

REGIONAL COMMENT LETTERS

COMMENT 6



COUNTY OF ORANGE

RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

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NCL 05-015

June 2, 2005

Ricky Ramos
City of Huntington Beach
Planning of Department
2000 Main Street
Huntington Beach, CA 92648

SUBJECT: Recirculated DEIR No. 00-02 for the Poseidon Seawater Desalination Project

Dear Mr. Ramos:

The County of Orange is submitting its comments after the close of the public review period ending on Friday, May 26, 2005 following agreement with Ricky Ramos and Howard Zolefsky granting an extension for County review of the subject Recirculated Draft Environmental Impact Report (DEIR).

The project consists of the construction and operation of a 50 million gallon per day seawater desalination facility to be located on a seven acre portion of the 22 acre AES Huntington Beach Generating Plant at 21730 Newland Street, off Pacific Coast Highway.

The County of Orange has reviewed the Recirculated DEIR and offers the following comments:

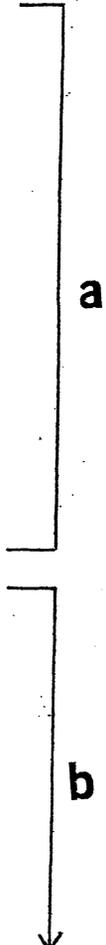
OPEN SPACE/RECREATION:

The County has no comments regarding the proposed desalination plant site within the City of Huntington Beach, but is concerned regarding:

Proposed OC-44 Pump Station in Resource Preservation Easement:

1. The proposed pump station site is located in an eastern area of the City of Newport Beach within a County "Resource Preservation Easement" in Lot C, Recorded Tract 15945. Terms and limitations for the easements are per that separate instrument recorded November 14, 1984, as Instrument No. 84-468083, and cited on the recorded tract map. Specifically, removal of native vegetation is prohibited, no grading or land-filling permitted except to repair slope damage due to failure or to construct access ways to developed areas when no other access routes are available, and structures limited to open fencing.

Activities regarding site placement, grading and construction of the proposed pump station are prohibited within the subject Resource Preservation Easement. Additionally, given the nature of



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existing habitat on the site and the acknowledgement of construction related impacts (Section 5.9), permits from the California Department of Fish & Game (CDFG) and perhaps the Army Corps of Engineers (ACOE) or U.S. Fish & Wildlife Service (USFWS) will likely be required in order to implement the booster pump station at this proposed location. Should the applicant be successful in securing any required CDFG and/or ACOE, USFWS permits, the applicant will also need to file for a County Property Permit (encroachment permit) with the County of Orange as well as a request for vacation of the Resource Protection Easement over the project site. If the request for vacation and County Property Permit are deemed appropriate, additional mitigation and/or compensation over and above any CDFG, ACOE or USFWS permit requirements will likely be required.

"Alternative Pipeline Alignment" along Victoria Street:

2. An alternative pipeline alignment is proposed along Victoria Street in the City of Costa Mesa. The DEIR acknowledges that the pipeline will be located within public easements, but does not evaluate any proposed impacts to Talbert Nature Preserve located both on the north and south side of Victoria Street near the Santa Ana River. Any short term construction impacts and/or long term project impacts to the Talbert Nature Preserve would also require a County Property Permit from the County of Orange with appropriate mitigation for those impacts.

Trails and Bikeways:

Project Site:

3. Talbert Channel may become a future regional trail or bikeway. As such the County requests that the project not preclude the possible reuse of the levee service road for trail or bikeway purposes.

Perimeter Wall:

4. Where the perimeter wall is adjacent to the channel levee, the County requests that instead of a block wall, the City use a vertical metal-tubing fence. This type of fencing opens up the view from the trail and avoids the "tunnel" effect created by a long, blank, block wall. Also, block walls are susceptible to graffiti.

Interior Landscaping:

5. Where the project is adjacent to the channel, the County requests that landscaping be planted just inside the metal fencing to improve the quality of the view shed.

Water Transmission Lines:

6. Several proposed water transmission line alignments cross numerous County trails and bikeways. These facilities are used by numerous commuter and recreational bicyclists and trail users. Based on Exhibit 3-9 (Approximate Desalination Water Distribution Area), the following trails and bikeways will be impacted:
 - a. Aliso Creek Bikeway (several locations)

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- b. Aliso Creek Trail (several locations)
- c. Santa Ana River Class I Bikeway (3 locations)
- d. Santa Ana River Trail (3 locations)
- e. Greenville-Banning Class I Bikeway (1 location)
- f. Peters Canyon Class I Bikeway (2 locations)
- g. Peters Canyon Trail (2 locations)
- h. San Diego Creek Class I Bikeway (1 or more locations)
- i. Sand Canyon Class I Bikeway (1 location)
- j. Santa Ana Heights Trail (1 location)
- k. Wood Canyon Trail (1 location)

This is only an estimate. There may be other locations where additional regional or local trails and bikeways may also be impacted by the project.

