



California Regional Water Quality Control Board San Diego Region

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December 10, 2009

In reply refer to:
704670: bkelley
WDID: 9 000017S6

Mr. Thomas R. Rosales
General Manager
South Orange County Wastewater Authority
34156 Del Obispo Street
Dana Point, CA 92629

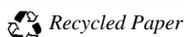
Dear Mr. Rosales:

SUBJECT: REQUEST FOR PERMIT MODIFICATION BY SOUTH ORANGE COUNTY WASTEWATER AUTHORITY FOR ORDER NO. R9-2006-0054, NPDES NO. CA0107417, DISCHARGE FROM THE SAN JUAN CREEK OCEAN OUTFALL TO THE PACIFIC OCEAN

This is in response to your letter dated October 29, 2009, requesting modification of Order No. R9-2006-0054, NPDES No. CA0107417, for the South Orange County Wastewater Authority (SOCWA) discharge to the Pacific Ocean via the San Juan Creek Ocean Outfall (the Order). Specifically, SOCWA is requesting that the NPDES permit be amended to change the point of compliance of the technology based effluent limitations (TBELs) for the South Coast Water District (a member agency of SOCWA) Groundwater Recovery Facility (GRF) from its current location at the GRF to the San Juan Creek Ocean Outfall combined effluent monitoring station M-001. After a thorough review of the information provided in your October 29, 2009 request for modification, the San Diego Regional Water Quality Control Board (Regional Water Board) has determined that moving the compliance point for TBELs applicable to the GRF would not be in conformance with state and federal regulations. Applicable federal NPDES federal regulations in 40 CFR 122.62 - which the Regional Water Board is legally bound to follow - allow modification of NPDES permits in only very limited circumstances, none of which is applicable here. Accordingly your NPDES permit application for amendment is denied.

Your October 29, 2009, letter asserts that the change in monitoring point imposed in the 2006 NPDES Permit was based on the Regional Water Board's mistaken application of technical standards, mistaken interpretations of law, and a lack of new information as justification for new permit conditions. SOCWA's basis for these assertions includes the following points:

California Environmental Protection Agency



- The 2006 NPDES Permit erroneously applies the Ocean Plan standards to the GRF
- Changes in the 2006 NPDES permit resulted from a misinterpretation of the United States Environmental Protection Agency's (USEPA's) position with respect to Publicly Owned Treatment Works (POTWs);
- There is no discharge to waters of the United States at the GRF;
- There was no information at the time of the 2006 NPDES permit issuance regarding the operational aspects of the GRF and the impacts on the Latham Plant;
- Other NPDES Permits allow brine discharge to be blended at outfalls; and
- There was no need to establish discharge criteria to establish a monitoring program for the GRF.

Regional Water Board responses to these points are shown below. The Regional Water Board has also prepared the attached memorandum entitled, "Application of Technology-Based Effluent Limitations for Discharges to the Pacific Ocean in the San Diego Region" dated December 10, 2009 (Ocean Discharge Memo), which contains additional supporting information.

1) The 2006 NPDES Permit erroneously applies the Ocean Plan standards to the GRF

SOCWA asserts that the GRF is not an industrial discharger so the Ocean Plan standards do not apply. As discussed in the attached Ocean Discharge Memo, the Regional Water Board has historically for many years considered, brine discharges as industrial discharges for purposes of applying state and federal water quality regulations, including the application of Ocean Plan Table A TBELs. This is also consistent with the State Water Resources Control Board's (State Water Board) interpretation of the application of the Table A TBEL's. The Ocean Plan Table A TBELs are directly applicable to brine discharges such as the discharge from the GRF and are correctly and appropriately applied in the Order.

