



California Regional Water Quality Control Board Los Angeles Region



Linda S. Adams
*Acting Secretary for
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Edmund G. Brown Jr.
Governor

June 30, 2011

Ms. Susan B. Mulligan, General Manager
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360-6800

Dear Ms. Mulligan:

APPROVAL TO MONITOR AND COMPLY WITH THE EFFLUENT LIMITATIONS FOR SPECIFIC RADIOACTIVE CONSTITUENTS - CALLEGUAS MUNICIPAL WATER DISTRICT, REGIONAL SALINITY MANAGEMENT PIPELINE, OXNARD (NPDES NO. CA0064521, CI-9404)

The Los Angeles Regional Water Quality Control Board (Regional Water Board) adopted Order No. R4-2008-0014 on April 3, 2008, which served as Waste Discharge Requirements and National Pollutant Discharge System (NPDES) permit (NPDES No. CA0064521) for Calleguas Municipal Water District (CMWD) for the Regional Salinity Management Pipeline (RSMP). The adopted Order included effluent limitations (Item IV.A.1a) and monitoring requirements (Attachment E. - Item IV.A.1) for radioactivity. The requirement in Item IV.A.1a states that "Radioactivity: Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, §30253 of the California Code of Regulations. Reference to §30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect".

In your letter dated June 1, 2011, you proposed to monitor and comply with the effluent limitations for the specific radioactive constituents contained in Title 22 of the California Code of Regulations for which the maximum contaminant levels (MCLs) are specified. The proposed radioactive constituents are listed in the Table 1 below.

Table 1 – Proposed Radioactivity Compliance Limits

Constituents	Units	Maximum Daily Limits
Gross Alpha	pCi/L ¹	15
Gross Beta	pCi/L ¹	50
Combined Radium-226 & Radium-228	pCi/L ¹	5.0
Tritium	pCi/L ¹	20,000
Strontium-90	pCi/L ¹	8.0
Uranium	pCi/L ¹	20

¹ pCi/L – picocuries = curies X 10⁻¹²

You also proposed procedures for monitoring and analysis for gross alpha and gross beta. You stated that if the results of the analyses for gross alpha and/or gross beta exceed the limits in Table 1, the combined radium-226 and radium-228 will be analyzed. Further, if the results of the combined radium concentrations are higher than the limits in Table 1, then tritium, strontium-90 and uranium analyses will be conducted. This approach is consistent with the NPDES permits for other Ocean discharges.

Based on our review of your request, the Regional Water Board staff concurs with your proposals to monitor and comply with the effluent limitations for the specific radioactive constituents. These radioactive constituents and the limitations are consistent with Table 3-9 (The Maximum Contaminant Levels: Radioactivity specified in Table 4 of Section 64443 of Title 22 of the California Code of Regulations as of 12-22-88), page 3-16 of the Basin Plan. Therefore, CMWD shall maintain compliance with the following effluent limitations at Discharge Point 001 for the following radioactive constituents listed in Table 2 and compliance measured at Monitoring Location EFF-001 described in Table 3:

Table 2 – Effluent Limitations for Radioactive Constituents

Constituents	Units	Maximum Daily
Gross Alpha	pCi/L ¹	15
Gross Beta	pCi/L ¹	50
Combined Radium-226 & Radium-228	pCi/L ¹	5.0
Tritium	pCi/L ¹	20,000
Strontium-90	pCi/L ¹	8.0
Uranium	pCi/L ¹	20

Table 3 – Effluent Monitoring for Radioactive Constituents

Constituents	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Methods
Gross Alpha	pCi/L ¹	Grab	Semiannually	²
Gross Beta	pCi/L ¹	Grab	Semiannually	²
Combined Radium-226 & Radium-228	pCi/L ¹	Grab	Semiannually	²
Tritium	pCi/L ¹	Grab	Semiannually	²
Strontium-90	pCi/L ¹	Grab	Semiannually	²
Uranium	pCi/L ¹	Grab	Semiannually	²

¹ pCi/L – picocuries = curies X 10⁻¹²

² Analyze these radiochemicals by the following USEPA testing methods: method 900.0 for gross alpha and gross beta, method 903.0 or 903.1 for radium-226, method 904.0 for radium-228, method 906.0 for tritium, method 905.0 for strontium-90, and method 908.0 for uranium.

Analysis for combined Radium-226 & 228 shall be conducted only if gross alpha results for the same sample exceed 15 pCi/L or beta is greater than 50 pCi/L. If Radium-226 & 228 exceeds the stipulated

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criteria, analyze for Tritium, Strontium-90 and Uranium. This procedure is consistent with the recently adopted NPDES permits for discharges to the Ocean.

The monitoring reports for the radioactive chemicals shall be submitted to this Regional Water Board in accordance with Attachment E - Monitoring and Reporting Program of Order No. R4-2008-0014. All other provisions in Attachment E of Order No. R4-2008-0014 are in full force and effect.

If you have any questions, please contact Rosario Aston at (213) 576-6653.

Sincerely,



Samuel Unger, P.E.
Executive Officer

cc: Via E-mail Only

Environmental Protection Agency, Region 9, Permits Branch (WTR-5)
U.S. Army Corps of Engineers
NOAA, National Marine Fisheries Service
Department of Interior, U.S. Fish and Wildlife Service
NPDES Wastewater Unit, State Water Resources Control Board, Division of Water Quality
Mr. William Paznokas, Department of Fish and Game, Region 5
California Department of Public Health
California Coastal Commission, South Coast Region
Water Replenishment District of Southern California
Los Angeles County, Department of Public Works, Waste Management Division
Los Angeles County, Department of Health Services
Mr. Mark Pumford, City of Oxnard
Ms. Liz Crosson, Santa Monica BayKeeper
Dr. Mark Gold, Heal the Bay
Mr. Daniel Cooper, Lawyers for Clean Water
Mr. David Beckman, Natural Resources Defense Council
Ms. Kristine McCaffrey, Calleguas Municipal Water District
Mr. Mati Waiya, Ventura CoastKeeper
Mr. Tony Goff, Calleguas Municipal Water District
Mr. Jae Kim, Tetra Tech

California Environmental Protection Agency