



California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair



Winston H. Hickox
Secretary for
Environmental
Protection

Gray Davis
Governor

Redding Branch Office

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18 March 2002

CERTIFIED MAIL

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Mr. Mark Sandon
Manager, Environmental Remediation
Kinder Morgan Energy Partners L.P.
1100 Town and Country Road
Orange, CA 92868

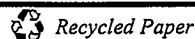
TRANSMITTAL OF REVISED CLEANUP AND ABATEMENT ORDER NO. 99-711 FOR SFPP L. P. AND KINDER MORGAN ENERGY PARTNERS L.P., 2570 HEGAN LANE, CHICO, BUTTE COUNTY

Enclosed is a copy of Revised Cleanup and Abatement Order No. 99-711. This Order was originally issued to you on 28 April 1999, pursuant to Section 13304 of the California Water Code for the discharges of waste, threatened discharges of waste, and violations of the Federal Spill Pollution Control and Countermeasures Regulations. The Order is being revised to reflect current site conditions.

The Order requires you to cleanup and abate, forthwith, the effects of wastes discharged or threatened to be discharged to surface water drainage courses or ground water. Specifically, you are directed to:

- **Immediately** provide temporary alternative water supplies to affected private domestic supply well owners.
- Submit, **by 19 April 2002**, a Work Plan for approval by the Executive Officer to evaluate deeper migration pathways toward domestic supply wells, and the property immediately southwest of the Chico Terminal, expand or augment the existing soil vapor extraction system as necessary, and evaluate appropriate technologies to meet Water Quality Objectives. The Work Plan must include a time schedule for its implementation.
- Submit, **by 31 July 2002**, a Corrective Action Plan (CAP) Addendum for approval by the Executive Officer to clean up the waste in compliance with State Board Resolution 92-49 and other applicable requirements. The CAP Addendum must recommend appropriate cleanup options, and alternatives should selected options prove ineffective. The CAP Addendum must also have contingencies for evaluating off-site supply wells as vertical conduits for waste migration and providing permanent alternative water supplies for affected domestic well owners.

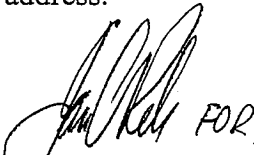
California Environmental Protection Agency



- Continue a quarterly ground water monitoring program for monitoring wells and begin sampling private water supply wells impacted or potentially threatened by the discharge of waste twice per calendar quarter. Submit the results of the monitoring **within 30 days from the end of each calendar quarter** until the discharge of waste is abated.

Failure to comply with the enclosed Order may result in further enforcement action pursuant to Section 13350 of the California Water Code, which may result in civil liabilities of up to five thousand dollars (\$5,000) to fifteen thousand dollars (\$15,000) per day for each violation. In addition, the Board may seek injunctive relief by authorizing the Attorney General to petition the Superior Court for an injunction requiring compliance with the Order. The Court may grant a prohibitory injunction stopping all activities until compliance is achieved.

If you have any questions, please contact Eric Rapport of my staff at (530) 224-4998 or the letterhead address.



GARY M. CARLTON
Executive Director

EJR:ba

cc+enclosure: Regional Board Members
U. S. Environmental Protection Agency, Region 9, San Francisco
Ms. Lisa Brown, California Environmental Protection Agency, Sacramento
Ms. Frances McChesney, State Water Resources Control Board,
Sacramento
Mr. Darrin Polhemus, State Water Resources Control Board, Compliance
Assurance and Enforcement Unit, Sacramento
Mr. Mark Bradley, Central Valley Regional Water Quality Control Board,
Sacramento
Mr. Vance Severin, Butte County Department of Environmental Health,
Chico
Mr. Jim Waggoner, Butte County Air Quality Management District, Chico
Mr. Steve Osborn, Kinder Morgan Energy Partners, L.P., Fairfield
Mr. Scott Seyfried, Levine Fricke, Granite Bay
Ms. Barbara Vlamis, Butte Environmental Council, Chico
Ms. Christine Nelson, Chico

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

REVISED CLEANUP AND ABATEMENT ORDER NO. 99-711

FOR

SFPP, L.P. AND KINDER MORGAN ENERGY PARTNERS, L.P.
1. CHICO TERMINAL
BUTTE COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) finds that:

