



al/EPA

Los Angeles  
Regional Water  
Quality Control  
Board

111 Centre Plaza Drive  
Monterey Park, CA  
91754-2156  
Tel: (213) 266-7614  
Fax: (213) 266-7600



Pete Wilson  
Governor

August 26, 1997

Robert Wenom, Refinery Manager  
Powerine Oil Company  
12354 Lakeland Road  
P.O. Box 2108  
Santa Fe Springs, CA 90670-3857

**POWERINE OIL COMPANY, 12345 & 12354 LAKELAND ROAD, SANTA FE SPRINGS - CLEANUP AND ABATEMENT ORDER AND PROSPECTIVE PURCHASER AGREEMENT (FILE NO. 85-18 & 96-137)**


We reference our letter dated August 13, 1997, transmitting a revised tentative Cleanup and Abatement Order and Prospective Purchaser Agreement, for the Powerine refinery, File No. 85-18 and the Lakeland Property, File No. 96-137.

Pursuant to Section 13263 of the California Code of Regulations, this Regional Board at a public meeting held on August 25, 1997, reviewed the tentative Cleanup and Abatement Order and Resolution, considered all factors in the case, and adopted the enclosed Cleanup and Abatement Order No. 97-118 for the Powerine refinery and Resolution No. 97-016, authorizing the Executive Officer to execute the enclosed Prospective Purchaser Agreement.

The Prospective Purchaser Agreement shall be recorded by Powerine in the County of Los Angeles prior to the recordation of any conveyance, or execution of any lease for, any portion of the Lakeland Property by Powerine in favor of any purchaser, any Owner or Occupant. Any amendment to this Agreement shall also be recorded in the County of Los Angeles.

In addition, the Prospective Purchaser Agreement requires Powerine to this Regional Board by March 15, 1998, a Master Work Plan to implement the Cleanup and Abatement Order. In addition, Powerine shall submit by December 31, 1997, a Work Plan and Time Schedule acceptable to the Executive Officer, to initiate remediation of the off-site benzene plume beneath the Lakeland Property and beneath the Metropolitan State Hospital.

Please call Keith Elliott at (213) 266-7614 if you have any questions.

  
J.E. Ross, Unit Chief  
Site Cleanup Unit

cc: See enclosed mailing list

Enclosure



Recycled Paper

*Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.*

Robert Wenom, Refinery Manager  
Powerine Oil Company  
Page 2

Mailing List

cc: Jorge Leon, State Water Resources Control Board, Office of Chief Counsel  
John Youngerman, State Water Resources Control Board, Division of Water Quality  
Nancy Long, Department of Toxic Substance Control, Headquarters  
Hamid Saebfar, Department of Toxic Substance Control, Region 3 - Glendale  
Tom Klinger, Los Angeles County Fire Department - Health Hazardous Materials  
Division  
Metropolitan State Hospital  
Katsumi Keeler, South Coast Air Quality Management District  
Ginger Shattuck, Norwalk-La Mirada School District  
Andy Lazaretto, City of Santa Fe Springs  
Dave Klunk, Santa Fe Springs Fire Department  
Gary Dicorpo, City of Norwalk  
Roger Pearson, California Environmental Insider  
Glen Totten, California Compliance Monitor  
Carlos Porras, Communities for a Better Environment  
Angela Johnson Maszaros, Environmental Justice Resource Network  
Ruben Mc David, Mothers of East Los Angeles  
Friends of the L.A. River  
Besthand  
Darling Bolt  
Bligh Roof  
Galaxy Tea Corporation  
Weld Engineering  
Coast Iron and Steel  
Zillion, Inc.  
G&F Roof Supply  
Henry Richter, TriHidro Corporation  
Roger Kemple, Golden West Refinery  
George Bravante, DC Santa Fe Springs, LLC.  
Trevor Santochi, Santochi and Bravante, LLC

