CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. R2-2014-0040

RESCISSION OF CLEANUP AND ABATEMENT ORDER No. 01-035 for:

R. REED RINEHART, RINEHART DISTRIBUTION, INC., and RINEHART OIL COMPANY, DBA RINEHART'S TRUCK STOP

for the property located at:

2645 PETALUMA BOULEVARD SOUTH
PETALUMA, SONOMA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (Water Board) finds that:

1. **Site Location**: The site was formerly occupied by Rinehart's Truck Stop, a truck fueling station, located approximately one mile southeast of the City of Petaluma (Figure 1). The site consists of approximately two acres along South Petaluma Blvd. The site slopes northeast towards a ditch located on Southern Pacific Railroad's property that drains to the Petaluma River, a tributary to San Francisco Bay and a water of the State. Currently, the site is occupied by Royal Petroleum and is composed of an office and mini-mart, a former café structure, truck scale, and a 5,000-gallon kerosene aboveground storage tank (AST) and fuel dispenser within a containment structure.

2. **Site History**: On May 6, 1991, Water Board staff received a citizen complaint of oil or diesel in a drainage ditch at the rear of the truck stop. On May 9, staff inspected the drainage ditch. The ditch runs along one side of the truck stop for a few hundred feet before entering a culvert tributary to the Petaluma River. A portion of the ditch was contaminated with a one-to-two inch thick layer of floating product. Upon sampling, the product contained about 82,000 ppm total petroleum hydrocarbons (TPH) as diesel. The release is believed to have occurred between an aboveground product line and an underground product line, associated with the truck stop's ASTs. Since 1991, the site has been undergoing soil and groundwater remediation along with groundwater monitoring as described below.

3. **Named Dischargers**: R. Reed Rinehart, Rinehart Distribution, Inc., and Rinehart Oil Company, dba Rinehart's Truck Stop, are named as dischargers (collectively, the discharger) because they owned the site during the discharge, had knowledge of the discharge or the activities that caused the discharge, and had the legal ability to prevent the discharges.

4. **Site Hydrogeology**: The site is located on a narrow alluvial plain. The Coast Range mountains rise steeply to the west of the site. Shallow groundwater is present at 3 to 5 feet below the ground surface, present within a layer of natural and/or artificial unconsolidated fill material that overlies a clay layer about 6 to 12 feet below the ground surface. The shallow groundwater beneath the site appears to be in a perched aquifer. The general regional shallow groundwater flows from the Coast Range mountains towards the Petaluma River.

5. **Regulatory Status**: In response to the observed discharge described in finding 2, Cleanup and

Abatement Order No. 91-121 was adopted by the Water Board on August 9, 1991. The 1991 Order required the discharger to divert uncontaminated upstream drainage ditch water around the contaminated area, to remove all visibly stained soil, and to submit a work plan for site investigation and cleanup. These tasks were completed by the end of 1991, and additional site cleanup work was conducted during the 1990's, as described below. On March 21, 2001, Cleanup and Abatement Order No. 01-035 was adopted and Order No. 91-121 was rescinded. This Order rescinds Order No. 01-035.

6. **Interim Remedial Measures and Investigation**: In October 1991, in response to Order No. 91-121, the discharger installed a horizontal recovery trench that succeeded in recovering about 5,500 gallons of petroleum product over a two-year period. Free product thickness peaked at about 16 inches in 1993; over the next two years, it dropped to about 2 inches in well P-4, with most wells showing only an oily sheen. The discharger also removed about 300 cubic feet of contaminated soil from the drainage trench. An initial subsurface investigation revealed elevated concentrations of gasoline, benzene, toluene, ethylbenzene, and xylenes (BTEX) and diesel in the soil above the shallow groundwater over most of the site. Gasoline and diesel concentrations ranged up to 19,000 mg/kg in soil. Dissolved gasoline and diesel concentrations ranged up to 870,000 and 2,400 µg/l, respectively, in the groundwater.

7. **Groundwater Monitoring:** In 1993, ten groundwater monitoring wells were installed. The groundwater wells were advanced to approximately ten feet below the water table and screened from the bottom to about six inches to one foot above the water table. The first round of sampling was conducted in July 1993. Water levels were measured, and samples were collected and analyzed, generally on a quarterly schedule, for gasoline, diesel, residuals, and BTEX.

8. **Remediation History:** Most of the free product was removed from the site during the 1990s. However, groundwater monitoring showed that a substantial amount of dissolved groundwater contamination remained onsite. To address the remaining groundwater contamination, Order No. 01-035 was adopted in 2001, requiring the discharger to establish cleanup goals for site groundwater and soil. For groundwater, these were to be the more stringent of background concentrations or applicable water quality objectives. For soil, these were to be the more stringent of background concentrations or Basin Plan limits, not to exceed 1 mg/kg total volatile organic compounds. Order No. 01-035 also established requirements for remediating site soil and groundwater to meet agreed-upon standards and to perform quarterly groundwater monitoring until the cleanup standards were achieved.

