



August 18, 2014

VIA EMAIL (commentletters@waterboards.ca.gov)

Jeanine Townsend Clerk to the Board State Water Resources Control Board 1001 I Street, 24th Floor Sacramento, CA 95814

Re: Comment letter – Desalination Amendments

Dear Ms. Townsend:

South Coast Water District ("SCWD") and South Orange County Wastewater Authority ("SOCWA") hereby provide the following comments on the draft Ocean Plan Amendments (issued on July 3, 2014). As a threshold matter, we are concerned that with respect to the regulation of desalination facilities, the focus of the Draft Amendments is on ocean desalination facilities and not brackish groundwater facilities. SCWD owns and operates a groundwater recovery facility ("GRF") which extracts and treats brackish groundwater for potable use, and we have previously been impacted by the San Diego Regional Water Quality Control Board's application of Ocean Plan Table A standards to the facility. As we have repeatedly indicated, we believe that the State Water Resources Control Board ("State Board") must amend the Ocean Plan to exempt such facilities from the Ocean Plan Table A Standards at the facility in circumstances where the brine discharge can be co-disposed with wastewater at an outfall. In such case, the application of Ocean Plan standards should occur at the outfall. While the Amendments recognize comingling of brine effluent with treated wastewater as a preferred disposal method, it does not address the issue of compliance point (i.e., at the outfall rather than at the facility).

By way of background, with the support of Metropolitan Water District of Southern California ("MWD"), SCWD spent \$5.8 million to construct its GRF in Dana Point, California which currently produces approximately 10% of SCWD's potable water. SCWD is in the process of expanding the GRF and by the end of 2014, it anticipates that the GRF will produce approximately 20% of SCWD's potable water [not sure they will be going up to 20% as water rights have not yet been obtained from SJBA to allow for an expansion – may want to project 2015 or 2016 at this point. The GRF treats low quality/brackish groundwater to produce drinking water. The GRF was designed to allow for compliance with effluent limitations to be determined at the outfall as was allowed by the NPDES permit at the time. Prior to the



commencement of operations at the GRF, despite no change in the governing regulations, the San Diego Regional Water Quality Control Board ("SDRWQCB") amended the NPDES permit to require compliance with Ocean Plan Table A standards at the GRF.

After the initial startup period, SCWD determined that the GRF's brine discharge could not meet the Ocean Plan Table A standards due to the high levels of naturally occurring iron and manganese salts in the groundwater. SDRWQCB levied \$204,000 in mandatory minimum penalties ("MMPs") against SCWD for these exceedances despite SCWD's demonstration that the brine discharge did not impact the SJCOO.¹

SCWD and SOCWA (the NPDES permit holder) sought a permit modification from SDRWQCB and urged it to exercise its best professional judgment ("BPJ") to allow for compliance to be determined at the outfall rather than the GRF in light of the benefits of the GRF and the fact the brine effluent did not impact water quality or beneficial use at the outfall. MWD supported this request, as did a number of other water districts and municipalities. SDRWQCB denied the request, and the State Board dismissed SCWD's petition for review of the matter on March 4, 2011. However, the State Board indicated that the brine discharge issue would be addressed through the Ocean Plan Amendments (see Attachment 1).

When SDRWQCB was presented with the same matter by the City of Oceanside, it recognized the importance of this issue and requested clarification on the issue of brine discharge from the State Board noting that:

"... the real issue centers on how waste byproducts from desalination facilities are classified rather than the NPDES regulations governing the point of compliance for TBELs in NPDES permits. Waste brine discharges from desalination processes are currently regulated through a default classification as an industrial waste under both the Clean Water Act and the California Ocean Plan because they do not provide specific regulatory distinction for waste byproducts from desalination facilities. While TBELs are indeed appropriate for pollutants associated with industrial wastes, the constituents of concern in brine waste are primarily mineral salts and turbidity. These constituents present a far less significant threat to the ocean than most industrial wastes that are regulated through TBELs... An appropriate regulatory distinction for brine waste could be provided by the State Water Board through an Ocean Plan amendment establishing a new separate classification for waste byproducts from desalination facilities." (Memorandum dated February 3, 2011 from David W. Gibson to Tom Howard (see Attachment 2)).