1. SFPP, L.P. and Kinder Morgan Energy Partners, L.P. (hereafter Discharger) own and operate a 25 acre bulk storage terminal at 2570 Hegan Lane in Chico, California. The Chico Terminal is in Section 1, T21N, R1E, MDB&M (Assessor's Parcel No. 039-060-053). Surface drainage is to Comanche Creek, a tributary of the Sacramento River.
2. The Chico Terminal receives gasoline and diesel fuel through an underground distribution pipeline and stores them in a tank farm of 33 aboveground storage tanks (ASTs) that have a cumulative capacity of 24.4 million gallons. The terminal also currently receives gasoline additives by truck from Tosco, Chevron, Exxon, ARCO, Texaco, and Valero, and stores them in nine ASTs that have a total capacity of 77,100 gallons. The terminal transfers gasoline, gasoline additives, and diesel fuel from the ASTs by underground and aboveground piping to four loading racks.
3. The Discharger operates an on-site process water treatment system in accordance with Waste Discharge Requirements Order No. 5-01-194 (NPDES No. CA0083810). The system treats AST draw water and loading rack wastewater. The NPDES permit also allows the system to treat ground water. Effluent limitations and toxicity requirements for the treatment system are specified in the existing NPDES permit. If these requirements are met, treated process wastewater is discharged to an unlined ditch that drains indirectly to Comanche Creek. If requirements are not met, treated process wastewater is trucked to the City of Chico wastewater treatment plant.
4. On 29 September 1987 Mobil Oil Corporation reported an underground storage tank unauthorized release (discharge of waste) following the removal of a 2,000-gallon gasoline additive tank. The Discharger assumed responsibility for investigation and remediation associated with the discharge of waste.
5. From 1990 to 1997 approximately 4,000 gallons of gasoline, gasoline additives,

and diesel fuel were released in a number of separate events from the Chico Terminal that impacted soil and ground water. The Discharger attributes releases to locations including, but not limited to, the manifold area and Tank #25 in the center of the tank farm, and the former oil/water separator site at the southwest corner of the tank farm. The largest release, 3,800 gallons of gasoline, resulted in free product floating on ground water beneath the facility. The Discharger extracted approximately 650 gallons of free product from the ground water and removed approximately 1,000 cubic yards of polluted soil. During the fourth quarter of 1998 about 4.5 feet of free product were discovered in monitoring well MW-6 from a new release in the tank farm. The Discharger removed about 40 gallons of product from MW-6 and attributes that release to a disgruntled person deliberately pouring gasoline into it.

6. The subsurface geology at the Chico Terminal consists of a low-permeability clayey silt from grade surface to ten feet below ground surface (bgs), a high-permeability sandy gravel to 30 feet bgs, and interbedded silts and sands to 90 feet bgs. Vadose zone soil samples associated with petroleum discharges indicate impacts to shallowest ground water by petroleum constituents, including but not limited to, fuel oxygenates, gasoline aromatics, and diesel fuel constituents. The extent of impacts to soil throughout the site is unknown.
7. The Discharger has to date installed 41 monitoring wells to define the extent of petroleum pollution in ground water, 35 in the shallow sandy gravel and the remaining six in deeper intervals. Quarterly monitoring has determined that the water table fluctuates from five to 15 feet bgs, causing seasonal hydraulic confinement in the sandy gravel during winter. Shallowest ground water generally flows southwest. Hydraulic heads in deeper confined intervals may be affected by local pumping wells. A range of 0.02 feet to 4.5 feet of free product has been found in nine shallow monitoring wells, largely beneath the tank farm.
8. Analyses of ground water samples obtained from the monitoring wells reveals petroleum constituents, with fuel oxygenate concentrations up to 2,500 milligrams/Liter (mg/L) of Methyl tert-Butyl Ether (MtBE), 4.0 micrograms/Liter ($\mu\text{g/L}$) of Ethyl tert Butyl Ether (EtBE), 410 $\mu\text{g/L}$ of tert-Amyl Methyl Ether (TAME), 3.3 mg/L of tertiary Butyl Alcohol (TBA), and 300 $\mu\text{g/L}$ of Methanol; gasoline aromatic compounds up to 4.3 mg/L of Benzene, 22 mg/L of Toluene, 6.1 mg/L of Ethylbenzene, and 18.9 mg/L of Xylenes; and total petroleum hydrocarbons (TPH) up to 410 mg/L of TPH as gasoline (TPHg) and 250 mg/L of TPH as diesel fuel (TPHd). Gasoline aromatic compounds, TPHg, and TPHd appear to have remained on-site. However, fuel oxygenates may have migrated off-site to the south.

