

California Regional Water Quality Control Board
North Coast Region

CLEANUP AND ABATEMENT ORDER NO. R1 2001-0107

FOR

LIQUID TRANSFER, LLC
SPILL ON HIGHWAY 20 AT MILE POST 21.61
MENDOCINO COUNTY

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

1. On February 26, 2001 at 1255 hours, a tanker truck overturned on Highway 20 at mile post 21.61, East of Fire Road 100, spilling approximately 7,000 gallons of fuel oil from Evergreen Oil, Inc.
2. Liquid Transfer, LLC is the owner of the tanker truck involved in the spill. Liquid Transfer, LLC, is hereby referred to as the Discharger.
3. The tanker truck overturned, ruptured, and spilled fuel oil onto the highway and a culvert catch basin. The spill soaked into the ground and entered an unnamed tributary to James Creek. The area where the fuel oil soaked into the ground is part of the Caltrans right-of-way for Highway 20. A portion of the spill area includes private property owned by Pioneer Resources. The area that includes the south shoulder of Highway 20 east of the culvert at mile post 21.61, the affected culvert, soil beneath Highway 20, and the tributary to James Creek is hereby referred to as the site.
4. Initial cleanup of Highway 20 was conducted by FOSS Environmental, an emergency spill response group. Cleanup actions included using a vacuum truck, absorbent material, and a backhoe to remove fuel oil from the south shoulder of Highway 20. Excavation of contaminated soil began on February 28, 2001.
5. Other cleanup actions included use of absorbent pads to remove fuel oil in the tributary, flushing of the hillside to recover product, construction of catch dams in the stream to collect the product, soil removal from the catch dams, and treatment of the collected water/product from catch dams constructed in the tributary.
6. Surface water samples were obtained from the unnamed tributary to James Creek and James Creek between February 26 and March 14, 2001. Analysis of the samples determined that the following constituents were detected in the receiving waters:

Constituent

Sampling Results (parts per billion, ppb)

Acetone	275
Benzene	0.97
n-Butylbenzene	18.3
2-Chlorotoluene	0.88
Ethylbenzene	17.9

<u>Constituent</u>	<u>Sampling Results (parts per billion, ppb)</u>
Isopropylbenzene	1.0
Methyl ethyl ketone	2.6
4-Methyl-2-pentanone	163
Methyl tert-butyl ether	521
Napthalene	13

<u>Constituent</u>	<u>Sampling Results (parts per billion, ppb)</u>
n-Propylbenzene	1.4
Tetrachloroethene	3.4
Toluene	199
1,2,4-Trimethylbenzene	24.3
1,3,5-Trimethylbenzene	4.5
Xylene	114.9
Total petroleum hydrocarbons as diesel	1,700
Total petroleum hydrocarbons as motor oil	4,800

7. The September 17, 2001 surface water sampling of the unnamed tributary to James Creek and James Creek continue to detect the constituents Methyl tert-butyl ether and Tetrachloroethene. Current flow in the unnamed tributary has decreased to below 2 gallons per minute and goes subsurface below catch Dam #3.
8. The Discharger has caused or permitted, continues to cause or permit, or threatens 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 has created and/or threatens to create, a condition of pollution or 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 (Basin Plan).
9. 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: (a) cleanup to background levels, (b) cleanup to levels attainable through application of best practicable technology, and (c) cleanup to protective water quality objective levels. Cleanup to background levels is the presumptive standard. Any proposed alternative that will not achieve cleanup to background levels (i.e., MCLs), 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 Resolution 68-16 and 92-49, 23 CCR section 2550.4, subdivisions (c), and (d). The following water quality objectives apply to this Site:

Constituent of Concern	Background Level ug/L	Water Quality Objective ug/L	Reference for Objective
Acetone	<0.5	700	U.S. EPA Integrated Risk Information System drinking water level of 700 ug/l; applied to the narrative TOXICITY objective in the Basin Plan.
n-Butylbenzene	<0.5	0.50	No established Maximum Contamination Level (MCL) exists; therefore the detection limit of 0.50 ug/l is controlling and applied to the narrative TOXICITY objective in the Basin Plan.
Methyl ethyl ketone	<0.5	170	U.S. EPA Health Advisory is 170 ug/l; applied to the narrative TOXICITY objective in the Basin Plan.
4-methyl 2-pentanone (Methyl isobutyl ketone)	<0.5	120	California Department of Health Services (DHS) action level of 120 ug/l; applied to the narrative TOXICITY objective in the Basin Plan.
Napthalene	<0.5	20	U.S. EPA Health Advisory Suggested No Adverse Response Level of 20 ug/l; applied to the narrative TOXICITY objective in the Basin Plan.
n-Propylbenzene	<0.5	0.50	No established MCL exists; therefore the detection limit of 0.50 ug/l is controlling and applied to the narrative TOXICITY objective in the Basin Plan.
1,2,4-Trimethylbenzene	<0.5	0.50	No established MCL exists; therefore the detection limit of 0.50 ug/l is controlling and applied to the narrative TOXICITY objective in the Basin Plan.
1,3,5-Trimethylbenzene	<0.5	15	U.S. EPA taste and odor threshold is 15 ug/l, Federal Register 54 (97):22064-22138; applied to the TASTE AND ODOR water quality objective for domestic supply in the Basin Plan.
Isopropylbenzene	<0.5	0.50	No established MCL exists; therefore the detection limit of 0.50 ug/l is controlling and applied to the narrative TOXICITY objective in the Basin Plan.
Total Petroleum Hydrocarbons as diesel (TPH-d)	<50.0	56.0	U.S. EPA health advisory of September 4, 1992, Suggested No Adverse Response Level of 56 ug/l; applied to narrative TOXICITY objective in the Basin Plan.
Total Petroleum Hydrocarbons as motor oil (TPH-mo)	<50.0	<50.0	U.S. EPA National Ambient Water Quality Criteria, Freshwater Aquatic Life Protection, May 1, 1986. Suggested No Adverse Response Level of 0.1 ug/l to 1.0 ug/l is applied to the narrative TOXICITY objective of the Basin Plan and Oil and Grease criteria of the Basin Plan, but the detection limit is 50 ug/l and is controlling.
Tetrachloroethene (PCE)	<0.5	0.5	The MCL for protection of domestic supply, Title 22 § 64444, is 5.0 µg/L; applied to the narrative TOXICITY objective in the Basin Plan.

