California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair



'Vinston H. Hickox Secretary for Environmental Protection

Redding Branch Office

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7 February 2003

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Mr. John Crowston Jesse M. Lange Distributing, Inc. P.O. Box 1036 Chico, CA 95927

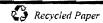
TRANSMITTAL OF AMENDED CLEANUP AND ABATEMENT ORDER NO. 99-709, JESSE LANGE DISTRIBUTING, INC., 11226 MIDWAY, CHICO, BUTTE COUNTY

Enclosed is a copy of Amended Cleanup and Abatement Order No. 99-709. 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 and threatened discharges of waste. 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 groundwater. Specifically, you are directed to:

- Submit, by 27 March 2003, a work plan for soil vapor extraction and vacuum enhanced groundwater pump-and-treat pilot test.
- Within 90 days of staff concurrence, implement this plan in accordance with an approved time schedule.
- Submit, by 17 April 2003, work plans for in-situ chemical oxidation, bio-augmentation pilot studies, and further aquifer investigation.
- Within 90 days of staff concurrence, implement these plans in accordance with approved time schedules.
- Continue a quarterly monitoring program and augment as appropriate based on findings from additional aquifer investigations. Submit quarterly monitoring reports within 30 days after the end of each calendar quarter until directed otherwise.

California Environmental Protection Agency



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.

JAMES C. PEDRI, P.E. Assistant Executive Officer Shasta Cascade Watershed

EJR:sae

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. Vance Severin, Butte County Department of Environmental Health, Chico

Mr. Jim Waggoner, Butte County Air Quality Management District, Chico

Mr. Dana Brown, R.G., Hanover, Chico

Ms. Barbara Vlamis, Butte Environmental Council, Chico

Ms. Christine Nelson, Chico

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

AMENDED CLEANUP AND ABATEMENT ORDER NO. 99-709

FOR

JESSE M. LANGE DISTRIBUTING, INC. BUTTE COUNTY

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

- 1. Jesse M. Lange Distributing, Inc. (hereafter Discharger), owns and operates a one-acre retail and wholesale petroleum distribution facility at 11226 Midway in Chico, California. The facility is in Section 1, T21N, R1E, MDB&M, Butte County Assessor's Parcel Number 040-320-0072. Comanche Creek, an agricultural diversion and tributary of the Sacramento River, lies 100 to 500 feet north and east of the facility.
- 2. Comanche Creek likely influences shallowest groundwater flows. Pumping wells can affect deeper flows. A plastic clayey silt locally extends to about 10 feet below grade surface (bgs). A sandy, partially cemented gravel with variable permeability extends to about 20 feet bgs. Shallow perched and unconfined groundwater occurs at 10 to 20 feet bgs in the shallow gravel. Unconfined flows vary northwest to southwest, away from Comanche Creek, in part likely due to fluctuating recharge. Deeper confined groundwater occurs in inter-bedded silts, sands, and gravels to 300 feet bgs, with greatest permeability in gravels at 80 to 160 and 275 to 300 feet bgs. Although limited data suggest west flow components in confined groundwater, active local domestic and agricultural supply wells are completed at these depths and can influence direction of flow.
- 3. The Discharger is near three other facilities with documented groundwater contamination from petroleum releases; the former Western Petroleum Marketers (WPM) bulk fueling facility at 11204 Midway, the Pacific Gas and Electric (PG&E) Chico Service Center at 11239 Midway, and the Kinder Morgan Energy Partners, L.P. (KM) bulk storage terminal at 2570 Hegan Lane.
- 4. The Discharger formerly stored petroleum in five aboveground storage tanks (ASTs) and two underground storage tanks (USTs). The ASTs had a total capacity of 120,000 gallons and contained gasoline, diesel fuel, and kerosene. The USTs had a total capacity of 20,000 gallons, and contained gasoline and stoddard solvent. Petroleum from the ASTs and USTs was transferred to a loading rack and dispensers through aboveground and underground piping.
- 5. Petroleum from the former storage system has impacted soils and groundwater. On 13 March 1995, the Discharger filed an Underground Storage Tank Unauthorized Release (LEAK)/Contamination Site Report when their environmental consultant discovered