State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

CLEANUP AND ABATEMENT ORDER NO. 97-118

REQUIRING POWERINE OIL COMPANY  
TO CLEANUP AND ABATE THE EFFECTS OF UNCONTROLLED RELEASES OF  
PETROLEUM HYDROCARBONS  
TO SOIL AND GROUND WATER

(File No. 85-18)

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. The Powerine Oil Company, a California corporation, (hereafter referred to as the Discharger), operates a 88 acre Refinery, located at 12345 Lakeland Road. The refinery includes the Bloomfield Property, located at 10820 Bloomfield Avenue, and interconnecting pipelines from the refinery to its former Marine Terminal located at Berth 73 Port of Long Beach. The Powerine Oil Company is currently owned by Energy Merchant Corporation.
2. The refinery site has been used for refining purposes since 1936. The refinery processes raw materials, including crude oil, raw naphtha to produce petroleum products. The components 1,2-dichloroethane and tetrachloroethene were used at the site and stored near the refinery laboratory in above ground tanks. Tetrachlorethene may have been used at the site as a catalyst activator and 1,2-dichloroethane may have been used as a lead scavenger. The main products produced by the refinery are transportation fuels, including kerosene, jet A fuel, unleaded gasoline, high and low sulfur diesel, fuel oil, and petroleum coke. The refinery also produces refinery gas and hydrogen, which are consumed internally by the refinery. In addition, the refinery produces revenue generating non-fuel by-products such as sulfur and carbon dioxide.
3. From 1968 to March 1986, the Discharger-leased a small portion of the Walker property, located at 11240 Bloomfield Avenue, Santa Fe Springs, as a terminalling facility for storage and transferring of asphalt, jet fuel, gas oil, fuel oil, butane, carbon dioxide, and liquified petroleum gas. The two large tanks existed at the site as early as 1945, prior to Powerine use of the tanks.
4. In March 1984, Powerine sought Chapter 11 bankruptcy protection and shut down the refinery. In September, 1986, Powerine Oil Company emerged from bankruptcy. The refinery operated from 1986 until 1995 undergoing a series of ownership changes that ultimately resulted in a July, 1995 shutdown of their 49,500 barrel per day refining process and layoff of most of their 400 employees. During this time, Order No. 85-17 was adopted by this Regional Board directing Powerine Oil Company to conduct a subsurface investigation of their Refinery and to detect and assess any conditions of soil and ground water pollution which may be present. This Order provides that additional Orders shall be issued to correct any condition of pollution found. In response to this Order, the Discharger: Investigated the extent of ground water contamination originating from the

refinery and initiated some soil cleanup and operation of a free-phase petroleum hydrocarbon product removal system. In 1991, free-phase hydrocarbon removal was suspended due to the unrecoverability of the remaining free-phase petroleum hydrocarbon on the ground water. Little free-phase petroleum hydrocarbon contamination remains but extensive dissolved-phase contamination remain on-site and off-site, including under the State Hospital to the south. In early 1996 the Energy Merchant Corporation acquired Powerine with the intent of restarting the refinery and reestablishing Powerine in the petroleum refining business. Powerine stated that the sale of its former administrative building and terminalling facility property located at 12354 Lakeland Road, is key to the financing of the proposed refinery start-up. To facilitate this sale, on June 24, 1997, Powerine requested that this Regional Board enter into a Prospective Purchaser Agreement covering only the Lakeland Road portion of their refinery property.