SCWD initiated discussion with the State Board on this issue and requested that the State Board provide guidance clarifying that SCWD may utilize the compliance point at the outfall for the

¹ SCWD has participated extensively in Ocean Plan Amendment process and SCWD has previously submitted technical documents supporting that the GRF's discharge does not cause or contribute to any exceedance of water quality standards when commingled with wastewater discharged at the outfall. (See SCWD letter to Dominic Gregorio dated December 6, 2011).

GRF brine discharge. On March 8, 2012, the State Board provided this guidance to the Regional Board and deemed the compliance point at the outfall acceptable as an interim solution for SWCD pending completion of the Ocean Plan Amendments (memorandum from Jonathan Bishop to David Gibson dated March 8, 2012 (see Attachment 3)). The State Board stated that it

"recognizes that brine waste discharges have significantly different impacts to ocean water quality than other industrial wastes, and the State Water Board is very interested in exploring alternatives that promote the availability of new water supplies. Consequently, this Ocean Plan amendment has been identified as a high priority by the State Water Board" (Id.)

The District also sought legislative relief and successfully advocated for the passage of SB 607 which requires the State Board "to either amend the California Ocean Plan, or adopt separate standards, to address water quality objectives and effluent limitations that are specifically appropriate to brackish groundwater treatment system facilities that produce municipal water supplies for local use" by January 1, 2013.

As discussed above, while the Draft Amendments appear to favor commingling brine discharge with treated wastewater (see page 34, Sec. L.2.d.(2)(a)) as a preferred technology for brine disposal, this language does not appear to apply to brackish groundwater treatment facilities. Sec. L.1.a. states that Chapter III.L "applies desalination facilities* using seawater." Moreover, the Draft Amendments do not appear to address the compliance point issue we raised at all. Finally, we believe there is a significant difference between dedicated brine lines and commingled brine/wastewater discharge, and the two should be regulated differently (currently, there does not appear to be a distinction). A commingled brine/wastewater discharge has much less potential impacts and may actually improve the salinity of the wastewater to lessen the impact of the wastewater on marine and benthic environments.

As such, SCWD suggests the following changes to the Draft Amendments to allow the comingling of brine discharge from a desalination facility (either ocean or brackish groundwater) so long as all water quality objectives are met at the edge of the brine mixing zone.

- 1. Modify Chapter III.L.1.a. as follows:
 - "a. Chapter III.L applies to desalination facilities* using seawater,* and where specifically noted, desalination facilities using brackish groundwater*"
- 2. Modify Chapter III.L.2.d.(2)(a) as follows:

"The preferred technology for minimizing mortality of marine life resulting from brine* disposal is to commingle brine* with wastewater (e.g., agricultural, sewage, industrial, powerplant cooling water, etc.) that would otherwise be discharged to the ocean, unless the wastewater is of suitable quality and quantity to support domestic or irrigation uses. Brackish groundwater* desalination

facilities may also commingle brine* with wastewater as long as all applicable water quality objectives are met at the edge of the zone of initial dilution*.

We deleted "unless the wastewater is of suitable quality and quantity to support domestic or irrigation uses" for a number a reasons. First, while water reuse and recycling should certainly be encouraged (note that SCWD spent \$2.8 million dollars last year to put in a recycled water system filtration system using RO to improve the quality of recycled water by removing the high TDS that are inherent in the potable water supply that is delivered to the District through the State water systems), many factors play into whether reuse and recycling are feasible, and it should be up to the water agencies to determine whether the water can be reused or recycled. The suitability of the water in and of itself should not preclude a desalination facility from being able to commingle its brine effluent with the wastewater. In any event, if a future recycling project is planned which may reduce the volume of wastewater available for the dilution of brine, a regional water board may condition the permit on the availability of the wastewater pursuant to Section L.2.a.(5)

3. Modify Chapter III.L.2.d.(2)(c) as follows:

"the owner or operator to analyze the brine* disposal technology or combination of brine* disposal technologies that best reduces the effects of the discharge of brine* on marine life due to intake-related entrainment, osmotic stress from elevated salinity,* turbulence that occurs during water conveyance and mixing, and shearing stress at the edge of the brine mixing zone or zone of initial dilution point of discharge."

