



California Regional Water Quality Control Board

Los Angeles Region



Linda S. Adams
Agency Secretary

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Arnold Schwarzenegger
Governor

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

July 14, 2006

Ms. Abbe Burns
Ventura County Fire Department
165 Durley Avenue
Camarillo, CA 93010

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
CLAIM NO. 7003 3110 0003 3258 2956

Dear Ms. Burns:

SECOND AMENDMENT TO ENROLLMENT UNDER GENERAL WASTE DISCHARGE REQUIREMENTS AND MONITORING AND REPORTING PROGRAM – VENTURA COUNTY FIRE STATION # 30, 325 HILLCREST DRIVE, THOUSAND OAKS, CALIFORNIA (FILE NO. 03-108, CI NO. 8624)

We received a letter dated May 19, 2006 and a technical report from your consultant (Applied Environmental Technologies, Inc.) requesting modifications to the terms of the enrollment under the general Waste Discharge Requirements Order No. R4-2002-0030 (Series No. 033). Your consultant proposed in the letter to continue passive infiltration of hydrogen peroxide with Fenton's reagent into the permitted wells (MW-14, MW-15, GW-2, GW-3, GW-4, MW-4, MW-6, SP-10, and SP-12) (Figures 1 and 2) and the infiltration into six additional wells (IW-1, IW-2, IW-3, IW-4, IW-5, and IW-6) (Figure 3). This would bring the total number of injection wells to 15. The proposed injection schedule for the 15 injection wells is shown in Table 1 (attachment). In addition, your consultant requested not to increase the frequency for the existing Monitoring and Reporting Program (MRP) No. CI-8624 for the new injection area and to cancel the 24-hour and 15-day post-injection monitoring and sampling requirement of the existing monitoring program because the previous injections have demonstrated only a temporary slight increase in pH, increased dissolved oxygen, increase oxidation reduction potential, and unchanged temperature, specific conductance, iron 3⁺ and total iron. Furthermore, your consultant believed that the existing monitoring program has and will be fully assessed the present and future conditions of the injection area.

The concentration of the hydrogen peroxide with Fenton's Reagent, the quantity and the application method will be the same as previously used for the new injection well. The concentration that has been applied of hydrogen peroxide with Fenton's Reagent range from six to ten percent and the volume is approximately twenty-gallon per well. The hydrogen peroxide with Fenton's Reagent has been poured slowly into each well and flushed throughout the entire screen interval using a clean downhole surge block.

After a review of the information in our file and the information provided by your consultant, the Los Angeles Regional Water Quality Control Board Executive Officer hereby approves your request to modify the terms of the enrollment to include the additional new injection wells into the injection net work and the deletion of the 24-hours and 15-days post injection monitoring (footnotes 1 and 3) requirements. However, the monitoring program has been modified to include additional monitoring wells and two monitoring parameters as follows (additions are bolds and deletions are struck out):

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Change No 1: Section III.A, Groundwater Monitoring on page T-2 has been changed to read as follows:

III.A. Representative samples of groundwater shall be obtained from wells **MW-1, MW-2, MW-3, MW-2B, MW-5, MW-7, MW-8, MW-9, MW-10, MW-12, MW-13, MW-16, MW-17, MW-18, MW19, MW-20, MW-21, SP-7, and SP-13** (Figures: Plates 2 and 3). These sampling stations shall not be changed and any proposed change of sampling locations shall be identified and approved by the Regional Board Executive Officer (Executive Officer) prior to their use.

The following table summarizes the changes of the groundwater monitoring frequency:

| <u>Constituent</u> | <u>Units</u> | <u>Type of Sample</u> | <u>Minimum Frequency of Analysis</u> [†] |
|------------------------|--------------|-----------------------|---|
| pH | pH units | grab | Quarterly |
| Temperature | °F | grab | Quarterly |
| . | . | . | . |
| . | . | . | . |
| . | . | . | . |
| Tertiary butyl alcohol | µg/L | grab | Semi-annually ¹ |
| Formaldehyde | µg/L | grab | Semi-annually |
| Acetone | µg/L | grab | Semi-annually |
| . | . | . | . |
| . | . | . | . |
| . | . | . | . |
| Boron | mg/L | grab | Semi-annually |

[†] The first sampling event is required within fifteen days from the injection date.

¹ If tertiary butyl alcohol is detected during the first sampling events, the sampling event shall continue at quarterly intervals until it is not detected.

Change No 2: Section III.B, Groundwater Monitoring for Injection Wells on page T-3 has been changed to read as follows:

III.B. Representative samples of groundwater shall be obtained from the injection wells GW-2, GW-3, GW-4, **IW-1, IW-2, IW-3, IW-4, IW-5, IW-6** (Figure: Plate 3), ~~MW-1, MW-2, MW-3, MW-4, MW-6, MW-14, MW-15, MW-18, MW-19, MW-20, SP-10, and SP-12~~ (Figures: Plates 2 and 3). These wells shall be monitoring during and after the injection for a period of three months any time that there is an injection event. These sampling stations shall not be changed and any proposed change of sampling locations shall be identified and approved by the Executive Officer prior to their use.



The following shall constitute the groundwater and injection-monitoring program for the injection wells:

| <u>Constituents</u> | Unit | <u>Type of Analysis</u> | <u>Minimum Frequency of Analysis</u> |
|-------------------------------|--------------|-------------------------|--------------------------------------|
| Total injection/dripping rate | gallons/well | --- | ----- |
| pH | pH units | grab | Monthly ³ |
| Temperature | °F | grab | Monthly ³ |
| Dissolved oxygen | µg/L | grab | Monthly ³ |
| Specific conductance | µmhos/cm | grab | Monthly ³ |
| Oxidation-reduction potential | millivolts | grab | Monthly ³ |
| Fe ⁺³ | µg/L | grab | Monthly ³ |
| Total iron | µg/L | grab | Monthly ³ |
| . | . | . | . |
| . | . | . | . |
| . | . | . | . |
| <u>Tertiary butyl alcohol</u> | <u>µg/L</u> | <u>grab</u> | <u>Semi-annually</u> |

³The first sampling event is required within 24 hours from the injection time.

Enclosed is the second amended Monitoring and Reporting Program No. CI-8624. Please note that the amended MRP is effective as of July 5, 2006.

If you have any additional questions, please contact Mr. Orlando H. Gonzalez at (213) 620-2267 or Mr. Rodney Nelson at (213) 620-6119.

Sincerely,

Jonathan Bishop
Executive Officer

Enclosure

cc: Mr. Robert Sams, Office of Chief Counsel, State Water Resources Control Board
Mr. James Evans, Ventura County Environmental Health Division, Liquid Waste
Ms. Melinda Talent, Ventura County Environmental Health Division, Land Use Unit
Ms. Diane B. Wahl, LUFT Program, Ventura County Environmental Health Division
Mr. J. F. Fakhoury, Ventura County Public Works
Mr. George Ehrhardt, City of Thousand Oaks
Ms. Carol B. Shestag, Applied Environmental Technologies, Inc.