5. Prior to their request for a Prospective Purchaser Agreement, Powerine initiated shallow soil remediation on the Lakeland Property and requested a no further action letter to facilitate the sale of the land. This remediation action consisted of demolition of the above ground tanks and associated pipelines at the Lakeland Property and removal of about 5,100 cubic yards of petroleum hydrocarbon saturated soils for staging prior to treatment or off-site disposal.
6. After Powerine's remediation efforts, on May 14, 1997, staff issued a "No Further Action" letter regarding soil contamination which provided that reasonable precautions are to be taken by those involved in any excavation, borings or related activities involving the subsurface of the subject site. This no further action letter was based upon:
  - a. Shallow soils meet the Board's cleanup goals for low risk sites. Deeper soil contamination remaining contain up to 27,000 mg/kg total petroleum hydrocarbon (TPH) as gasoline, up to 3.3 mg/kg methyl tertiary butyl ether (MTBE), 200 mg/kg benzene and up to 110 mg/kg naphthalene and pose no risk to surface development.
  - b. A "Fate and Transport/Human Health Risk Assessment", dated March 21, 1997, and update of May 12, 1997, indicate that remaining site soil contaminants will not impact the ground water, the incremental cancer risk was predicted to be less than 0.5 in one million for a site industrial worker, and the non-carcinogenic hazard index was predicted to be less than 0.013.
  - c. Existing ground water contamination with up to 14,000 mg/l benzene was deferred from the no further action letter for later cleanup under the refinery cleanup and abatement Order. Analyses for three on-site production wells, screened in the Silverado aquifer, were below detection limits for all constituents except for 0.88 µg/l toluene in production well number 6, which appeared to be an anomaly.

7. The refinery is underlain by several water-bearing zones. The uppermost water-bearing zone is the unconfined Artesia aquifer. The depth to ground water underlying the refinery is generally 80 feet to 100 feet below ground surface (bgs). Ground water flow direction is generally south in the vicinity of the refinery with an apparent ground water divide about one mile south of the refinery. A deeper probable water-bearing zone at about 200 feet to 400 feet bgs located in the Lynwood formation and a water bearing zone at about 600 to 800 feet bgs called the Silverado aquifer, is a drinking water source for the area.
8. Ground water production wells, screened in the Silverado aquifer, within four miles of the refinery supply drinking water for approximately 114,000 people, supplied by five water purveyors.
9. Free-floating hydrocarbon product was identified in the Artesia aquifer underlying the refinery and is known to have migrated off-site in this aquifer. The discharger initiated recovery of free floating hydrocarbon from the Artesia aquifer in the summer of 1990. As of March 1995, about 520 gallons of hydrocarbon have been recovered from the Artesia aquifer and the maximum hydrocarbon thickness has been reduced to from 2.96 feet to 0.3 feet.
10. The U.S. EPA conducted a Site Inspection Prioritization (SIP) of the refinery and prepared a report, dated September 11, 1995. This report indicated that further assessment is needed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), the Regional Board is the lead agency for this site and that EPA will continue to monitor the sites progress.
11. The Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region on June 13, 1994. This Water Quality Control Plan designates beneficial uses and establishes water quality objectives for all ground water within the Region. Existing or potential beneficial uses for ground water in the Coastal Plain, where the site is located, are municipal and domestic supply, agricultural supply, and industrial service and process supply. Ground water in the Silverado aquifer is usually of best quality and quantity.
12. The California Water Code, Section 13304, "Cleanup and Abatement Orders", requires in part, that any discharge of waste into the waters of the state, that creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the Regional Board cleanup such waste or abate the effects thereof. If such waste is cleaned up, the effects thereof abated, the person or persons who discharged the waste, shall be liable to that governmental agency [for its supervision] to the extent of the reasonable costs actually incurred in cleaning up such waste and abating the effects thereof.
13. Additionally, under the Aboveground Tank Act (SB 1050), the discharger is required to reimburse the State of California for staff oversight costs associated with cleanup and abatement activities. To that end, the discharger, via a letter dated March 11, 1993, agreed to reimburse the State of California for staff oversight costs associated with cleanup activities at this facility.

14. This enforcement action is being taken for the protection of the environment 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 15321, Chapter 3, Title 14, California Code of Regulations.

The Regional Board has notified the discharger of its intent to issue an Order requiring it to cleanup and abate conditions of soil and ground water pollution caused by the release of petroleum hydrocarbon products from their properties and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the tentative Order.