9. On 3 August 1998, Regional Board staff sampled one private domestic water supply well approximately 100 feet east of the Chico Terminal (2518 Hegan Lane). Staff were denied access to sample another private water supply well approximately 200 feet north of the Chico Terminal (11181 Midway). Staff also sampled 12 private domestic water supply wells southeast of the Chico Terminal in the Skyway Homes Subdivision, on Skyway and Cessna Avenues. Petroleum constituents including MtBE were not detected in the sampled wells.

10. The Discharger began quarterly sampling the three closest private domestic water supply wells to the Chico Terminal in the Skyway Homes Subdivision (2615 Hegan Lane, and 720 and 721 Skyway Avenue) in October 2000. A 13 December 2001 sample from the 2615 Hegan Lane well showed 1.08 µg/L of MtBE. A 3 January 2002 repeat sample showed MtBE at 8.86 µg/L and TAME at 0.89 µg/L. The Discharger notified the well owner and collected further repeat samples. MtBE was detected at 0.78µg/L in some repeat samples, along with Methanol up to 910 µg/L. While several monitoring wells without historical fuel oxygenate detections lie between the tank farm and the 2615 Hegan Lane domestic supply well, the detections in the domestic supply well are currently attributed to releases from the Chico Terminal because insufficient deep monitoring wells have been installed for adequate coverage.

11. Water Quality Objectives (WQOs) included in the *Water Quality Control Plan for the Sacramento/San Joaquin River Basin* (Basin Plan) that apply to the constituents of concern in the ground water include those listed below and the Basin Plan's narrative toxicity objective for ground water. These WQOs are numerical standards necessary to comply with numeric Water Quality Objectives such as state drinking water standards, or narrative Water Quality Objectives, including the narrative toxicity objectives.

Constituent	WQO (µg/L)	Description and Reference
MtBE ¹	5	Secondary Maximum Contaminant Level, DHS
"	13	Primary Maximum Contaminant Level, DHS
TBA ¹	12	State Action Level for Toxicity, DHS
EtBE ¹	None ²	
TAME ¹	None ²	
Methanol	3,500	Reference Dose in Drinking Water, USEPA
Benzene	0.14	Public Health Goal, OEHHA
"	0	Maximum Contaminant Level Goal, USEPA
Toluene	40	Proposed Secondary Maximum Contaminant Level for Drinking Water, USEPA
Ethylbenzene	30	Proposed Secondary Maximum Contaminant Level for Drinking Water, USEPA
Xylenes	1750	Primary Maximum Contaminant Level, DHS.

CLEANUP AND ABATEMENT ORDER NO. 99-711
SFPP, L.P. AND KINDER MORGAN ENERGY PARTNERS, L.P.
CHICO TERMINAL
BUTTE COUNTY

- 4 -

USEPA United States Environmental Protection Agency
OEHHA California Office of Environmental Health Hazard Assessment
Notes:

1. MtBE, TBA, EtBE, and TAME are Methyl tert Butyl Ether, tert Butyl Alcohol, Ethyl tert Butyl Ether, and tert Amyl Methyl Ether, respectively. See Finding 8.
 2. No criteria have been established for EtBE and TAME. However, the State Board suggests interim action levels for them similar to those of MtBE.
12. Concentrations of these constituents in ground water beneath the site exceed the Water Quality Objectives except for EtBE, TAME, and Methanol. The concentration of Methanol has not exceeded its Water Quality Objectives to date. The presence of Methanol in the ground water is still of concern due to its detection in an off-site domestic supply well and its potential impact on remediation systems.
 13. On 1 September 1998, Regional Board staff issued a Proposition 65 disclosure to Butte County pursuant to §25180.7 of the California Health and Safety Code, based on the Benzene concentrations detected in the ground water and active usage of the water supply.
 14. On 20 April 2001 the Discharger submitted a Corrective Action Plan (CAP) to remove free product in the shallowest water-bearing sandy gravel with soil vapor extraction (SVE) and contain the down-gradient extent of fuel oxygenates with technologies to be determined. The SVE system has since been installed on-site near the southern edge of the floating product layer. An SVE pilot test was also run in the center of the floating layer. While preliminary data indicate high air permeabilities favorable for SVE at both locations, the system is inefficient during winter due to the high water table. The SVE system is expected to perform best during summer as the water table falls within the shallow sandy gravel. The Discharger has also entered a purchase agreement on the 10-acre property immediately southwest of the Chico Terminal to allow access for a down-gradient remediation system. To date, the Discharger has not presented a work plan for evaluating specific cleanup technologies.
 15. On 14 July 1998, Regional Board staff performed a Spill Prevention Control and Countermeasure (SPCC) plan inspection of the Discharger's facility in conjunction with representatives from the U.S. Environmental Protection Agency, Butte County Environmental Health Department, and Butte County Air Quality Management District. The inspection discovered an inaccurate SPCC plan, incomplete ground water monitoring network, and violations of Waste Discharge Requirements Order No. 96-064 (NPDES No. CA0083810). A Notice of Violation was issued to the Discharger on 25 August 1998. The Discharger has since prepared an SPCC plan for the facility dated 27 May 1999. The Discharger

