

State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
November 12, 2008

ITEM: 15

SUBJECT: General Waste Discharge Requirements for Discharges of Treated Groundwater from Volatile Organic Compound Cleanup Sites to Land in the San Diego Region (Tentative Order No. R9-2008-0138 (Cheryl Prowell))

PURPOSE: Consider adoption of Tentative Order No. R9-2008-0138.

PUBLIC NOTICE: The public was notified of this agenda item by posting the Tentative Order on the Regional Board web page on October 10, 2008, and an announcement was mailed to current enrollees of Order No. R9-2003-0111 (which would be superseded by this Order) and other interested persons (Supporting Document 1). These public notification actions satisfy the requirements of California Government Code section 11125 for a 10-day notice.

DISCUSSION: Tentative Order No. R9-2008-0138 provides a discharge alternative for treated groundwater in areas where sewer hook-ups are unavailable, and the discharged water can not meet effluent limitations for discharge into surface waters. The Tentative Order regulates discharges of treated groundwater derived only from volatile organic compound (VOC) cleanup sites. Groundwater discharged pursuant to the requirements of Tentative Order No. R9-2008-0138, will be extracted, treated to remove pollutants of concern and re-injected into the same aquifer.

Tentative Order No. R9-2008-0138 (Supporting Document 2) was prepared as a result of the Regional Board's review and past experience administering the current Order No. R9-2003-0111 (Supporting Document 3). Order No. R9-2003-0111, adopted on June 12, 2003, established discharge prohibitions, specifications, provisions, and monitoring and reporting requirements related to the reinjection of treated groundwater generated during cleanup of sites polluted with VOCs. Order No. R9-2003-0111 included extensive monitoring requirements and discharge specifications that did not adequately account for natural

variability of naturally occurring geochemical parameters. This resulted in violations of that Order which were not indicative of impacts to water quality. Two sites actively discharging under the Order over the past year reported a total of 74 violations related to variations in concentrations of naturally occurring constituents exceeding discharge specifications..

Tentative Order No. R9-2008-0138 contains a revised streamlined monitoring approach developed to focus monitoring on pollutants of concern (volatile organic constituents or VOCs), and to limit regular monitoring of naturally occurring chemical constituents. Initial groundwater monitoring to verify eligibility for coverage by the Tentative Order would be limited to indicator parameters used to verify that the extracted groundwater and receiving water are from the same aquifer. Regular monitoring would be conducted for pollutants of concern (site related VOCs) and any other chemical constituents identified in the site-specific Sampling and Analysis Plan.

Tentative Order No. R9-2008-0138 was developed to maintain protection of groundwater, and to streamline Regional Board staff time expended on reviewing applications, enrolling applicants, reviewing results of water quality analyses, and addressing violations. The revisions incorporated into Tentative Order No. R9-2008-0138 will adequately protect water quality while at the same time significantly reducing the compliance monitoring costs associated with the Order, making the costs more reasonable in relationship to the benefits of the monitoring as required by Water Code section 13267(b)(1).

Adoption of Waste Discharge Requirements by the Regional Board for the discharge of treated groundwater is considered a project under the California Environmental Quality Act (CEQA; Public Resources Code, section 21000 et seq.). The Regional Board is the lead agency for the project, and adopted a Negative Declaration (Resolution No. R9-2003-0167) on June 13, 2003, determining that there was no substantial evidence that discharges to land or wastes associated with the cleanup and abatement of groundwater containing volatile organic compounds would have a significant effect on the environment. The scope of the project has not been modified and the tentative Order will supersede General Order No. R9-2003-0111; therefore, adoption of Tentative Order No. R9-2008-0138 relies on the

same negative declaration adopted by the Regional Board in Resolution No. R9-2003-0167 (Supporting Document 4). The Resolution was adopted as a necessary part of the adoption of the current Order No. R9-2003-0111.

KEY ISSUES:

1. If adopted, Tentative Order No. R9-2008-0138 would supersede existing Order No. R9-2003-0111 as General Waste Discharge Requirements for discharges of treated groundwater reinjected into the same aquifer as part of a groundwater cleanup action.
2. Tentative Order No. R9-2008-0138 was revised to address violations of Order No. R9-2003-0111, which were not indicative of adverse impacts to water quality.
3. Streamlined monitoring will assist the Regional Board in more quickly identifying real site-related violations of discharge specifications and thereby protect water quality.
4. Monitoring costs associated with Order No. R9-2008-0138 bear a more reasonable relationship to the need for the monitoring data.

LEGAL CONCERNS:

None

SUPPORTING DOCUMENTS:

1. Public Notification for Consideration of Tentative Order No. R9-2008-0138
2. Tentative Order No. R9-2008-0138 and Attachment A. Application/Report of Waste Discharge Package
3. Order No. R9-2003-0111
4. Negative Declaration Resolution No. R9-2003-0167

SIGNIFICANT CHANGES:

1. Order No. R9-2003-0111 requires monthly monitoring of 33 chemical constituents and quarterly monitoring of 5 to 39 additional constituents. Tentative Order No. R9-2008-0138 reduces the analytical requirements to a one time assessment of 5 indicator parameters to verify eligibility, and monthly assessment of site specific constituents of concern (VOCs) to verify that the treatment system is functioning as designed.

2. The discharge specifications for constituents other than VOCs, if monitored, were revised to require that the concentration of a constituent in effluent shall not exceed the average concentration in the influent by more than one standard deviation.
3. Requirements to consult with the affected groundwater management entity, affected public water systems, the State Department of Health Services, and owners of private wells located within 1000 feet of the discharge location were eliminated consistent with Tentative Order No. R9-2003-0081.
4. Electronic reporting requirements were added.
5. The order was rewritten as a new order for clarity and to update language of certain Findings and Standard Provisions.

COMPLIANCE
RECORD

Two notices of violations were issued for a total of 31 violations related to VOC pollutants under Order No. R9-2003-0111. These are related to a surface water discharge of polluted water at one site, and multiple reporting violations at another site. In addition, there were hundreds of violations reported by dischargers related to concentrations of naturally occurring constituents exceeding discharge specifications that did not result in formal enforcement action by the Regional Board.

RECOMMENDATION:

Regional Board staff recommends adoption of tentative Order No. R9-2008-0138 with errata.

SUPPORTING DOCUMENT NO. 1

Public Notification for Consideration of
Tentative Order No. R9-2008-0138

SUPPORTING DOCUMENT NO. 2

Tentative Order No. R9-2008-0138 and
Attachment A. Application/Report of Waste
Discharge Package

(Changes from the version submitted for
public comment are underlined)

SUPPORTING DOCUMENT NO. 3

Order No. R9-2003-0111

SUPPORTING DOCUMENT NO. 4

Negative Declaration Resolution
No. R9-2003-0167