IT IS HEREBY ORDERED, pursuant to California Water Code 13304, that Powerine Oil Company shall:

1. Cleanup and abate the effects of on-site and off-site soil and ground water contamination originating from its refinery, including its Bloomfield Property, activities associated with two above ground storage tanks on the "Walker Property" located at 11240 Bloomfield Avenue, and its interconnecting pipelines to its former Marine Terminal, located at Berth 73 in the Port of Long Beach, Long Beach, California. In addition, cleanup and abate the effects of on-site and off-site ground water contamination which may have originated from its Lakeland Property, as required by this Regional Board.
2. Submit to this Regional Board by March 15, 1998, a Master Work Plan and time schedule for approval by the Executive Officer, that details all known on-site and off-site ground water and soil contaminated areas for cleanup. The Master Work Plan shall provide a time schedule for cleanup of all detailed ground water and soil contamination. These activities shall be conducted according to approved work plans, the requirements of the State Water Resources Control Board Resolution No. 92-49 "Policies and Procedure", and the time schedule specified in the Master Work Plan. The Master Work Plan shall include at a minimum the following items:
  - a. An updated refinery source identification and elimination plan including a plan and time schedule for implementation of the site source identification and elimination program within 90 days of approval of the plan by the Executive Officer. The plan is to detect leakage from above ground tanks and associated piping, identify free phase petroleum hydrocarbon in the vadose zone, and remediate any petroleum hydrocarbon contamination in a timely manner.
  - b. A plan and schedule for final site assessment of all soil and ground water contamination to:
    - 1) Fully delineate the extent of free-phase and dissolved phase ground water contamination in the upper saturated zone and underlying saturated zones. Off-site investigations coordinated to include neighboring facilities are

- considered a vital part of this effort. Complete the preliminary investigation and characterization of all known on-site vadose zone contamination. Define the lateral and vertical extent of such contamination, characterize and evaluate contaminant behavior, and evaluate the potential impact on ground water quality.
- 2) Develop specific aquifer characteristics, such as hydraulic conductivity, for the uppermost saturated zone and any underlying contaminated aquifers;
  - 3) Assess the saturated zone hydraulic characteristics and conductivity (i.e., determine the connection between saturated units or aquitards underlying any soil or ground water contamination).
- c. A description of the current facility ground water cleanup strategy to remediate any on-site and off-site free-phase and dissolved phase ground water contamination.
  - d. A schedule for initiating cleanup of all known ground water contamination.
  - e. A schedule for initiating cleanup of all known vadose zone contamination. Cleanup levels shall be approved in Waste Discharge Requirements issued by this Regional Board.
3. After completion of any phase of ground water or soil investigation or cleanup, according to the approved time schedule in the Master Work Plan, a detailed report describing the activities and results shall be submitted to this Regional Board. Semi-annual progress reports shall be submitted until all required activities are completed.
  4. Pursuant to Section 13267 of the Water Code, the discharger shall submit, under penalty of perjury, to this Regional Board technical reports to include semi-annual progress and ground water elevation gauging and sampling reports until completion of all Regional Board mandated work. These reports must contain, at a minimum, the following information:
    - a. A summary of all ground water elevation measurements from mean sea level and depths to ground water from all site monitoring wells. Monitoring wells should be sounded for total depth at each gauging event. This information should be presented in tabular form to include well location (latitude/longitude or x/y coordinate system) and on a plot plan depicting the location of the borings/wells with ground water contours depicting groundwater flow direction and gradient information. Also, include a free phase hydrocarbon isothickness map and a dissolved phase contaminant isoconcentration contour map, if applicable.
    - b. Analyses of ground water collected from selected site monitoring wells during the sampling period, as approved by the Executive Officer, together with an evaluation