Modify Chapter III.L.2.d.(2)(d) as follows:

"Brine* disposal technologies other than wastewater dilution and multiport diffusers,* such as flow augmentation,* may be used if an owner or operator can demonstrate to the regional water board that the technology provides a comparable level of protection. The owner or operator must evaluate all of the individual and cumulative effects of the proposed alternative discharge method on marine life mortality, including (where applicable); intake-related entrainment, osmotic stress, turbulence that occurs during water conveyance and mixing, and shearing stress at the edge of the brine mixing zone or zone of initial dilution point of discharge. . . ."

For purposes of commingling brine discharge with wastewater for disposal, the standard water quality objectives, testing and mixing zone analysis appropriate to POTW discharges should apply. Such standards allow for a zone of initial dilution and impacts are assessed outside of this zone of initial dilution.

SOCWA's current NPDES permit states:

"Numerical water quality objectives established in Chapter II, Table B of the California Ocean Plan shall not be exceeded outside of the zone of initial dilution as a result of the discharges from the Facilities." (San Juan Creek Ocean Outfall Order No. R9-2012-0012, NPDES NO. CA0107417, p. 22).

Furthermore, a dilution allowance is provided for the acute toxicity numeric limit that allows compliance at the edge of the zone of initial dilution. (See Ocean Plan at Chapter III.C.4.b.).

This is consistent with the Expert Panel's recommendation that brine discharge be regulated by the mixing zone approach where water quality standards must be met at the mixing zone boundary:

"Because discharges can be designed to result in rapid initial dilution around the discharge, we recommend that they be regulated by a mixing zone approach wherein the <u>water quality regulations are met at the mixing zone boundary</u>. The mixing zone should encompass the near field processes, defined as those influenced hydrodynamically by the discharge itself. These processes typically occur within a few tens of meters from the discharge, therefore we conservatively recommend that the mixing zone extend 100 m from the discharge structure in all directions and over the whole water column." (Management of Brine Discharges to Coastal Waters Recommendations of a Science Advisory Panel, March 2012, Executive Summary at ii-iii) (emphasis added).

"Water quality objectives must be <u>met at the edge of a regulatory mixing zone</u> that extends vertically through the water column up to 100 m from the discharge structure in all directions." (Id at 45) (emphasis added).

To require impact analysis and mitigation of these impacts within the brine mixing zone appears to be inconsistent with the Expert Panel's recommendation and the existing regulatory scheme.

4. Modify Chapter III.L.2.d.(2)(e) as follows:

"Mitigation for the purposes of this section is the replacement of marine life or habitat that is lost due to the construction and operation of a desalination facility* after minimizing marine life mortality through site, design, and technology measures. The owner or operator may choose whether to satisfy a facility's mitigation measures pursuant to chapter III.L.2.e.(3) or, if available, L.2.e.(4). The owner or operator shall fully mitigate for all marine life mortality associated with the desalination facility.* With respect to brine disposal, where wastewater is commingled with brine as a disposal option, so long as the NPDES permit discharge water quality standards are met, compliance at the edge of the zone of initial dilution* shall be presumed to be fully protective of marine life impacts sustained from brine disposal."

For facilities which commingle brine with wastewater as a discharge option, the NPDES permit governing the wastewater discharge should be fully protective of marine life impacts. As such,

so long as the brine does not result in any exceedance of NPDES permit limits, compliance at the edge at the zone of initial dilution should be sufficiently protective of marine life impacts and should not require any further mitigation.

5. Modify Chapter III L.2.d.(2)(e)(1)(b) as follows:

"For operational mortality related to discharges, the report shall estimate the area in which salinity* exceeds 2.0 parts per thousand above natural background salinity* or a facility-specific alternative receiving water limitation (see § L.3) outside of the brine mixing zone* or zone of initial dilution*. The area in excess of the receiving water limitation for salinity* shall be determined by modeling and confirmed with monitoring. The report shall use any acceptable approach for evaluating mortality that occurs due to shearing stress resulting from the facility's discharge, including any incremental increase in mortality resulting from a commingled discharge. The requirement to evaluate shearing impacts shall not apply to commingled brine discharges with wastewater."