Constituent of Concern	Background Level ug/L	Water Quality Objective ug/L	Reference for Objective
Methyl-tertiary butyl ether (MtBE)	<5	5	California DHS Secondary MCL, Title 22 of the California Code of Regulations, 5.0 ug/l drinking water standard; applied to the narrative TOXICITY objective in the Basin Plan
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 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 for domestic supply; U.S. EPA taste and odor threshold is 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.
Xylene	<0.5	17	California DHS MCL, Title 22 of the California Code of Regulations, § 64444 is 1750 ug/L for domestic supply; U.S. EPA taste and odor threshold 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.

10. Beneficial uses of groundwater in the affected area include domestic, municipal, and agricultural water supply. Beneficial uses of the unnamed tributary, James Creek and the Big River include:
 - agricultural supply
 - industrial process supply
 - groundwater recharge
 - municipal and domestic supply
 - navigation
 - water contact recreation
 - non-contact water recreation
 - commercial and sport fishing
 - cold freshwater habitat
 - wildlife habitat
 - migration of aquatic organisms
 - spawning, reproduction, and/or early development
 - estuarine habitat
11. Discharge prohibitions contained in the Basin Plan apply to this site. State Water Resources Control Board Resolution 68-16 applies to this site. State Water Resources Control Board Resolution 92-49 applies to this site and sets out the "Policies and

Procedures for Investigation and Cleanup and Abatement of Discharges under Section 13304 of the California Water Code.”

12. Reasonable costs incurred by Regional Water Board staff in overseeing cleanup or abatement activities are reimbursable under Section 13304 of the California Water Code.
13. 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 Section 15308 and 15321, Chapter 3, Title 14 of the California Code of Regulations.

THEREFORE, IT IS HEREBY ORDERED that, pursuant to California Water Code Sections 13267(b) and 13304, the Discharger shall cleanup and abate the discharge and threatened discharges forthwith and shall comply with the following provisions of this Order:

1. Conduct all work under the direction of a California registered civil engineer or geologist experienced in soil and groundwater assessment and remediation.
2. Submit a workplan within 14 days. The workplan shall include :
 - a. A proposal to define the extent of remaining contamination at the spill site.
 - b. Present and evaluate alternative long-term cleanup actions for the residual petroleum wastes remaining at the spill site. Each such alternative long-term cleanup action shall address the standards in Finding No. 9, above.
 - c. Short-term abatement actions necessary to prevent the discharge of product and/or dissolved petroleum contamination from the source areas during the upcoming wet weather season.
 - d. A proposal for conducting a hydrogeologic investigation.
3. Commence implementation of the workplan within 24 hours following concurrence of the plan by the Executive Officer.
4. Submit a report of findings by October 31, 2001. This report shall include recommendations for additional work.
5. Submit a workplan within 14 days that describes the restoration of the affected tributary. The workplan shall include a contingency plan for restoring the tributary in the wet weather season, and a schedule for implementation and completion of the restoration work. The plan shall be simultaneously submitted to the Department of Fish and Game.
6. Submit a workplan by October 5, 2001 proposing a sampling and monitoring program for the upcoming wet weather season. The workplan shall include sample frequencies, sample locations, and sampling during storm events. The workplan shall also include plans for continued dam maintenance, free product removal, and water treatment and/or removal for the upcoming wet weather season.
7. Commence implementation of the workplan within 24 hours following concurrence of the plan by the Executive Officer.

8. Monitoring reports shall be submitted monthly. The monthly monitoring reports, including analytical sampling data sheets and chain-of-custody documentation, shall be submitted by the 15th of the month following the close of the reporting period.
9. If, for any reason, the Discharger is unable to perform any activity or submit any documentation in compliance with the work schedule 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, if possible, 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.

Ordered by

Susan Warner
Executive Officer

September 25, 2001