Existing Bikeways and Trails to Remain Open:

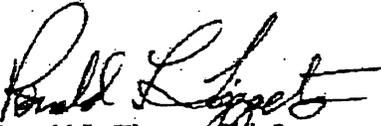
- 7. Existing bikeways and trails should remain open at all times during project construction, either by protecting in place or by providing a detour. Detour plans should follow Caltrans standards. A detour must remain in place until the affected trail or bikeway can be returned to its original alignment. Also, trails and bikeways must be returned to original condition upon completion of construction activities as a requirement of a County Property Permit for encroachment within any of its trails or bikeways (the County will provide additional details when an encroachment permit is requested).

Coordination regarding Trails and Bikeways:

- 8. We suggest that the applicant coordinate with Jeff Dickman, Chief of the County's Trail Planning, who may be reached at (714) 834-5372.

Thank you for the opportunity to respond to the Recirculated DEIR. If you have any questions, please contact Charlotte Harryman at (714) 834-2522.

Sincerely,


 Ronald L. Tippets, Chief
 Environmental Planning Division

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Response No. 6

County of Orange

Resources and Development Management Department

Ronald L. Tippetts, Chief, Environmental Planning Division

- 6a. This text provides an introduction to the comment letter and does not require a response.
- 6b. Comment noted. Implementation of the OC-44 booster pump station would require acquisition of all necessary resource and encroachment permits, which could include permits from the California Department of Fish and Game (CDFG), Army Corps of Engineers (ACOE), U.S. Fish and Wildlife Service (USFWS), and County of Orange.
- 6c. Refer to Response 6b, above.
- 6d. The proposed project site is within close proximity to the Talbert Channel. The proposed conveyance pipeline would be either microtunneled or directionally bored beneath the Channel, and would not impact the levee service road. In addition, the project would not place a block wall adjacent to any public trails. Moreover, as shown in DREIR Exhibit 3-16, *CONCEPTUAL LANDSCAPE MASTERPLAN*, landscaping is proposed along the eastern side of the subject site, adjacent to the Huntington Beach Channel.
- To clarify, Exhibit 3-19, *DESALINATED WATER DISTRIBUTION AREA* of the DREIR depicts existing water conveyance pipelines in Orange County. The proposed project would not impact the listed trails/bikeways. Note that the proposed distribution pipeline would be microtunneled or directionally drilled beneath the Santa Ana River and Greenville-Banning Channel, and their associated bikeway and trail would not be disturbed.
- 6e. Refer to Response 6d, above.
- 6f. This paragraph provides contact information for the County, and does not require a response.



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Executive Office

May 26, 2005

Mr. Ricky Ramos
 City of Huntington Beach
 Department of Planning
 2000 Main Street
 Huntington Beach, California 92648

Dear Mr. Ramos:

Recirculation of a
 Draft Environmental Impact Report for the Seawater Desalination Project at Huntington Beach

The Metropolitan Water District of Southern California (Metropolitan) has received a copy of the Recirculated Draft Environmental Impact Report (Draft EIR) for the Seawater Desalination Project at Huntington Beach (Project). The city of Huntington Beach (City) is acting as the Lead Agency for this Project. The Project consists of the construction and operation of a 50 million gallon per day seawater desalination facility within the City. The facility would consist of seawater intake pretreatment facilities, a desalination plant utilizing reverse osmosis technology, product water storage, two pump stations, materials storage tanks, and 42 to 48-inch diameter product water transmission pipeline possibly up to 10 miles in length in Huntington Beach and Costa Mesas. The facility would utilize existing seawater intake and outfall pipelines for its operations. The proposed Project is located on an 11-acre portion of the 22-acre Huntington Beach Generating Plant located at 21730 Newland Street, off Pacific Coast Highway. The proposed Project includes construction of an underground pump station in a portion of unincorporated Orange County, south of Bonita Canyon Drive, near the eastern border of the City of Newport Beach. A second pump station is proposed in a church parking lot located at 4949 Alton Parkway within the City of Irvine.

Both Metropolitan and its member agencies have a responsibility to provide adequate, reliable, high quality water supplies to meet current and projected water demands in Southern California. To that end, alternative water supplies must be explored beyond the additional development of current imported supplies. Over the past several decades, Metropolitan has explored the potential of seawater desalination as a water resource alternative for Southern California. More recently, Metropolitan's Board of Directors adopted policy principles in February 2001, which define a strategy for the development of brackish and seawater desalination. These policy principles will serve as guidelines in defining the future direction of seawater desalination

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development through strategic planning processes. This letter contains Metropolitan's views, as a potentially affected public agency, on the scope and content of the Recirculated Draft EIR.