As discussed above, analysis of impact should occur outside of the mixing zone or zone of initial dilution.

The requirement to evaluate shearing impacts should not apply to commingled brine/wastewater discharge. Existing POTWs are not required to mitigate for entrainment and shearing losses that might occur from wastewater disposal within the zone of initial dilution. Such losses are expected to be quite low or non-existent for the low pressure wastewater outfall diffusers. Indeed, the Expert Panel recognized that there is no published evidence of mortality due to diffuser jets and that shearing losses from diffusers would likely be low because exposure to damaging turbulence is on the order of seconds. (See Desalination Plant Entrainment Impacts and Mitigation, October 9, 2014 at p.3). The Expert Panel noted that "literature reports of damage to larvae caused by turbulence are generally based on longer exposure times." (See id.). Given the lack of scientific evidence demonstrating the potential for shearing impacts from diffusers, the requirement to evaluate these impacts is unwarranted.

6. Modify Chapter III L.3.d.(4)(a)(1) as follows:

"An owner or operator must perform facility-specific monitoring to demonstrate compliance with the receiving water limitation for salinity,* and evaluate the potential effects of the discharge within the water column, bottom sediments, and the benthic communities. Facility-specific mMonitoring is required until the regional water board determines that a regional monitoring program is adequate to ensure compliance with the receiving water limitation. Receiving water monitoring for salinity shall be conducted at the boundary of the defined brine mixing zone* or zone of initial dilution* and shall be conducted at times when the monitoring locations are most likely affected by the discharge. The monitoring and reporting plan shall be reviewed, and revised if necessary, upon NPDES permit renewal. The regional water board may require additional monitoring at

the desalination facility, however, compliance with water quality objectives is to be determined at the edge of the brine mixing zone* or zone of initial dilution*."

"Facility-specific monitoring" should be clarified, particularly for commingled brine and wastewater facilities. Such monitoring should occur in the receiving waters at stations representative of the area within the waste field where initial dilution is completed, i.e., at the edge of the brine mixing zone or zone of initial dilution.

7. Add definitions of "brackish groundwater" and "zone of initial dilution":

"BRACKISH GROUNDWATER is water from below the ground surface that has more salinity than fresh water but less than sea water. Brackish groundwater may be replenished by recharge systems (using various water sources from runoff, storm flows, returning domestic supplies, treated recycled water, other brackish groundwater sources, etc).

<u>"ZONE OF INITIAL DILUTION</u> is a regularly shaped area (e.g., circular or rectangular) surrounding the discharge structure (e.g., submerged pipe or diffuser line) that encompasses the regions of high (exceeding standards) pollutant concentrations under design conditions.

8. Modify footnote 1 of the Table 2 (formerly Table A) effluent limitations:

"Table 2 effluent limitations apply only to publicly owned treatment works and industrial discharges for which Effluent Limitations Guidelines have not been established pursuant to sections 301, 302, 304, or 306 of the Federal Clean Water Act. Table 2 shall not apply to brine discharges from brackish groundwater treatment facilities that are commingled with treated wastewater prior to disposal to an outfall."

This footnote would further clarify that the compliance point for Table 2 standards for brackish groundwater treatment facilities that commingle brine discharge prior to disposal with treated wastewater is at the outfall, and not at the facility, as discussed above.

Thank you for your attention on this matter. Should you have any questions, please feel free to contact us.