COMPLIANCE DATE

petroleum during a subsurface investigation at the facility. In April 1997, the consultant drilled on-site soil borings, which further showed petroleum contamination. On 13 June 1997, the City of Chico detected hazardous petroleum vapors in a utility vault beneath the Midway, and halted sanitary sewer and storm drainage improvements. On 1 September 1998, Regional Board staff issued a Proposition 65 disclosure to Butte County pursuant to Section 25180.7 of the California Health and Safety Code due to benzene in groundwater. In November 1998, the Discharger removed USTs and found free phase gasoline product had saturated soils largely below a tank turbine. The Discharger recently sampled soils near a former overhead loading rack and fuel dispenser piping. Results showed most on-site contamination was from the USTs rather than ASTs. Based on this information, the State Water Resources Control Board (State Board) UST Cleanup Fund agreed to reimburse 80% of the Discharger's investigation and cleanup costs.

6. Preliminary subsurface investigations showed extensive groundwater contamination and free phase gasoline product, therefore on 28 April 1999 the Executive Officer issued the original version of this Order, requiring the following:

REQUIREMENT

1 June 1999	Install a free product removal system.
I July 1999	Submit a registered engineer's report on AST system compliance with Federal Spill Pollution Control and Countermeasure Plan regulations.
1 July 1999	Submit a work plan with a time schedule for implementation to define pollution extent.
1 September 1999	Submit maps of waste discharge sources and sensitive receptors within one mile of the facility.
1 January 2000	Submit a Corrective Action Plan with a time schedule for implementation to cleanup and abate waste
Quarterly	. Implement a groundwater monitoring program.

- 7. The Discharger has since implemented a groundwater monitoring program, installed a free product removal system which has removed approximately 1,200 gallons of free product, submitted a work plan for further free product removal system upgrades, removed the original ASTs and replaced them with fiberglass USTs, excavated about 1500 cubic yards of contaminated soils, defined the extent of contamination in shallow groundwater, partially defined the vertical extent of groundwater contamination, performed a detailed sensitive receptor survey, and submitted a Corrective Action Plan (CAP).
- 8. The CAP recommends soil vapor extraction, bio-augmentation and bio-stimulation, and vacuum enhanced groundwater pump-and-treat to clean up soil and groundwater. The CAP also recommends additional site investigation to augment the monitoring program and

further evaluation of in-situ chemical oxidation. Regional Board staff concurs with these recommendations.

- 9. On 14 September 1998 and 3 February 2000, Regional Board staff sampled the four closest private domestic wells to the Discharger. These 95 to 230 feet deep wells are at residences about 1,000 feet east of the Discharger's facility, on the opposite side of Comanche Creek. Staff found no fuel oxygenates, gasoline aromatics, or other volatile organic compounds.
- 10. The Discharger's current data indicate gasoline constituents have extensively impacted shallow unconfined groundwater and appear to have migrated into deeper groundwater along a vertical conduit. Near source petroleum concentrations in shallow groundwater suggest equilibrium with free phase, oxygenated gasoline. Also, in 1998 Regional Board staff found an inactive 95-foot deep domestic well adjacent to the Discharger's facility. Staff sampled the well before the property owner destroyed it. The following table shows the maximum concentration of constituents of concern in shallow soils and groundwater near the former UST turbine, and in deeper groundwater at the adjacent former domestic well.

