1 November 2011

PUBLIC NOTICE: INFORMATION ON THE RED BARN FACILITY, 656/980 STATE HIGHWAY 299, BIEBER, LASSEN COUNTY

PUBLIC NOTICE:

The Central Valley Regional Water Control Board (Central Valley Water Board) is providing this Fact Sheet to parties interested in site cleanup at the Red Barn Facility, 656/980 Highway 299, Bieber, California (Site). Red Barn (Discharger) proposes to pump polluted groundwater, treat the water at grade for petroleum constituents, and then discharge effluent into an infiltration gallery under General Order R5-2003-0044. This Fact Sheet summarizes site investigation and cleanup to date, and proposed activities. For details on the General Order, see:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2003-0044.pdf

SITE INVESTIGATION AND CLEANUP TO DATE:

The Site is an automotive service station at State Highway 299 and County Road A2 with an underground storage tank (UST) system. The UST system includes three gasoline and diesel tanks, four fuel dispenser islands, and piping. In 2000, the Lassen County Environmental Health Department discovered that petroleum pollution from the UST system had impacted groundwater, and transferred lead agency status to the Central Valley Water Board. For details on the case history, go to Geotracker, the State Water Resources Control Board public access website, at:

http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603593601

The Discharger subsequently excavated contaminated soils, and further investigated the site with 44 soil borings, and 13 groundwater monitoring wells. Results generally show two discrete water-bearing, permeable sands, nominally 16 to 30 feet below grade surface (bgs), and 33 to 54 feet bgs, the shallow and deeper zones, respectively. Silty clays separate the two zones. The shallow zone is hydraulically unconfined; the water table most often occurs within the sand. The deeper zone is hydraulically confined; hydraulic heads cause water levels to rise within monitoring wells above the sand into overlying clays. In both the shallow and deeper zones, groundwater flow directions vary, northeast to northwest, at gradients ranging 0.001 to 0.02.

The site has remaining polluted groundwater. Most laterally extensive pollution is in the shallow zone, with chronic detections in on-site monitoring wells MW-13, MW-17, and MW-18. At the above Geotracker link, find current data under *Site Map/Documents* See especially a report titled *1Q11 QMR*, dated 29 April 2011, 9,585 KB (First Quarter 2011 Monitoring Report).

The most mobile key pollutant in groundwater, Methyl tert Butyl Ether (MtBE), currently occurs in down-gradient shallow zone monitoring well MW-17, at 2,100 micrograms/Liter (µg/L), and in deeper zone well MW-11R, at 68,000 µg/L; for trend data in wells, at the above Geotracker link, see *Environmental Site Data (ESI)*. Existing shallow zone monitoring wells adequately define the lateral extent of the MTBE with the exception of northward from MW-17. Existing monitoring wells, plus recent pumping test results, generally define the extent of MtBE in the deeper zone. The Discharger will continue to monitor both shallow and deeper zone water quality during the proposed activities, and will recommend further action based on findings.

CONTACTS

Questions or Additional Information Contact:

(Written Comments or Questions)

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(Proposed System Design)

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MtBE poses the relatively greatest threat to water supply wells near the site. Based on current information, 13 active supply wells are within 2,000 feet of the site. Of these, two are potentially down-gradient of identified pollution. For historical details, at the above Geotracker link, see a report titled *Report of Findings 1 of 2*, dated 6 October 2006, 9,382 KB. Note that two supply wells at Big Valley Medical Clinic and Red Barn have since been destroyed under Lassen County permit.

PROPOSED ACTIVITIES:

To mitigate the potential threat to nearby supply wells, and lower near-source pollutant concentrations, the Discharger proposes a groundwater extraction and treatment system. The system will consist of submersible pumps, holding tank, treatment plant of three, 1,000-pound carbon units with virgin coconut shell carbon, secondary (clean water) holding tank, and infiltration gallery. System design allows for unattended, continuous operation. Discharge to the infiltration gallery will comply with the requirements of the General Order.

FURTHER QUESTIONS AND COMMENTS:

Central Valley Water Board staff has reviewed the Discharger's application to discharge treated groundwater under the General Order, and generally concurs pending comments from interested parties. Submit written questions or comments to Eric Rapport **by 5:00 PM. 30 November 2011**. In the interim, if you wish to review hard copies of relevant case file documents, schedule an appointment with Mr. Rapport during normal business hours. For questions in detail on system design, contact Mr. Gowri Kowtha.