

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 8-9, 2016
Prepared on October 26, 2016

ITEM NUMBER: 9

SUBJECT: Revision of Waste Discharge Requirements, Reissuance of National Pollutant Discharge Elimination System General Permit No. CAG993002 for Discharges of Highly Treated Groundwater, Order No. R3-2016-0035

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KEY INFORMATION

Discharger: Any person, partnership, firm, corporation, association, trust estate, or any other legal entity
Location: Locations throughout the Central Coast Region
Type of Discharge: Groundwater extraction and treatment at active cleanup sites
Waste Types: Petroleum products, chlorinated solvents, perchlorate, or other chemicals
Permitted Flow: Continuous discharges up to 0.2 million gallons per day (MGD) and batch discharges up to 0.25 MGD for up to 30 days
Type of Treatment: Sediment and granular activated carbon filtration systems, which may include bioreactors or ion exchange systems
Disposal Method: Surface water discharge
Solid Wastes: Not applicable
Existing Orders: Waste Discharge Requirements Order No. R3-2011-0222
Reclamation: Not applicable

This Action: Adopt Order No. R3-2016-0035

DISCUSSION

Operators of underground storage tanks, dry cleaners, oil fields, or other industrial facilities may discharge chemicals they use in their processes, such as petroleum compounds, perchlorate, or chlorinated solvents, to groundwater. Remediating these discharges may result in extracting polluted groundwater that cannot be routed to a municipality's sanitary sewer system for treatment plant capacity reasons. Cleanup activities that typically generate polluted groundwater include: excavation dewatering during removal or installation of underground storage tanks or clarifiers; aquifer pumping tests; pilot tests for groundwater remediation; or pumping to prevent contamination from migrating offsite. This permit allows responsible parties to treat groundwater generated by remedial activities and discharge it to waters of the United States.

To be considered for enrollment under this Order, dischargers must highly¹ treat the extracted groundwater at these cleanup sites to remove all toxicity and wastes prior to discharge to surface

¹ Groundwater is considered "highly treated" when the treatment system includes carbon filtration and/or bioreactors, and meets the effluent limitations set forth in the permit.

waters. Currently, the five enrollees² in this general NPDES permit treat the extracted groundwater using sediment filters in series with granular activated carbon and/or other treatments, such as resins that can remove perchlorate. The discharger, site location, and type of waste being remediated are shown on the table below:

Responsible Party	Cleanup Site/ Link to GeoTracker Case	Groundwater is treated to remove:
Shell Exploration & Production, Inc.	Former Shell Hercules Gas Plant, Santa Barbara County/ http://geotracker.waterboards.ca.gov/profile_report?global_id=SL203331271	Petroleum wastes and polychlorinated biphenols
Hart Family Trust	Speedee Oil Change (former Chevron Service Station) 1488 Freedom Boulevard, Watsonville, Santa Cruz County/ http://geotracker.waterboards.ca.gov/profile_report?global_id=T0608700043	Petroleum wastes
Whittaker Corporation	Former Whittaker Ordnance, 2751 San Juan Road, Hollister, San Benito County/ http://geotracker.waterboards.ca.gov/profile_report?global_id=SL203161254	Perchlorate and chlorinated solvents
Arcadis, Inc.	Former Watkins Johnson Superfund Site, 440 Kings Village Drive, Scotts Valley, Santa Cruz County/ http://geotracker.waterboards.ca.gov/profile_report?global_id=T0608591625	Chlorinated solvents
Scott's Valley Phase II	Scott's Valley Dry Cleaners, 272 Mount Herman Road, Scotts Valley, Santa Cruz County/ http://geotracker.waterboards.ca.gov/profile_report?global_id=SLT3S5621370	Chlorinated solvents

The Central Coast Water Board first permitted discharges of highly treated groundwater to surface waters in 1996 and has modified and re-issued the NPDES permit about every five years since then. The State Water Resources Control Board (State Water Board) has indicated that it will develop statewide general NPDES permit for treated groundwater discharges to surface waters and other orders³ to govern extracted groundwater recycling. However, in the meantime, Central Coast Water Board staff proposes to reissue this general permit now, as this will allow dischargers to continue to perform groundwater cleanup in the Central Coast region.

