

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF MARCH 20-21, 2008
Prepared February 13, 2008

ITEM NUMBER: 7

SUBJECT: Rescind Individual NPDES Permit No. CA0049077 and Enroll under General NPDES Permit No. CAG993002 for Discharges of Highly Treated Groundwater

KEY INFORMATION

Location: 440 Kings Village Road, Scotts Valley, Santa Cruz County
Discharge Type: Treated groundwater
Current Flow Rate: 57,000 gallons per day average
Treatment: Granular activated carbon in series
Disposal: Bean Creek
Existing Order: NPDES Order No. R3-2002-0002 (NPDES Permit No. CA0049077)
This Action: Rescission of Individual NPDES Order No. R3-2002-0002 and Enrollment Under the General NPDES Permit Order No. R3-2006-0067

SUMMARY

Staff recommends that the Central Coast Water Board rescind the current individual National Pollutant Discharge Elimination System (NPDES) Permit Order R3-2002-0002 (Individual Permit), Attachment 1, for the treated groundwater discharge and authorize the facility's enrollment in the General NPDES Permit for Discharges of Highly Treated Groundwater to Surface Waters Order No. R3-2006-0067 (General Permit).

DISCUSSION

On March 8, 2007, Arcadis U.S., Inc. (Arcadis) submitted a Notice of Intent for the General Permit to enroll a discharge of treated groundwater from the former Watkins-Johnson Company (WJC) facility to Bean Creek, located north of the facility property boundary.

Site Background

The former WJC facility is located at 440 Kings Village Road, Scotts Valley, California (Site). In 1963, WJC began manufacturing industrial furnaces and electronic parts. Historical industrial processes have included metal machining, degreasing operations, metal plating, glass cleaning, glass etching, welding, soldering, painting, and photo-lab activities. WJC disposed solvents, including trichloroethene, into the septic leach-field drainage system at the Site. The waste disposal impacted soil and groundwater in both a perched zone and an underlying regional groundwater aquifer. In the 1980's, the Central Coast Water Board initiated regulatory oversight for the investigation and cleanup for the Site. When the Site was placed on the National Priority List in 1987, the USEPA became the agency overseeing site cleanup. Subsequently, the Central Coast Water Board only regulates the Site's discharge of treated groundwater to surface waters. In July 1999, Arcadis assumed liability for the chlorinated solvent waste cleanup and treated groundwater discharge. Arcadis is also the Site's environmental consultant and performs the Site monitoring and

cleanup efforts. The facility has changed ownership and operations several times. Currently, AVIZA Technology (Aviza), which specializes in the semiconductor industry, is the owner of the facility.

Treatment System and NPDES Permit

In 1986, WJC, constructed and began operation of the groundwater extraction and treatment system. The treatment system consists of a combination of groundwater extraction, treatment, and discharge facilities. Two 20,000-pound carbon vessels remove contaminants from the extracted water, and then the treated water is stored in a 10,000-gallon storage tank. Aviza uses the treated water from this storage tank for its manufacturing processes. Any treated groundwater that Aviza does not utilize, Arcadis discharges to Bean Creek, a tributary of the San Lorenzo River. The average discharge flow rate to Bean Creek is about 40 gallons per minute.

Most recently, Arcadis discharged treated groundwater under the Individual Permit. The treatment system has successfully treated pollutants found in the untreated groundwater prior to discharging to surface waters and Arcadis has complied with all the permit requirements. Because the Individual Permit was due to expire on March 22, 2007, the Central Coast Water Board staff administratively extended the existing permit until Arcadis could be enrolled under the General Permit. The General Permit contains comparable requirements to the Individual Permit. The General Permit requires routine sampling of the treatment system's process stream, flow rate measurements, and collection of physical parameters (pH, temperature, dissolved oxygen, and turbidity). In addition, the General Permit requires monthly sampling of the treatment system for solvent constituents. Treatment system redundancy, routine inspection, maintenance, and confirmation sampling ensure the discharge will pose no significant threat to water quality.

If the Central Coast Water Board rescinds the Individual Permit and authorizes Arcadis' enrollment in the General Permit at the March 21, 2008 meeting, then the Executive Officer will send a letter to Arcadis notifying them of authorization to discharge treated groundwater under the General Permit. The Executive Officer will issue the Site-Specific Monitoring and Reporting Program No. R3-2006-0067 along with that letter.

COMMENTS AND RESPONSES

On January 9, 2008, staff notified all known interested parties of its recommendation to rescind Arcadis' individual NPDES permit and enroll Arcadis' discharge in the General Permit. Staff received no public comments.

RECOMMENDATION

Rescind Individual Permit Order No. R3-2002-0002 and concur with Executive Officer's enrolling Arcadis under General Permit Order No. R3-2006-0067, with Site-Specific Monitoring and Reporting Program No. R3-2006-0067.

ATTACHMENTS

1. NPDES Order No. R3-2002-0002
2. Draft Site-Specific Monitoring and Reporting Program No. R3-2006-0067