is required under Order No. 5-01-194 to prepare an updated SPCC plan and submit it to the Regional Board by 27 May 2002 for review. Further ground water investigations are addressed in this Order. The wastewater treatment system currently operates in compliance with Waste Discharge Requirements.

16. The Discharger is near two other petroleum facilities. Jesse M. Lange Distributing, Inc. owns and operates a retail and wholesale petroleum distribution facility at 11226 Midway. Western Petroleum Marketers, Inc. owns and operates a petroleum distribution facility at 11204 Midway. Petroleum discharges from all three facilities threaten ground water, several private, public, and small community water systems. Separate cleanup and abatement orders have been issued for each facility.
17. The Regional Board does not expect SFPP, L.P., Kinder Morgan Energy Partners, L.P., Western Petroleum Marketers, Inc., or Jesse M. Lange Distributing, Inc., to duplicate each others' work or the requirements of their respective cleanup and abatement orders, but encourages the parties to work cooperatively in sharing information to understand the regional hydrogeology and extent of degradation, and to develop regional maps for the use of all parties to comply with this Order.
18. The Basin Plan establishes beneficial uses of waters of the state and Water Quality Objectives to protect those uses. The beneficial uses of the ground water are domestic, municipal, industrial and agricultural supply.
19. The issuance of this Order is in accordance with Section 13304(a) of the California Water Code, which states:

"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. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the Regional Board, shall petition the superior court of the county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant."

20. Section 13304(c) (1) of the California Water Code provides:

“If the waste is cleaned up or the effects of the waste are abated, or, in the case of threatened pollution or nuisance, other necessary remedial action is taken by any governmental agency, the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions. The amount of the costs is recoverable in a civil action by, and paid to, the governmental agency and the State Board to the extent of the latter’s contribution to the cleanup costs from the State Water Pollution Cleanup and Abatement Account or other available funds.”

21. Section 13267(b) of the California Water Code provides that:

“In conducting an investigation specified in subdivision (a), the Regional Board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the Regional Board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring these reports, the Regional Board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

22. The unauthorized releases of petroleum and petroleum constituents constitute a discharge of waste within the meanings of Sections 13050 and 13304 of the California Water Code. The concentrations of waste in ground water exceed Water Quality Objectives contained in the Basin Plan.

23. As a result of the activities described in Findings 2, 4 and 5, SFPP, L.P. and Kinder Morgan Energy Partners, L.P., have caused or permitted waste to be discharged or deposited where it has or probably will be discharged into waters of the State and has created, and continues to threaten to create, a condition of pollution or nuisance.

24. The technical reports required by this Order are necessary to assure compliance with the tasks and time schedules herein. Existing data and information about the site indicates that waste has been discharged or is discharging at the property, which is owned and operated by the Discharger named in this Order.
25. The State Board has adopted *Resolution No. 92-49* (as amended 21 April 1994 and 2 October 1996), *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*. This policy sets forth the procedures to be used during an investigation or cleanup of a polluted site and requires cleanup standards consistent with State Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*. Resolution 92-49 and the Basin Plan establish cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an alternate cleanup level that is the most stringent economically and technologically feasible in accordance with Title 23, California Code of Regulations section 2550.4. Any alternative cleanup level above background must 1) be consistent with the maximum benefit to the people of the state, 2) not unreasonably affect present and anticipated beneficial use of such water, and 3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Board.
26. The issuance of this Order is an enforcement action by a regulatory agency and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), in accordance with Section 15231(a)(2), Title 14, California Code of Regulations.
27. Any person affected adversely by this action of the Regional Board may petition the State Board to review the action. The petition must be received by the State 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 or can be viewed at www.swrcb.ca.gov/water_laws/index.html.
28. If, in the opinion of the Executive Officer, the Discharger fails to comply with the requirements of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, or issue a complaint for Administrative Civil Liability.
29. Failure to comply with a cleanup and abatement order may result in further enforcement actions under the California Water Code including Section 13350, which may result in civil monetary liability up to a maximum of five thousand dollars (\$5,000) to fifteen thousand dollars (\$15,000) for each day of violation.