CONSTITUENT	SOIL (mg/Kg) ²	GROUNDWATER (mg/L) ²		
		SHALLOW	DEEPER	
MtBE ¹	840	3,700	39	
TBA ¹	<250	9.3	< 0.001	
TAME ¹	11	6.4	0.41	
Benzene	270	190	0.067	
Toluene	1400	180	0.051	
EthylBenzene	390	38	0.0028	
Xylenes	2000	210	0.028	
TPHg	22,000	2,800	0.0031	
TPHd	800	220	No data	

MtBE, Methyl tert-Butyl Ether, TBA, Tert-Butyl Alcohol, TAME, Tert-Amyl Methyl Ether

- ² mg/Kg, milligrams/Kilogram, mg/L, milligrams/Liter (1 mg/L=1000 micrograms/Liter, µg/L)
- 11. MtBE and benzene exceeding 10 mg/L have migrated in unconfined groundwater over 500 feet off-site west onto PG&E property. MtBE at 7.4 mg/L has reached past the northern KM property line, a distance of about 1,200 feet assuming a source at the Jesse Lange facility. The Discharger's consultant has since detected MtBE up to 40 mg/L at about 90 feet bgs in a grab water sample from the pilot boring of a nearby off-site monitoring well. This detection may relate to the former supply well.
- 12. The Water Quality Control Plan for the Sacramento and San Joaquin River Basins, Fourth Edition (hereafter Basin Plan), designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board.

- 13. The designated beneficial uses of groundwater identified in the Basin Plan are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
- 14. The Basin Plan contains water quality objectives (WQOs) established for the reasonable protection of designated beneficial uses or the prevention of nuisance. The following table shows WQOs and numerical limits used to interpret the objectives for each constituent of concern identified in Finding 10. The lowest of these limits for each constituent is selected to comply with all WQOs. Where the lowest limit of a constituent is lower than its analytical quantitation limit, that quantitation limit is considered the numerical limit.

CONSTITUENT	WQO	LIMIT	REFERENCE FOR LIMIT
		(μ g/L)	
MtBE	Chemical Constituents	13	California Primary MCL
	Chemical Constituents	5	California Secondary MCL
	Toxicity	13	California Public Health Goal
	Tastes and Odors	5	California Secondary MCL
TBA	Toxicity	12	DHS Drinking Water Action Level
	Tastes and Odors	290,000	Taste and Odor Threshold
TAME	None ¹		
Benzene	Chemical Constituents	1	California Primary MCL
	Toxicity	0.15	California Public Health Goal
	Tastes and Odors	170	Taste and Odor Threshold
Toluene	Chemical Constituents	150	California Primary MCL
	Toxicity	150	California Public Health Goal
	Tastes and Odors	42	Taste and Odor Threshold
Ethylbenzene	Chemical Constituents	700	California Primary MCL
	Toxicity	300	California Public Health Goal
	Tastes and Odors	29	Taste and Odor Threshold
Xylenes	Chemical Constituents	1750	California Primary MCL
(sum of isomers)	Toxicity	1800	California Public Health Goal
	Tastes and Odors	17	Taste and Odor Threshold
Gasoline	Toxicity	21	USEPA Superfund Provisional
			Cancer Slope Factor
	Taste and Odors	5	Taste and Odor Threshold
Diesel	Toxicity	56 to 140	USEPA Superfund Provisional
}			Reference Dose
	Taste and Odors	100	Taste and Odor Threshold

MCL = Maximum Contaminant Level; DHS= Department of Health Services; USEPA=United States Environmental Protection Agency.

As shown in Findings 5, 7, 10, 11, and 14, Jesse M. Lange Distributing, Inc. has permitted wastes to be discharged into groundwaters of the State in concentrations that exceed applicable water quality objectives in the Basin Plan, and threaten to create a condition of pollution or nuisance. Exceedance of applicable water quality objectives constitutes "pollution" as defined in California Water Code section 13050.

¹ No limits are currently established for TAME.

16. 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 level that is 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.

17. Section 13304(a) of the California Water Code provides that:

"Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirements 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 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 such waste or abate the effects thereof, or, in the case of threatened pollution or nuisance, take other necessary remedial action. Upon failure of any person to comply with such a cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that 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."

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

"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 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."

19. 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 of the State 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 those 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."

- 20. 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 pursuant to Section 15231(a)(2), Title 14, California Code of Regulations.
- 21. Any person affected adversely by this action of the Regional Board may petition the State Board to review the action in accordance with Sections 2050 through 2068, Title 23, California Code of Regulations. 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 may be found on the Internet at http://www.swrcb.ca.gov/water_laws/cawtrcde/wqpetition_instr.html, or will be provided upon request.

