



# **Central Valley Regional Water Quality Control Board**

May 2, 2018

Benjamin Borsoff Strawberry Valley General Store PO Box 337 Strawberry Valley, CA 95981

# NOTICE OF APPLICABILITY, STRAWBERRY VALLEY GENERAL STORE, 13416 LA PORTE ROAD, STRAWBERRY VALLEY, YUBA COUNTY, CASE # 580099

On February 22, 2018, Stratus Environmental, Inc. (Stratus) submitted a Notice of Intent Application (NOI) to apply for coverage under Waste Discharge Requirements General Order No. R5-2003-0044 (General Order) for your site at 13416 La Porte Road, Strawberry Valley (Site). In response to the NOI, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff requested additional information in a March 14, 2018 letter. Stratus submitted an Addendum to Notice of Intent Application (NOI Addendum) on April 9, 2018.

The NOI and NOI Addendum are in support of a discharge of treated groundwater from a groundwater extraction and treatment system located at your Site. The treatment system is designed to remove petroleum hydrocarbon contaminants from the extracted groundwater. This treated groundwater will then be discharged to land via an infiltration gallery in the downgradient groundwater flow direction from the existing groundwater contaminant plume on the Site.

Based on our review of the information provided, we have determined this project meets the required conditions to be approved under the General Order. You are hereby assigned General Order No. R5-2003-0044-033 to regulate the discharge of treated groundwater associated with the unauthorized release of petroleum hydrocarbons at the Strawberry Valley General Store. All requirements contained in the General Order and/or modified by this Notice of Applicability (NOA) are applicable to your project.

#### **Project Location and Description**

The Strawberry Valley General Store Site address is 13416 La Porte Road, Strawberry Valley, Yuba County, California. The Site is identified as Yuba County Assessor's Parcel Number 054-130-024, with the geographic coordinates of latitude 39°33'49.20" north, and longitude 121°06'28.80" west.

The Strawberry Valley General Store continues to operate as a store but no longer dispenses vehicle fuel. In 1995 and 1999, two 1,000-gallon underground storage tanks (USTs) were removed from the Site. Soil samples from beneath the removed USTs contained elevated concentrations of petroleum hydrocarbons. In 2011, groundwater samples collected from domestic wells on the Site and on an adjacent property contained significant concentrations of petroleum hydrocarbons including benzene at almost 1,000 times the maximum contaminant

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

level. Subsequent investigations included advancement and sampling of seventeen soil borings, and installation of fourteen groundwater monitoring wells, and four soil vapor monitoring wells.

Based on investigative results, Central Valley Water Board staff requested that the responsible party implement remedial measures to clean up the identified contaminant plume. The responsible party installed three soil vapor extraction wells and began operation of a soil vapor extraction system in February 2015. To date, approximately 3,900 pounds of petroleum have been removed via soil vapor extraction. To address on-going groundwater impacts, the responsible party installed five groundwater extraction wells, and two air sparging well nests in July 2017. The remedial action plan proposes groundwater remediation using a combination of groundwater extraction, soil vapor extraction, and air sparging. The groundwater extraction technology requires coverage under the General Order from the Central Valley Water Board to discharge treated groundwater to land as there is no municipal sewer system in Strawberry Valley to receive the discharge.

The Strawberry Valley General Store will extract contaminated groundwater from the five extraction wells and pass it through a bag filter to remove sediment, and one 500-pound and three 1,000-pound in-line granular activated carbon canisters for hydrocarbon stripping prior to being discharged to the subsurface through an infiltration gallery southeast of the former UST area. Analytical testing will be performed on the untreated influent and the treated effluent before it is discharged to the subsurface. The nearest surface water is Kentucky Creek, about 900 feet southwest of the Site. Treated groundwater will not discharge to Kentucky Creek.

### **Monitoring and Reporting**

The General Order includes a Monitoring and Reporting Program (MRP) that prescribes minimum wastewater monitoring requirements including sampling and analytical testing for specific constituents in treatment system influent and effluent. The MRP allows for adjustments to the analytical program based on monitoring results:

- Influent Sampling: The MRP states "If three consecutive monthly sampling events result in a constituent having a non-detectable concentration, at appropriate detection limits, and the constituent is not present in the groundwater, or surface water being treated, then the sampling frequency shall be reduced to annually for that constituent."
- Effluent Sampling: "If a constituent is not present in the influent sample, then the testing for that constituent may be discontinued, upon approval by Regional Board staff, until detected in the influent. Appropriate quantitation (or reporting) limits are described in Part C.1 of this Order."
- Influent and Effluent Sampling: "If lead is not detected in the first 2 sampling events, then testing may be discontinued thereafter, upon approval by Regional Board staff."

The MRP also requires that a groundwater monitoring program be submitted and approved by the Executive Officer. As explained in the NOI Addendum, the groundwater monitoring program for the Site is described and required in Monitoring and Reporting Program R5-2017-0804. No modifications to the Site's groundwater monitoring program are required in response to the proposed discharge of treated groundwater at this time. The treated groundwater will be discharged to shallow soil and may cause localized mounding of the water table. Shallow

groundwater beneath the discharge area is not impacted with petroleum constituents, and because the treated groundwater will be free of petroleum, will not be impacted by the discharge. Deep groundwater beneath the infiltration gallery contains approximately 100 micrograms per liter of methyl tert butyl ether (MTBE). Migration of the deep plume will be addressed by extraction wells upgradient of the discharge area. Discharge of the treated groundwater to the infiltration gallery will not impact deeper groundwater remediation efforts and may help develop a clean water front downgradient of the extraction wells.

### **Additional Requirements**

- The "Standard Provisions and Reporting Requirements" attached to the General Order require a plan for preventing and controlling accidental discharges. <u>At least 30 days</u> <u>prior to system startup</u>, please submit the plan to Board staff for review. The plan should include consideration of high water table conditions and associated impacts to the infiltration gallery.
- 2. The Strawberry Valley General Store shall obtain and analyze influent and effluent groundwater samples at 8 and 72 hours after treatment system startup. The 8-hour samples are to be collected and analyzed in accordance with locations and frequencies directed in the General Order and MRP. To minimize analytical costs, the 72-hour sample can focus on the primary constituents of concern, benzene, toluene ethylbenzene, xylenes, and MTBE. Pesticides are waived from the sampling and reporting requirements because they were not detected in previous sampling of the groundwater.
- The required annual fee (as specified in the annual billing invoice to be issued by the State Water Resources Control Board) shall be submitted until this NOA is officially withdrawn.

If you have any questions regarding this NOA, please contact Tom Gavigan at (916) 464-4728 or tom.gavigan@waterboards.ca.gov.

Patrick Pulupa, Incoming Executive Officer for

Pamela C. Creedon, Executive Officer

Part Phy

cc (via email): Galvin Kauffman & Bill Brasher, SWRCB

Clark Pickell, Yuba County Environmental Health Dept.

Scott Bittinger, Stratus Environmental Inc.

Rob Kull, Stratus Environmental Inc.