred since 2002. Those investigations revealed that the beneficial uses of groundwater in two water bearing zones are impacted by discharges from the site. Dense Non Aqueous Phase Liquid (DNAPL) is located under the building on Site. The contaminants associated with the petroleum uses at the

Site are commingled with the PCE contaminants. PCE contamination is identified in groundwater both on-site and off-site. Several pilot studies are being conducted to determine the feasible option for clean up of the discharges of PCE and its breakdown products at the Site.

9. It is inconclusive how the off-site plume of PCE arrived at its present location in the deeper water-bearing zone. The site conceptual models prepared by the consultants for KFD and Chevron/Unocal suggest that it may have been transported via the City's sewage pipeline, and leaked out through an opening in a break in the pipeline. Alternatively, the plume may have moved off site following the preferential pathway of the sewage line. Whether the PCE plume moved within the pipeline or without, once it reached the manhole at E and Grotto Streets, groundwater data indicate that it made its way to the deeper water bearing zone. Even though the City's sewage system may have altered the movement of the PCE, the Regional Water Board is not naming the City as a responsible party because the City of Eureka was not involved in any of the initial discharges that caused the contamination at the Site. Because there are responsible parties involved in the initial discharges of contaminants that are able to complete the cleanup, this Order does not name the City as a responsible party.
10. KFD Enterprises, Incorporated dba Norman's Dry Cleaners and Laundry, Union Oil Company, Unocal Corporation, and Chevron Company are hereinafter referred to as the "Dischargers" for cleanup and abatement of discharges associated with their respective operations at the Site.
11. On July 28, 2003, the Regional Water Board Executive Officer issued Cleanup and Abatement Order No. R1-2003-0088 to KFD Enterprises, Incorporated dba Norman's Dry Cleaners and Laundry, requiring specific tasks to be under taken in the investigation. This revised Order reflects the progress of the investigation, requires additional tasks and names Chevron/Unocal as responsible parties for the cleanup of the contamination caused by its former gas stations activities.
12. The Site is located in Eureka approximately 1.5 miles east of Humboldt Bay and overlies shallow groundwater, which is approximately five feet below the surface.
13. The beneficial uses of groundwater include:
 - a) domestic Supply,
 - b) agricultural Supply
 - c) industrial Process Supply

In addition, State Water Resources Control Board Resolution 88-63 states that all ground water of the State is considered to be suitable, or potentially suitable,

for municipal or domestic water supply, and should be so designated by the Regional Boards.

14. The beneficial uses of Humboldt Bay include:
 - a) industrial supply
 - b) navigation
 - c) water contact recreation
 - d) non-contact water recreation
 - e) ocean commercial and sport fishing
 - f) saline water habitat
 - g) wildlife habitat
 - h) preservation of rare and endangered species
 - i) marine habitat
 - j) fish migration
 - k) fish spawning
 - l) shellfish harvesting

16. Section 13304 of the Water Code provides:

Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, 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 the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.

17. The Dischargers have caused or permitted, cause or permit, or threaten to cause or permit waste to be discharged where it is, or probably will be, discharged into waters of the State and create, or threaten to create, a condition of pollution or nuisance. Pollution is defined in Water Code section 13050(l) (1) as the alteration of the quality of the waters of the state by waste to a degree which unreasonably affects the waters for beneficial uses. The levels of COCs at the Site have unreasonably affected water quality for beneficial uses, including as sources of domestic, municipal, and industrial supplies. Nuisance is defined in Water Code section 13050(m) as anything that 1) Is injurious to health or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; 3) Occurs during, or as a result of, the treatment or disposal of wastes. The discharge at Site has impaired water quality to a degree which creates a threat to public health; the

levels of COCs at the Site exceed public health goals. These conditions threaten to continue unless the discharge or threatened discharge is permanently cleaned up and abated.

18. The Water Code, and regulations and policies developed thereunder, require cleanup and abatement of discharges. Cleanup to background levels is the presumptive standard. Alternative cleanup levels greater than background concentrations shall be permitted only if the Dischargers demonstrate that: it is not feasible to attain background levels; the alternative cleanup levels are consistent with the maximum benefit to the people of the State; alternative cleanup levels will not unreasonably affect present and anticipated beneficial uses of such water; and they will not result in water quality less than prescribed in the Basin Plan and Policies adopted by the State and Regional Water Board. 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 (State Water Resources Control Board (SWRCB) Res. Nos. 68-16 and 92-49; California Code of Regulations, title 23, section 2550.4, subds. (c) and (d).
19. Water Code section 13267 also authorizes the Regional Water Board to investigate the quality of any waters of the State within its region and require persons to furnish technical or monitoring reports where the burden, including costs, of these reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. This Order contains a requirement for the submittal of technical reports describing cleanup and investigative actions initiated and proposed to reduce the discharge of pollutants from the Site. All of the technical reports required by this Order are necessary to ensure that the prior harm and future threat to water quality created by the discharge of waste described above are properly abated and controlled. In light of the Discharger's unauthorized discharge of waste and regulatory agencies' observations that current conditions at the Site, as described in Findings 4 through 7, pose a continuing threat of discharge, the burden, including costs, of the reports required by this Order bear a reasonable relationship to the need for the reports and the benefits to be obtained therefrom.
20. Reasonable costs incurred by Regional Water Board staff in overseeing cleanup or abatement activities are reimbursable under Water Code section 13304(c) (1).
21. Any person affected by this action of the Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and section 2050 of title 23 of the California Code of Regulations. The petition must be received by the State Water Board 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 the Dischargers choose to appeal the Order, the Dischargers are advised to comply with the Order while the appeal is being considered. The appeals process is enclosed with this Order.