IT IS HEREBY ORDERED THAT, that, pursuant to California Water Code Section 13267 and Section 13304, Cleanup and Abatement Order No. 99-709 is hereby amended and Jesse M. Lange Distributing Inc. shall:

Investigate the discharges of waste, clean up the waste, and abate the effects of the waste, forthwith, resulting from activities at the bulk fuel facility, in conformance with State Board Resolution No. 92-49 Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304 and with the Regional Board's Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (in particular the Policies and Plans listed within the Control Action Considerations portion of Chapter IV). "Forthwith" means as soon as is reasonably possible. Compliance with this requirement shall include, but not be limited to, completing the tasks listed below:

1. Submit, by 27 March 2003, a work plan for soil vapor extraction and vacuum enhanced groundwater pump-and-treat pilot test describing system installation, inspection, and start-up, the pilot test, appropriate permitting, and report of findings.

- 2. **Within 90 days** of staff concurrence, implement the work plan for soil vapor extraction and vacuum enhanced groundwater pump-and-treat in accordance with the approved time schedule, which shall become part of this Order.
- 3. Submit, by 17 April 2003, work plans for in-situ chemical oxidation and bio-augmentation pilot studies describing test goals, bench tests, appropriate permitting, hydraulic controls to prevent generation of waste, fieldwork, system installation, inspection, and start-up, criteria to install full-scale systems, verification sampling, and long-term monitoring.
- 4. Submit, by 17 April 2003, a work plan for further aquifer investigation describing domestic well surveys and sampling, drilling and monitoring well installation, and a report of findings.
- 5. Within 90 days of staff concurrence, implement the work plans for in-situ chemical oxidation and bio-augmentation pilot studies, and further aquifer investigation describing in accordance with the approved time schedule, which shall become part of this Order.
- 6. Continue quarterly monitoring program and augment, as appropriate, based on findings from additional aquifer investigations. Quarterly monitoring reports shall be submitted within 30 days after the end of each calendar quarter until directed otherwise.
- 7. Continue to reimburse the Regional Board for reasonable costs associated with oversight of the cleanup of this facility. Failure to do so shall be considered a violation of this Order.
- 8. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, have all reports prepared by, or under the supervision of, a registered professional engineer or geologist and signed by the registered professional. All technical reports submitted by the Discharger shall include a statement signed by the authorized representative certifying under penalty of law that the representative has examined and is familiar with the report and that to his knowledge, the report is true, complete, and accurate.
- 9. Upon startup of any remediation system(s), operate the remediation system(s) continuously, except for periodic and required maintenance or unpreventable equipment failure. The Discharger shall notify the Regional Board within 24 hours of any unscheduled shutdown of the remediation system(s) that lasts longer than 48 hours. This notification shall include the cause of the shutdown and the corrective action taken (or proposed to be taken) to restart the system. Any interruptions in the operation of the remediation system(s), other than for maintenance, emergencies, or equipment failure, without prior approval from Regional Board staff or without notifying the Regional Board within the specified time is a violation of this Order.
- 10. Periodically optimize remedial systems and report on the effectiveness of the optimization in an Annual Report.

- 11. Notify Regional Board staff at least three working days prior to any onsite work, testing, or sampling that pertains to environmental remediation and investigation.
- 12. Obtain all local and state permits and access agreements necessary to fulfill the requirements of this Order prior to beginning the work.
- 13. Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished and this Order has been rescinded.
- 14. If, for any reason, the Discharger is unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the Executive Officer, the Discharger may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. An extension may be granted only by revision of this Order.
- 15. 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.
- 16. Failure to comply with this Order may result in the assessment of administrative civil liability (ACL) up to \$1,000 or up to \$10,000 per day of violation, depending on the violation, pursuant to the CWC, including sections 13268, 13271, 13350, and 13385. The Regional Board reserves its right to take any enforcement actions authorized by law.

THOMAS R. PINKOS, Executive Officer

By: James C. Pedri, Assistant Executive Officer

7 *FEBeuary 2003* (Date)

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