9. The discharger submitted soil and groundwater cleanup standards, which were approved by Water Board staff on June 11, 2001. Water Board staff also concurred with the discharger's proposal to remove four ASTs and associated piping and to excavate about 2,200 cubic yards of soil, down to a depth of five feet, and then replace this with clean soil. In July 2001, nine groundwater wells were destroyed in preparation for the soil removal action and, during July 2001, excavation and disposal of the impacted soil was conducted. About 2,800 cubic yards of soil was removed. An estimated 110 cubic yards of contaminated soil remained beneath an existing AST until its removal in May 2003. The only underground storage tank (UST) on the site, a 4,000 gallon tank used for gasoline and diesel, was previously removed in 1999.

10. In January 2002, five new groundwater monitoring wells were installed. Since then, groundwater monitoring has been conducted quarterly and then semi-annually at these and

two other wells for petroleum hydrocarbons, BTEX, and methyl tert-butyl ether (MTBE). While groundwater concentrations have dropped in all wells since the fuel sources were excavated, monitoring wells MW-11 and MW-12 have continued to yield persistent detections. In the April 2013 monitoring report, MW-11 showed gasoline and benzene at 1600 and 240 µg/l, respectively, while MW-12 showed gasoline at 190 µg/l and benzene at 30 µg/l.

11. In accordance with a work plan that Water Board staff approved on July 22, 2013, 2,000 gallons of a hydrogen peroxide solution were injected into monitoring wells MW-11 and MW-12 in an attempt to remediate dissolved petroleum hydrocarbons through chemical oxidation. Post-injection monitoring results successfully showed a significant decrease of petroleum hydrocarbon concentrations in both monitoring wells. For MW-11, the only detection above reporting limits was MTBE at 1.8 µg/l. For MW-12 the only detections above reporting limits were total xylenes at 5.7 µg/l and MTBE at 5.7 µg/l.

12. **Low-Threat Closure:** Based on these results, the discharger requested that the Water Board consider this site for a low-threat closure. Staff concurred that the site is a candidate for closure; however, before concurring with a No Further Action Request, staff requested an additional round of sampling for all site wells to verify that no petroleum hydrocarbon concentration rebound has occurred in any of the site's wells.

13. On April 22, 2014, the results of the rebound sampling were submitted. All wells showed non-detectable petroleum hydrocarbons, except for a slight rebound in MW-11, which showed gasoline at 800 µg/l, benzene at 260 µg/l, xylenes at 18.1 µg/l, and ethylbenzene at 2.7 µg/l. Staff requested another rebound sample of MW-11. On July 8, 2014, the results of the second rebound sampling were submitted and showed that concentrations had dropped to the following: gasoline at 380 µg/l, benzene at 46 µg/l, and toluene at 1.5 µg/l. Staff believe the residual concentrations in MW-11 will: 1) not impair beneficial uses of waters of the State, 2) are protective of human health and the environment, and 3) will continue to decline over time.

14. Per the State Water Board's low-threat UST case closure policy, to be considered for closure, the following criteria must be met:

    - The unauthorized release has been stopped.
    - Free product has been removed to the maximum extent practicable.
    - Any secondary source has been removed to the extent practicable.
    - Contaminant plumes that exceed water quality objectives must be stable or decreasing in areal extent.
    - Per State Water Board Resolution 92-49, water affected by an unauthorized release has attained either background water quality or the best water quality that is reasonable if background water quality cannot be restored.

15. Water Board staff has concluded that there is a minimal risk to groundwater at this site, as all soil sources have been removed and the remaining groundwater concentrations are either below cleanup criteria or are showing a decreasing trend. While chemical concentrations still exceed background water quality in one monitoring well (MW-11), concentrations are declining, and it can be reasonably assumed that acceptable water quality criteria will be achieved on a reasonable timeframe through natural attenuation of petroleum constituents. The discharger has therefore successfully met the cleanup objectives of Order No. 01-035, and the

Water Board considers site remediation/restoration complete. Thus, Order No. 01-035 is no longer necessary and should be rescinded.

16. The discharger is responsible for properly closing and abandoning all existing groundwater monitoring wells and piezometers at the site in accordance with State and county requirements. All wells must be closed within twelve months from the adoption date of this Order. All waste piles, drums, debris, and other investigation or remediation derived materials shall also be removed from the site and properly managed.

CEQA, SAFE DRINKING WATER ACT, NOTIFICATION, AND PUBLIC HEARING

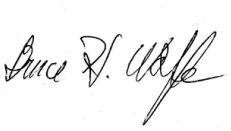
17. This action rescinds an order to enforce the laws and regulations administered by the Water Board. Rescission of the order is not a project as defined in the California Environmental Quality Act (CEQA). There is no possibility that the activity in question may have a significant effect on the environment (Cal. Code Regs., tit. 14 §§ 15378 and 15061, subd. (b)(3).

18. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by ensuring that contamination levels are below maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

19. The Water Board has notified the discharger and interested agencies and persons of its intent to rescind the site cleanup requirements contained in Order No. 01-035 and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

IT IS HEREBY ORDERED that Order No. 01-035 is rescinded.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Region on November 4, 2014.

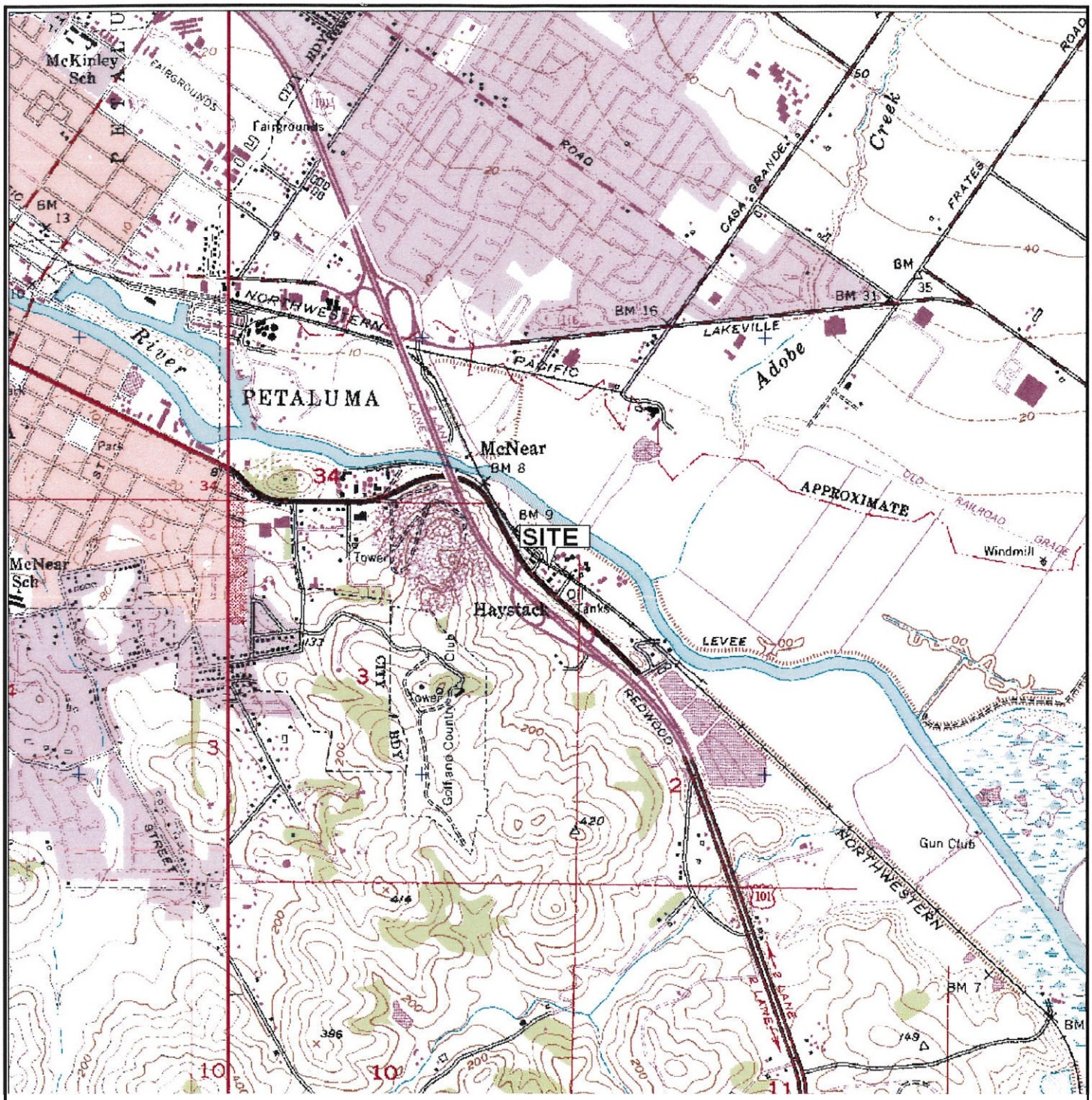


Digitally signed by Bruce H. Wolfe
DN: cn=Bruce H. Wolfe, o=SWRCB, ou=Region 2, email=bwolfe@waterboards.ca.gov, c=US
Date: 2014.11.04 11:12:50 -08'00'

Bruce H. Wolfe
Executive Officer

Attachment:

Figure 1, Site Location Map



PETALUMA RIVER QUADRANGLE CALIFORNIA
7.5 MINUTE SERIES (U.S. GEOLOGICAL SURVEY)
PHOTO 1980

SCALE
0 2000 4000

SITE LOCATION MAP

RINEHART TRUCK STOP - PETALUMA
2645 SOUTH PETALUMA BOULEVARD
PETALUMA, CALIFORNIA