Sincerely,

Andrew Brunhart General Manager

South Coast Water District

S. Surwett

Betty Burnett
General Manager
South Orange County Wo

South Orange County Wastewater Authority

Attachments

cc: Mariela de la Paz Carpio-Obeso (via email)

State Water Resources Control Board



Office of Chief Counsel

Edmund G. Brown Jr. Governor

Charles R. Hoppin, Chairman 1001 I Street • Sacramento, California 95814 • (916) 341-5161 Mailing Address: P.O. Box 100 • Sacramento, California • 95812-0100 Fax (916) 341-5199 • http://www.waterboards.ca.gov

CERTIFIED MAIL AND EMAIL

Patricia J. Chen, Esq. Miles • Chen Law Group, P.C. 9911 Irvine Center Drive, Suite 150 Irvine, CA 92618 pchen@miles-chen.com

Steven L. Hoch, Esq. Brownstein Hyatt Farber Schreck, LLP 2029 Century Park East, Suite 2100 Los Angeles, CA 90067 shoch@bhfs.com

Dear Ms. Chen and Mr. Hoch:

PETITION OF SOUTH COAST WATER DISTRICT AND SOUTH ORANGE COUNTY WASTEWATER AUTHORITY (FAILURE TO ACT TO MODIFY PERMIT), SAN DIEGO WATER BOARD: DISMISSAL **SWRCB/OCC FILE A-2072**

After careful consideration, it is concluded that the petition in this matter fails to raise substantial issues that are appropriate for review by the State Water Resources Control Board (State Water Board) at this time. Accordingly, the petition is dismissed as of this date. (See Cal. Code Regs., tit. 23, § 2052, subd. (a)(1); People v. Barry (1987) 194 Cal. App. 3d 158; Johnson v. State Water Resources Control Board (2004) 123 Cal.App.4th 1107.)

The State Water Board's staff intends to pursue amendments to the Water Quality Control Plan for Ocean Waters in California (Ocean Plan) that would separately address issues associated with desalinization, including brine line discharges. This forum will allow the State Water Board to carefully consider the changes in regulatory approach proposed by the petition and help ensure statewide consistency on this important topic. If you have any questions about this matter, please contact James Herink, Staff Counsel, in the State Water Board's Office of Chief Counsel, at (916) 341-5150.

Sincerely,

Executive Director

cc: See next page

cc: [via U.S. Mail and email]

Mr. Tom R. Rosales General Manager South Orange County Wastewater Authority 34156 Del Obispo Street Dana Point, CA 92629 trosales@SOCWA.com

[via U.S. Mail and email]

Mr. Michael Dunbar General Manager South Coast Water District P.O. Box 30205 Laguna Niguel, CA 92607-0205 mdunbar@SCWD.org

Mr. David W. Gibson [via email only]
Executive Officer
San Diego Regional Water Quality
Control Board
9174 Sky Park Court
San Diego, CA 92124-1331
dgibson@waterboards.ca.gov

Mr. Mike McCann [via email only]
Acting Assistant Executive Officer
San Diego Regional Water Quality
Control Board
9174 Sky Park Court
San Diego, CA 92124-1331
mmccann@waterboards.ca.gov

Mr. David W. Smith, Chief [via email only]
Permits Office
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105
smith.davidw@epa.gov

Mr. David Barker [via email only]
Supervising Water Resources Control Engineer
San Diego Regional Water Quality
Control Board
9174 Sky Park Court
San Diego, CA 92124-1331
dbarker@waterboards.ca.gov

Mr. Brian Kelley [via email only]
Senior Water Resources Control Engineer
San Diego Regional Water Quality
Control Board
9174 Sky Park Court
San Diego, CA 92124-1331
bkelley@waterboards.ca.gov

Catherine George Hagan, Esq. [via email only]
Office of Chief Counsel, State Water Board
c/o San Diego Region, Regional Water Quality
Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340
chagan@waterboards.ca.gov

Jessica M. Newman, Esq. [via email only]
Office of Chief Counsel
State Water Resources Control Board
1001 I Street, 22nd Floor [95814]
P.O. Box 100
Sacramento, CA 95812-0100
jmnewman@waterboards.ca.gov

Interested Persons



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Edmund G. Brown Jr. Governor

TO:

Tom Howard

Executive Director

State Water Resources Control Board

FROM:

David W. Gibson Panal W. (-)

Executive Officer

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

DATE: February 3, 2011

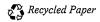
SUBJECT: Regulation of Brine Waste Discharges from Desalination Facilities

On January 12, 2011, the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) adopted Order No. R9-2011-0016 (Order), an NPDES permit for the City of Oceanside's Ocean Outfall discharge. The point established in the Order for compliance with technology-based effluent limitations (TBELs) for a ground water desalination facility brine discharge was a key issue raised by the City of Oceanside as well as other interested persons in the hearing. At the conclusion of the hearing the San Diego Water Board Members adopted the tentative Order recommended by staff, but requested that I communicate to the State Water Board their concern that the NPDES regulations may not provide sufficient flexibility for setting the point of compliance for TBELs in NPDES permits. The Board Members were particularly concerned that the lack of flexibility may lead to unnecessarily stringent requirements for the discharge of brine and other waste for projects designed to augment local water supply needs.