Anticipating that a statewide general permit would be comprehensive, Central Coast Water Board staff has not substantively revised this proposed new order from the previous order the Board adopted in 2011 (R3-2011-0222). However, Central Coast Water Board staff did update the following:

1. Reformatted the permit to be consistent with the statewide NPDES permit template.
2. Included the compound-specific/priority pollutant table, formerly included as an attachment, within the permit itself, as Table 4.
3. Required the Discharger to submit Monterey Bay National Marine Sanctuary (Sanctuary) authorization as part of its application if the discharge is proposed to enter Sanctuary boundaries (Attachment C).
4. Included the Central Coast Water Board's Standard Provisions updated in 2013 (Attachment D).

² In December 2011 when the Central Coast Water Board adopted R3-2011-0222, there were nine enrollees.

³ Such proposed State Water Board Order(s) would likely supersede the Central Coast Water Board's general permit. The Central Coast Water Board would rescind its' permit to avoid duplicate regulation.

5. Included test method references and species information relevant to the acute and chronic toxicity testing requirements section in the Monitoring and Reporting Program (Attachment E).

Draft Order No. R3-2016-0035 is included as Attachment 1.

PUBLIC COMMENTS

On September 23, 2016, the Central Coast Water Board notified Dischargers and other interested parties of the availability of the draft permit for review. The draft permit was also posted on the Central Coast Water Board's tentative order page website on September 23, 2016. The public notice was published in the following newspapers: *The Monterey Herald*, *The Santa Cruz Sentinel*, *The San Luis Obispo Tribune*, *The Morgan Hill Times*, and *Santa Barbara News-Press*.

The Central Coast Water Board received an email comment from the Monterey Bay National Marine Sanctuary (Sanctuary) on October 20, 2016. The sanctuary had two concerns: first, Sanctuary staff observed that although there are no current or proposed discharges into the Sanctuary, a 2015 memorandum of agreement⁴ requires any entity proposing to discharge highly treated groundwater into the Sanctuary to get the Sanctuary's authorization before Central Coast Water Board staff can enroll the discharger in this general permit. On Attachment C, Notice of Intent form, Verification Section VII, Central Coast Water Board staff added a note clarifying that the discharger must submit the Sanctuary's authorization letter as part of its application.

Secondly, Sanctuary staff asked if this permit could be applied to a broader range of discharges, such as the reverse osmosis reject water discharged by the Cambria Community Service District (CCSD) to raise water levels in the San Simeon Creek Lagoon.⁵ Central Coast Water Board staff has determined that CCSD's discharges are better regulated under the General Permit for Discharges with Low Threat to Water Quality (Order No. R3-2011-0223) because the existing discharge to surface water does not require treatment at all. By contrast, the discharges regulated under this permit require extensive treatment prior to discharge to remove toxic constituents. If there is a need to use highly treated groundwater to maintain surface water levels in the future, the Central Coast Water Board could consider re-opening this permit to include these types of discharges if there is not another applicable permit in place.

RECOMMENDATION

Adopt Order No. R3-2016-0035, as proposed.

ATTACHMENTS

1. Proposed Order No. R3-2016-0035, including the following attachments:
 - Attachment A – Definitions
 - Attachment B – Notice of Intent

⁴ The memorandum of agreement was signed by the Sanctuary, USEPA, the California Coastal Commission, the State Water Board, San Francisco Bay Water Board, Central Coast Water Board, and the Association of Monterey Bay Area Governments.

⁵ For reference, the Cambria CSD is extracting a combination of secondary-treated municipal wastewater and natural groundwater from its percolation ponds, performing advanced water treatment, and injecting highly treated (i.e. disinfected) groundwater into the San Simeon Groundwater Basin for groundwater recharge/indirect potable reuse. The Cambria CSD also discharges water from its advanced water treatment system into San Simeon Creek to increase water levels in the lagoon and potentially decrease seawater intrusion.

Attachment C – Notice of Termination
Attachment D – Standard Provisions
Attachment E – Monitoring and Reporting Program
Attachment F – Fact Sheet

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