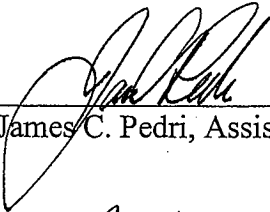
IT IS HEREBY ORDERED THAT, pursuant to Sections 13304 and 13267 of the California Water Code, SFPP, L.P. and Kinder Morgan Energy Partners, L.P. shall comply with the following:

1. Cleanup and abate the effects, forthwith, the discharge of waste to subsurface soil and ground water.
2. Compliance with No. 1 above shall include, but not be limited to, the following measures:
 - a. **Immediately** provide temporary alternative potable water supplies to private domestic supply well owners that are impacted or immediately threatened by petroleum constituents from the Chico Terminal.
 - b. Submit, **by 19 April 2002**, a Work Plan for approval by the Executive Officer to evaluate all migration pathways from the Chico Terminal toward domestic supply wells and the property to the immediate southwest, expand or augment the SVE system as necessary, and evaluate appropriate technologies for down-gradient petroleum pollutant monitoring and total site cleanup. The Work Plan must include additional borings and monitoring wells to define the total vertical and lateral extent of petroleum and petroleum constituents. It must, at a minimum, include borings and monitoring wells to depths of at least 100 feet bgs along the site boundaries with Hegan Lane and the property immediately southwest of the Chico Terminal, and near suspected releases in the southern portion of the tank farm. The Work Plan must include expansion or augmentation of the SVE system as necessary to remove free product to the maximum extent feasible, including beneath the tank farm. The Work Plan must allow sufficient data collection to evaluate appropriate technologies that will clean up the site to meet Water Quality Objectives. The Work Plan must include a time schedule for its implementation.
 - c. Submit, **by 31 July 2002**, a Corrective Action Plan (CAP) Addendum for approval by the Executive Officer to clean up the waste in compliance with Resolution 92-49 and other applicable requirements to abate the effects of the waste. The CAP Addendum must recommend appropriate cleanup options, and alternatives should selected options prove ineffective to prevent further pollutant migration. The Regional Board shall consider an option ineffective at controlling further migration if detectable fuel oxygenates are found at any depth on the site boundaries with Hegan Lane or the property to its immediate southwest. The Regional Board shall also require an appropriate prompt response if detectable fuel oxygenates occur in monitoring well LF-32 or in depth-equivalent intervals beneath the tank farm. All laboratory detection limits must be below appropriate Water Quality Objectives. The CAP Addendum must have contingencies for

evaluating off-site supply wells as vertical conduits for the migration of petroleum constituents and providing permanent alternative water supplies for affected domestic well owners. The Discharger shall obtain all State and local permits as necessary to cover operation and discharges from remedial systems.

- d. Continue a quarterly ground water monitoring program for monitoring wells and begin sampling private domestic water supply wells impacted or potentially threatened by the discharge of waste twice per calendar quarter. Sampling of the private domestic wells shall be conducted at mid-quarters and at quarters' ends. Submit the results of the monitoring **within 30 days from the end of each calendar quarter** until the discharge of waste is abated.
 - e. The Discharger shall submit to the Regional Board, on or before each compliance report date, a report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Board by letter when they are again in compliance with the time schedule.
3. The Discharger shall continue to reimburse the Regional Board for reasonable costs associated with the oversight of investigation, cleanup, and abatement of petroleum discharged from 2570 Hegan Lane, Chico, California. The Discharger shall continue to provide the Regional Board with the name and address of the appropriate person to receive the billing for the oversight costs.

GARY M. CARLTON, Executive Officer

By: 
James C. Pedri, Assistant Executive Officer

March 20 2002

Dated