2) Changes in the 2006 NPDES permit resulted from a misinterpretation of EPA's position with respect to POTWs

SOCWA asserts that the USEPA December 8, 2004, letter (USEPA 2004 Letter) is discussing secondary treatment TBELs with respect to POTWs. While this is correct, the application of TBELs, regardless of the category of discharge or facility, is the same. For industrial facilities, TBELs include national effluent limitations guidelines (ELGs) established by USEPA as well as any established by the State Water Board such as the Ocean Plan Table A effluent limitations. For publicly owned treatment works (POTWs), TBELs are derived from national secondary treatment standards. The last sentence of

the USEPA 2004 Letter states, "Technology-based requirements are to be met with treatment technology, not non-treatment such as flow augmentation (40CFR125.3(f)) or dilution that could occur as various effluents mix in the outfall." Code of Federal Regulations (CFR) Section 125.3(f) is applicable to all technology-based treatment requirements, not just the secondary treatment TBELs.

3) *There is no discharge to waters of the United States at the GRF*

SOCWA asserts that the discharge from the GRF is to the Chiquita Canyon land outfall and is not a direct point source discharge to a water of the United States until the discharge co-mingles with other discharges to the San Juan Creek Ocean Outfall and the combined discharges enters the Pacific Ocean through the diffuser ports of the ocean outfall. SOCWA also asserts that the GRF facility does not add any "pollutant" or combination of pollutants to "waters of the United States" from a "point source".

The NPDES permit for SOCWA San Juan Creek Ocean Outfall does regulate the point source discharge from the San Juan Creek Outfall to the Pacific Ocean. Water quality-based effluent limitations in the Order apply to the combined discharge and take into account mixing of the total ocean outfall discharge with ocean water through incorporation of an established dilution factor. The discharge from the ocean outfall is comprised of several separate, individually and independently operated and maintained treatment facilities, each designed to treat a certain type of waste stream. Accordingly, TBELs must be applied to each treatment facility prior to any mixing with other effluents or dilution with receiving water in accordance with applicable federal NPDES regulations at 40 CFR 125.3 (f). By letter dated December 8, 2004 (included as Attachment 3 of SOCWA's submittal) USEPA directly addressed this issue and concurred with the Regional Water Board's decision to establish compliance with secondary treatment TBELs at each sewage treatment plant discharging to SOCWA's Aliso Creek Ocean Outfall. The USEPA 2004 Letter goes on to further specify that the Aliso Creek Ocean Outfall structure does not convey waste to a treatment plant and is not included in the definition of a treatment plant. This same interpretation would apply to any facility discharging to the land outfall or ocean outfall structures since those structures do not provide any further treatment of the waste streams.

TBELs are developed with consideration of available treatment technologies and establish uniform standards defining the minimum level of treatment that can be consistently achieved without relying on the assimilative capacity of the receiving waters. Furthermore, the USEPA is in the process of developing Effluent Limitation Guidelines (ELGs) for drinking water treatment facilities including potentially desalination concentrates. USEPA considers the point source discharge of desalination concentrates to be adding a 'pollutant' or combination of pollutants to 'waters of the United States' and thereby subject to regulation under NPDES requirement, including any applicable TBELs. .

4) There was no information at the time of the 2006 NPDES permit issuance regarding the operational aspects of the GRF and the impacts on the Latham Plant

The Regional Water Board understands that SOCWA began full operation of the GRF after the adoption of the 2006 NPDES Permit. Since beginning full operation, SOCWA has found that the source ground water is higher in solids than previously expected which results in violations of the effluent limitations for total suspended solids (TSS), settleable solids (SS), and turbidity. SOCWA initially elected to discharge the GRF brine to SOCWA's JB Latham Wastewater Treatment Plant as a temporary measure to avoid Regional Water Board enforcement action for violation of these effluent limitations. SOCWA does not want to continue discharging to the Latham Treatment Plant because the facility is being upgraded to provide a sustainable source of recycled water and the high salinity in the brine could adversely affect the quality of recycled water.

