Central Valley Regional Water Quality Control Board

Day Month 2025

Earl L. Enns, Trustee
The Reedley Environmental
Remediation Trust
6315 Avenue 430
Reedley, CA 93654

[TENTATIVE] NOTICE OF APPLICABILITY FOR WASTE DISCHARGE REQUIREMENTS GENERAL ORDER FOR IN-SITU REMEDIATION AND DISCHARGE OF TREATED GROUNDWATER TO LAND, R5-2015-0012, REEDLEY/ FORMER DRY CLEANER, 1340 G STREET, REEDLEY, FRESNO COUNTY (GLOBAL ID 10000000435)

The Reedley Environmental Remediation Trust hereafter (Discharger) submitted a *Notice of Intent to Comply with the Terms of General Water Discharge Requirements Order No. R5-2015-0012*, *Groundwater Remediation Pilot Test Work Plan - G Street PCE Plume Reedley CA* dated 31 May 2024 and prepared by LEA Environmental, Inc. (LEA). A pilot test is proposed to assess the feasibility of remediation of chemicals in soil and groundwater by the injection of microorganisms and food substrates and other compounds intended to create a reducing environment in groundwater near the treatment area. Based on information in the submittal, it is the Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff determination that the project meets the requirements for implementation under Order No. R5-2015-0012, subject also to the conditions specified below. All of the requirements contained in the General Order are applicable to the project. The project is assigned Order No. **R5-2015-0012-XXXX**.

Project Location:
The project is to be implemented at 1340 G Street, Reedley, Fresno County (Site), Fresno County Assessor's Parcel numbers 368-273-05. The proposed remedial activities are to be implemented near the source zone of the Site (Figure 1).

Project Description:
The Site is a former dry cleaner facility that had historical discharges of tetrachloroethylene (PCE). Investigations at the site have identified PCE in indoor air, soil vapor, and groundwater at concentrations exceeding regulatory screening levels. A network of vapor sampling points beneath and around the building detected PCE and the general distribution of vapor concentrations was consistent with a

release from the former dry-cleaning machine that had migrated down to groundwater. The concentration distribution of PCE in groundwater, known from a network of 32 monitoring wells indicates that the Site is the likely source of a groundwater PCE plume which extends approximately 2,200 feet downgradient to the east-southeast. The plume was vertically delineated, with indications that the plume occurs from the water table which is approximately 70 feet below ground surface (bgs) to about 120 feet bgs at the source area but is submerged down-gradient where its upper surface is about 100 feet bgs and lower surface is about 140 feet bgs. The plume is about 400 feet wide at the source area and about 700 feet wide at its down-gradient margin.

A soil vapor extraction system was installed in January 2020 and operated through the end of 2020. The SVE recovered approximately 93 pounds of PCE. In March 2023, the Discharger submitted a Groundwater RI/FS Report to the Central Valley Water Board which detailed hydrogeologic characteristics of the plume area and evaluated remedial alternatives and selected Enhanced Reductive Dechlorination (ERD) which will induce microbial remediation of PCE. Central Valley Water Board staff, in a letter dated 6 May 2024, was in general agreement with the proposed completion of an ERD pilot study and requested a workplan and Notice of Intent.

The plan involves the installation of four injection points aligned as closely perpendicular to the groundwater flow direction within a section of the plume containing PCE concentrations greater than 500 micrograms per liter (µg/L). Two injection points will be permanent wells, and two will use the push method for testing different delivery methods. These points will be spaced 20 to 25 feet apart to assess the effective radius of influence (ROI), ranging from less than 20 feet to greater than 30 feet. Additionally, three new monitoring wells will be installed between the injection points, with two more downgradient wells to monitor the effectiveness of ERD, ROI, and compliance with waste discharge requirements.

Various ERD mixtures will be tested, which includes GEOFORM, a lecithin-based carbon substrate mixed with water that has been treated by low concentrations of sodium or potassium bisulfite or cysteine to scavenge dissolved oxygen. Other components include KB-1 for bioaugmentation, zero-valent iron (ZVI) for creating an anaerobic environment, and sodium bicarbonate for pH buffering. The amounts injected will depend on the size of the treatment zone and its ROI, with up to 11,000 gallons of carbon substrate, 26 liters of bioaugmentation product, and 4,500 pounds of sodium bicarbonate used for larger zones.

The project will employ tracers to monitor injection sources and monitor the treatment zone for 8-12 months. Results from this pilot test will be used to design a full-scale system for implementation.

A contingency plan has been submitted to address potential adverse effects. If chemical concentrations in compliance wells exceed exceeds its background level by 20% or more, the Discharger will notify the Central Valley Water Board, re-sample within 30 days, and take corrective measures, if necessary, which includes potentially aeration for

removal of the injected carbon product. Monitoring will continue to ensure the effectiveness of any corrective actions.

General Information

1. The project will be operated in accordance with the requirements contained in the General Order No. R5-2015-0012 and in accordance with the information submitted in the Work Plan, Notice of Intent, and specified in this Notice of Applicability.
2. The required annual fee (as specified in the annual billing you will receive from the State Water Resources Control Board) shall be submitted until this Notice of Applicability is officially revoked.
3. Injection of any material other than those specified above into the proposed injection points is prohibited.
4. The General Order requires a contingency plan for corrective actions should water quality exceed the requirements of the Order at the points of compliance. The General Order prohibits concentrations of metals, total dissolved solids, or electrical conductivity more than 20% greater than their respective baseline levels. The Discharger will implement one or more of the corrective action measures outlined in the contingency plan and as deemed necessary by the Central Valley Water Board.
5. Failure to abide by the conditions of the General Order could result in an enforcement action as authorized by provisions of the California Water Code.
6. The Discharger shall comply with the attached Monitoring and Reporting Program, Order No. **R5-2015-0012-XXXX**, and any revisions thereto as ordered by the Executive Officer.

If you have any questions regarding the information in this letter or regarding the technical aspects of this project, you may contact Paul Dotson, the Central Valley Water Board's project manager, at (559) 445-5525 or paul.dotson@waterboards.ca.gov.

Patrick Pulupa
Executive Officer

Attachments: Monitoring and Reporting program Order No. R5-2015-0012-XXX

cc: Fresno County Environmental Health Department, Fresno
Wade Allmon, LEA Environmental, Santa Barbara, CA