The Order regulates the combined discharges from three separate facilities including two municipal wastewater treatment plants classified as publicly owned treatment works and a desalination facility classified as an industrial facility. All three facilities are owned and operated by the City of Oceanside. Treated effluent from the three facilities is discharged through the Oceanside Ocean Outfall (Ocean Outfall) to the Pacific Ocean. Under the terms of the Order, discharges from each facility are now regulated under separate TBELs that apply to each discharge prior to mixing with any other wastewater flows directed to the Ocean Outfall.

This is a departure from prior Orders which, contrary to applicable NPDES regulations, implemented TBEL compliance at a single combined discharge point at the Ocean Outfall and not at each individual facility prior to mixing with other wastewater flows

California Environmental Protection Agency



directed to the Ocean Outfall. This change in the application of TBELs in the Order was based on three key NPDES regulations which stipulate that:

- 1. Technology-based treatment requirements under section 301(b) of the Clean Water Act represent the minimum level of control that must be imposed in an NPDES permit [40 CFR 125.3(a)];
- 2. Technology-based treatment requirements are applied prior to or at the point of discharge [40 CFR 125.3(e)]; and
- 3. Technology-based treatment requirements cannot be satisfied through the use of "non-treatment" techniques such as flow augmentation and in-stream mechanical aerators [40 CFR 125.3(f)]

The change was also based on Ocean Plan Table A TBELs which are applicable to 1) publicly owned treatment works discharges and 2) industrial discharges for which effluent limitation guidelines have not been established pursuant to Sections 301, 302, 304, or 306 of the Clean Water Act¹. Based on these considerations the Order requires that effluent pollutant levels be measured, and compliance with TBELs determined, at the point of discharge following the treatment process at each facility and prior to mixing with discharges from other separate facilities.

In my view, however, the real issue centers on how waste byproducts from desalination facilities are classified rather than the NPDES regulations governing the point of compliance for TBELs in NPDES permits. Waste brine discharges from desalination processes are currently regulated through a default classification as an industrial waste under both the Clean Water Act and the California Ocean Plan because they do not provide specific regulatory distinction for waste byproducts from desalination facilities. While TBELs are indeed appropriate for pollutants associated with industrial wastes, the constituents of concern in brine waste are primarily mineral salts and turbidity. These constituents present a far less significant threat to the ocean than most industrial wastes that are regulated through TBELs. Nonetheless, the San Diego Water Board relied on the default industrial waste classification in its decision to adopt the Order and in recent decisions on regulation of other brine discharges. An appropriate regulatory distinction for brine waste could be provided by the State Water Board through an Ocean Plan amendment establishing a new separate classification for waste byproducts from desalination facilities.

Amendment of the California Ocean Plan is an appropriate means to address issues affecting desalination facilities throughout the state. The 2005 California Ocean Plan Triennial Review and Workplan (State Water Board Resolution No. 2005-2008) identified brine discharge from desalination facilities as a high priority issue.

¹ 2005 California Ocean Plan adopted by the State Water Resources Control Board on January 20, 2005 and April 21, 2005, Page 12, Table A Effluent Limitations

understand that work is already underway by State Water Board staff to prepare revisions to the Ocean Plan on various issues common to desalination facilities as part of upcoming planning efforts for Ocean Plan amendment. The Ocean Plan revisions could address issues common to desalination facilities such as brine waste classification, intake water specifications, physical and toxicity characteristics of brine discharges, brine waste blending with other wastewater flows directed to a common ocean outfall, and alternative mixing zones for dense brine waste plumes. Ocean Plan revisions could also address adjustment of the Ocean Plan TBELs to reflect the specific types of waste and pollutants discharged from a desalination facility. Given the everincreasing importance of water reuse and desalination to meet the drinking water supply and reliability needs of California, the San Diego Water Board strongly supports the State Water Board's on-going planning efforts to facilitate permitting of facilities that discharge brine waste.