The Regional Water Board established the effluent limitations and compliance points in the Order in accordance with the California Ocean Plan and other applicable federal and state laws and regulations. It is the responsibility of the discharger to properly design, build, operate and maintain any treatment facilities used to comply with the water quality-based and technology-based effluent limitations contained in the NPDES permit. Under California Water Code section 13360, the Regional Water Board may not "specify the design, location, type of construction, or particular manner" of discharger compliance with waste discharge requirements or other orders, and dischargers can comply "in any lawful manner". This restriction is a shield against unwarranted interference with the ingenuity of the party subject to waste discharge requirements who can elect between available strategies to comply with the standard. Accordingly the Order does not prevent SOCWA from using any available appropriate treatment technology or other method to comply with the TBELs. Diverting the GRF brine discharge to the Latham Treatment Plant is by no means the only method of compliance available to SOCWA. Employment of additional treatment facilities to provide additional filtration and solids removal at the GRF to produce a brine discharge in conformance with the Order's TBEL's is another alternative viable means of ensuring compliance.

The Regional Water Board understands SOCWA's difficulties in meeting the TBELs established for the GRF facility caused by an unanticipated change in the quality of the source water. If SOCWA develops an appropriate plan to meet the TBELs the Regional Water Board may consider issuance of a Time Schedule Order which could provide a shield against further Regional Water Board imposition of administrative civil liability penalties and allow the discharge of brine to the ocean outfall to continue while a solution is being implemented.

5) Other NPDES Permits allow brine discharge to be blended at outfalls

It is true that TBELs are incorrectly applied at certain facilities in the San Diego Region that discharge to the Pacific Ocean, as documented in the Ocean Discharge Memo. In those few exceptions where the TBELs are inconsistent with state and federal regulations, changes to the NPDES permits to correctly implement the TBELs at each facility will be made during the next permit reissuance process.

6) There was no need to establish discharge criteria to establish a monitoring program for the GRF

SOCWA correctly asserts that at the Regional Board hearing of May 13, 2009, Mr. John Robertus, former Regional Water Board Executive Officer, indicated that one of the reasons why the monitoring point had to be moved was because of the need to obtain information on the brine discharge. SOCWA argues that collecting information at any given point is not connected to having a monitoring point for the purposes of discharge requirements.

The Regional Water Board may require discharge monitoring for many reasons beyond the need to document compliance with effluent limitations. In this case the Regional Water Board established TBELs for the brine discharge with the point of compliance at the GRF. Accordingly, the Order correctly requires that the compliance monitoring for the brine discharge be performed upstream of any co-mingling with other waste discharges.

In closing the Regional Water Board appreciates the fact that the GRF is an important part of a long-term strategy by SOCWA and its member agencies to reduce dependence on imported water in light of the protracted drought on both the Colorado River and in the Sierras, and increased regulation of water transfers from the Bay-Delta.

It is important that projects of this type be implemented in a manner that ensures full compliance with applicable state and federal laws and regulations.

The attached Ocean Discharge Memo documents the legal requirements and basis for establishing the TBELs in the Order. As previously discussed the GRF brine discharge is subject to the Ocean Plan Table A TBELs prior to any mixing with other effluents or dilution with receiving water. Thus, the application of TBELs to the GRF and the establishment of the compliance point at the facility prior to mixing with any other waste streams are correctly implemented in the Order. There is no basis to amend the Order as requested by SOCWA and the Regional Water Board will take no further action on the SOCWA's October 29, 2009 request for permit modification.

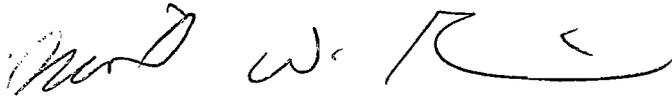
Mr. Thomas R. Rosales
South Orange County Wastewater Authority

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December 10, 2009

In the subject line of any response, please include the requested **"In reply refer to:"** information located in the heading of this letter. For questions pertaining to the subject matter, please contact Brian Kelley at (858) 467-4254 or bkelly@waterboards.ca.gov.

Sincerely,



David W. Gibson
Executive Officer
San Diego Regional Water Quality Control Board

Enclosure

cc via email: (w/encl.)

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Ken Schiff, Southern California Coastal Water Research Program
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Brian Kelley, San Diego Regional Water Board

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| WDID | 9 000017S6 |
| Reg. Measure No. | 309059 |
| Party ID | 41385 |