- of the test results. Ground water sample collection procedures and analyses shall be according to an approved work plan.
- c. The above data shall be submitted by hard-copy in a report and if requested, electronically in a format acceptable to the Executive Officer.
  - d. Investigative and remedial activities completed during the reporting period and activities proposed for the next reporting period.
5. Any request for time extensions of the completion dates, shown in the approved Master Work Plan, must include justification for such time extension and be submitted in writing to the Executive Officer for approval.
  6. Abandonment of any ground water well(s) at the site must be reported to the Executive Officer in advance when possible, but no later than 14 days after removal. Any ground water well removed must be replaced within a reasonable time, at a location approved by the Executive Officer. With justification, the Executive Officer may approve of the abandonment of ground water wells without replacement. When a well is removed, all work shall be completed in accordance with all applicable well abandonment requirements.
  7. All work, except the source elimination program, performed pursuant to this Order shall be under the direction and supervision of a registered Civil Engineer or Geologist or a Certified Engineering Geologist. The Discharger's contractor or consultant shall have the technical expertise sufficient to adequately perform all aspects of the work for which they are responsible.
  8. When required, it is the intent of this Regional Board to issue Waste Discharge Requirements or other Orders pursuant to Section 13260, Section 13304, and/or Section 13350 of the Water Code to facilitate this cleanup and abatement activity.
  9. The Regional Board and other Regional Board authorized representative shall be allowed:
    - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
    - b. Access to copy any records that are kept under the conditions of this order;
    - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this order; and
    - d. To photograph, sample, and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the California Water Code.



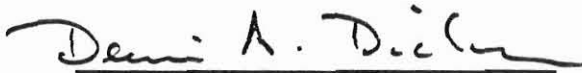
10. Any investigation and cleanup and mitigation activities required by this Order, currently in progress or conducted in the past, shall be included and made a part of the cleanup program.
11. This Order is not intended to permit or allow the discharger to cease any work required by any other Order issued by this Regional Board, nor shall it be used as a reason to stop or redirect any investigation or mitigation activities not required by this Order or any other agency.
12. This Order in no way limits the authority of the Regional Board as contained in the California Water Code, to require additional investigation and cleanup pertinent to this project. It is the intent of this Regional Board to issue Waste Discharge Requirements or other Orders pursuant to Section 13260, Section 13304, and/or Section 13350 of the Water Code when appropriate to facilitate this cleanup and abatement activity. Additionally, continued monitoring of the ground water quality beneath this facility after the completion of this cleanup and abatement activity may be required.
13. Provide to the Regional Board advance notice of any planned physical alterations to the facility or planned changes in the facility's activities that may affect compliance with this Order.
14. This Order does not exempt the discharger from compliance with any other laws, regulations, or ordinances which may be applicable, nor does it legalize these waste treatment and disposal facilities and it leaves unaffected any further restraints on those facilities which may be contained in other statutes or required by other agencies.
15. Provide to the Regional Board advance notice of any planned change in name, ownership, or control of the facility; provide notice to any succeeding owner or operator of the existence of this Order by letter; forward a copy of such notification to the Regional Board.
16. Pursuant to Section 13304 of the Water Code, the discharger shall reimburse the State Water Resources Control Board (SWRCB)-for all reasonable costs incurred by the State Board and this Regional Board in overseeing the cleanup and abatement activities required by this order.
17. This order may be revised by the Regional Board through its Executive Officer as additional information on this site becomes available. Upon request by the discharger, and for good cause shown the Executive Officer may defer, delete or extend the date of compliance for any action required of the discharger under this Order. The authority of the Regional Board, as contained in the California Water code, to order investigation and cleanup additional to that described herein, is in no way limited by this Order.

Powerine Oil Company  
Cleanup and Abatement Order No. 97-118

File No. 85-18

Failure to comply with the terms or conditions of this Order may result in the imposition of civil liabilities, either administratively by the Regional Board or judicially by the Superior Court, in accordance with Section 13350, et seq., of the California Water Code, and/or referral to the Attorney General of the State of California for such action as he may deem appropriate.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on August 25, 1997.



DENNIS A. DICKERSON  
Executive Officer