At the Management Coordinating Committee meeting of January 25, 2011, you described the need for closer collaboration between the Regional Water Boards and the State Water Board on key, emerging issues of both local and statewide importance. I suggest that this is one such issue the San Diego Water Board and State Water Board could take up together to more efficiently address this important issue.

I would appreciate your consideration of the San Diego Water Board's concerns in this matter. If you would like additional information on the Order or other aspects of San Diego Water Board's regulation of brine discharges please contact me.

cc: John Kemmerer, US EPA





State Water Resources Control Board

TO:

David W. Gibson, Executive Officer

San Diego Regional Water Quality Control Board

FROM:

Jonathan Bishop

Chief Deputy Director

STATE WATER RESOURCES CONTROL BOARD

DATE:

March 8, 2012

SUBJECT:

COMPLIANCE POINT FOR SOUTH COAST WATER

DISTRICT'S BRINE DISCHARGE

As you know, staff of the State Water Resources Control Board (State Water Board) is currently in the process of developing amendments to the California Ocean Plan that will, among other things, specifically address discharges of brine waste from desalination facilities. The State Water Board recognizes that brine waste discharges have significantly different impacts to ocean water quality than other industrial wastes, and the State Water Board is very interested in exploring alternatives that promote the availability of new water supplies. Consequently, this Ocean Plan amendment has been identified as a high priority by the State Water Board, and staff currently projects that the Ocean Plan amendment will be completed within a year.

I understand that the brine discharge from South Coast Water District's Groundwater Recovery Facility, which treats brackish groundwater for potable uses, may not be capable of consistently meeting the current Ocean Plan technology-based effluent limitations at the point that it discharges into the South Orange County Wastewater Authority joint ocean outfall due to naturally occurring elevated levels of iron and magnesium in the groundwater. After the brine discharge from the Groundwater Recovery Facility is commingled with the other wastewater discharges in the joint ocean outfall, however, the combined discharge has historically met the effluent limitations.

Given the immediate pendency of the Ocean Plan amendment, I believe that an

acceptable interim approach would be to measure compliance with the technology-based effluent limitations after the point where the brine discharge from the Groundwater Recovery Facility is commingled with the joint ocean outfall discharges, prior to the discharge to the ocean. While this is a departure from the current practice of applying those effluent limitations, I believe that a limited, short-term approach to defer, and possibly avoid, any significant expenditures is warranted, due to the pending completion of the Ocean Plan amendment, the comparatively lower impacts to ocean water quality from brine discharges, and our common desire to facilitate water availability.

If the San Diego Regional Water Quality Control Board determines that it is appropriate to temporarily move the compliance point for the technology-based effluent limitations for the Groundwater Recovery Facility to a location where it has commingled with other wastewater discharges, it should also ensure that (1) a reopener is included so that the permit can be modified as necessary to reflect the final terms of the Ocean Plan once the amendment is completed, (2) performance data is collected from the Groundwater Recovery Facility for the purpose of determining the current treatment capabilities, (3) a feasibility study is completed to assess the costs of providing additional treatment to meet the technology-based effluent limitations at the point that it discharges into the joint outfall, and (4) the joint outfall permittee, the South Orange County Wastewater Authority, is responsible for any penalties or liabilities for exceedances of the technology-based effluent limitations, subject to any internal agreements between the joint dischargers.

If you have any questions about this, please don't hesitate to call me at (916) 341-5165 or Phil Wyels, Assistant Chief Counsel, at (916) 341-5178.

cc: Betty Burnett, Assistant General Manager South Coast Water District P.O. Box 30205 Laguna Niguel, CA 92607-0205 Tom Rosales, General Manager South Orange County Wastewater Authority 34156 Del Obispo Street Dana Point, CA 92629

David W. Smith US EPA, Region IX 75 Hawthorne Street San Francisco, CA 94103