22. 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 sections 15308 and 15321 of title 14 of the California Code of Regulations.
23. Failure to comply with the terms of this Order may result in enforcement under the Water Code. Any person failing to provide technical reports containing information required by this Order by the required date(s) or falsifying any information in the technical reports is, pursuant to Water Code section 13268, guilty of a misdemeanor and may be subject to administrative civil liabilities of up to one thousand dollars (\$1,000.00) for each day in which the violation occurs. Any person failing to cleanup or abate threatened or actual discharges as required by this Order is, pursuant to Water Code section 13350(e), subject to administrative civil liabilities of up to five thousand dollars (\$5,000.00) per day or ten dollars (\$10) per gallon of waste discharged.

THEREFORE, IT IS HEREBY ORDERED that, Cleanup and Abatement Order No. R1-2003-0088 be rescinded, and that pursuant to Water Code sections 13267(b) and 13304, the Dischargers shall cleanup and abate the discharges and threatened discharges forthwith and shall comply with the following provisions of this Order, including the submittal of technical and monitoring reports identified below:

1. The Dischargers shall conduct all work under the direction of a California registered civil engineer or professional geologist with verifiable experience in petroleum hydrocarbon and chlorinated solvent pollution investigation and cleanup. All workplans and technical reports submitted to the Regional Water Board shall be signed and stamped by a licensed professional.
2. The Dischargers shall comply with Monitoring and Reporting Program Order No. R1-2009-XXXX and subsequent versions thereof. All existing and future monitoring wells must be accessible for all monitoring events.
3. The Dischargers shall submit all documents generated for this project electronically to the State Water Resources Control Board's Geotracker database.

4. Unocal shall submit by XXXX, 2009 the Corrective Action Plan for the remediation of the discharges associated with the former underground storage tanks.
5. Unocal shall implement the Corrective Action Plan within thirty (30) days of concurrence by the Executive Officer. If waste discharge requirements are required for any of the work, applications must be submitted within 30 days of the Executive Officer's concurrence with the Corrective Action Plan. Implementation of corrective actions shall commence no later than 30 days following receipt of any required permits.
6. KFD shall submit by XXXX, 2009 the report detailing the completion of the Dense Non Aqueous Phase Liquid (DNAPL) and Soil Gas investigations identified in the approved Feasibility Study (FS)/Pilot Study (PS) Work Plan.
7. KFD shall submit by XXXX, 2009 the report detailing the completion of the monitoring well installations identified in the approved FS/PS Work Plan.
8. KFD shall submit by XXXX, 2009 the report detailing completion of the Soil Vapor Extraction Pilot Scale Test identified in the approved FS/PS Work Plan.
9. KFD shall submit by XXXX, 2009 the report detailing completion of the groundwater pump tests identified in the approved FS/PS Work Plan.
10. KFD shall submit by XXXX, 2009 the report detailing completion of the Surfactant/Solvent Pilot Scale Test identified in the approved FS/PS Work Plan.
11. KFD shall submit by XXXX, 2009 the report detailing completion of the Ozone Sparge Pilot-Scale Test identified in the approved FS/PS Work Plan.
12. KFD shall submit by XXXX, 2009 the report detailing completion of the Electrical Resistive Heating Pilot-Scale Test identified in the approved FS/PS Work Plan.
13. KFD shall submit by XXXX, 2009 the Remedial Action Plan for the discharges associated with dry cleaning operations.
14. KFD shall submit by XXXX, 2010 the Remedial Action Workplan for the discharges associated with dry cleaning operations.
15. KFD shall implement the Remedial Action Workplan within thirty (30) days of concurrence by the Executive Officer. If any permits are required for any of the work, applications for the permits must be submitted within 30 days of the Executive Officer's concurrence with the Remedial Action Plan. Implementation of remedial actions shall commence no later than 30 days of the Executive

Officer's concurrence with the Remedial Action Plan, or where permits are required, within 30 days after receipt of required permits.

16. The Dischargers shall complete any additional work deemed reasonably necessary by the Regional Water Board's Executive Officer to abate and cleanup the discharge of waste or threatened waste, and to protect human health and the environment.
17. The Dischargers shall promptly pay in accordance with the instructions on all invoices for Regional Water Board oversight. Failure to make timely reimbursements will be considered a violation of this Order.

If, for any reason, the Discharger is unable to perform any activity or submit any documentation in compliance with the directives contained in this order or submitted pursuant to this Order and approved by the Executive Officer, the Discharger may request in writing, an extension of time as specified. The extension request must be submitted five days in advance of the due date and shall include justification for this delay including 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 all subsequent dates dependent on the extension. A written extension may be granted for good cause, in which case the order will be revised accordingly.

This Order in no way limits the authority of this Regional Water Board to institute additional enforcement actions or to require additional investigation and cleanup at the site consistent with state and federal law. This Order may be revised by the Executive Officer as additional information becomes available.

Ordered by _____
Catherine Kuhlman
Executive Officer

February XX, 2009