General Comments

Metropolitan's July 2004 Integrated Water Resources Plan Update (IRP, Report 1236), establishes that Metropolitan and its member agencies are partners in ensuring adequate, reliable, high quality water supplies to meet southern California's current and future water demands. The guiding principles of the IRP are reliability, affordability, water quality, flexibility, environmental, and institutional constraints. The IRP and Metropolitan's water rate structure support the development of local water resources by member agencies, recognizing contributions of such projects to water supply reliability for southern California. The IRP also recognizes seawater desalination as a potential supply option for the region.

Metropolitan remains concerned about the ultimate fate of the additional bromide loading from the desalinated seawater. Bromide in the seawater is expected to be ~0.6 mg/L, greater than drought-level bromide concentrations in State Water Project (SWP). High bromide levels may increase disinfection by-products. Some discussion of the accumulation of bromide in the groundwater basins should be included in the EIR.

Additionally, Metropolitan provided a comment letter on the Draft EIR, dated October 28, 2003, (attached). Our review of the Recirculated Draft EIR indicates that some of our comments, restated below, were not adequately addressed.

The Irvine Cross Feeder and the East Orange County Feeder No. 2 are within the proposed location for the underground booster pump station. According to the Recirculated Draft EIR, the proposed site for the booster pump station is within an Orange County Resource Preservation Easement, about ¼ mile north of the San Joaquin Reservoir, where the East Orange County Feeder No. 2 and the OC-44 transmission pipelines converge. These facilities are owned and operated by Metropolitan.

Metropolitan is concerned with potential impacts to the East Orange County Feeder No. 2, the Irvine Cross Feeder, and Service Connection OC-44 as a result of the construction of the proposed booster pump station. Metropolitan requests that the City consider our facilities in its project planning and identify potential impacts to these facilities that may result from Project implementation. Service Connection OC-44 is owned and operated by Metropolitan and, therefore, coordination with Metropolitan should occur prior to project approval.

Further, Metropolitan requests that the City address operational impacts and mitigation measures, if any, related to the introduction of desalinated seawater into Metropolitan's regional



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distribution system. More specifically, Metropolitan recommends that the City and Project Applicant coordinate with Metropolitan regarding operational and design issues presented in Appendix D – Pressure Surge Analysis. This technical document extends beyond the scope of the Draft EIR review and requires extensive coordination, analysis, and review among all parties involved. Based on preliminary evaluation of the proposed introduction of desalinated seawater into Metropolitan's regional distribution system, hydraulic conditions and surge impacts would affect current operating conditions within the distribution system. Agreement on the operational feasibility of connecting to Service Connection OC-44, the East Orange County Feeder No. 2, and the Irvine Cross Feeder requires further review.

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In order to avoid potential conflicts with Metropolitan's rights-of-way and because the booster pump station is proposed to connect to Service Connection OC-44, we require that design plans for any activity in the area of Metropolitan's pipelines or facilities be submitted for our review and written approval. In addition, Metropolitan must also be allowed to maintain its rights-of-way and access to our facilities at all times in order to repair and maintain the current condition of those facilities.

The City may obtain detailed prints of drawings of Metropolitan's pipelines and rights-of-way by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist in preparing plans that are compatible with Metropolitan's facilities, easements, and properties, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

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Metropolitan also requests that the effect of blending water sources with differing temperatures be discussed in the EIR. The EIR should also demonstrate that blending desalinated seawater with other sources produces an aesthetically acceptable end product. Additionally, the EIR should also demonstrate that the delivered water must be acceptable to all downstream users for its aesthetic qualities, temperature, and all regulated and unregulated constituents. It appears that few of the downstream users have been consulted in this regard.

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Specific Comments

Executive Summary, Page 1-2 (last paragraph); Page 3-30 (first paragraph); and Page 5.9-10, Coastal Junction Pump: In addition to pumps, telemetry equipment, appurtenances and one diesel powered electrical generator for emergency back-up purposes at the Coastal Junction pump station, the EIR should assess the need for surge protection as provided for the OC-44 pump station.

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Page 3-32: Table 3-1 shows only selected water quality parameters and the table overstates the benefits of desalinated seawater. Some parameters such as bromide and chloride significantly increase. Although a high Total Dissolved Solids (TDS) may be indicative of water with higher corrosivity, it is actually the concentrations of specific ions that influences corrosion. While sulfate is lower in desalinated water, chloride will increase by about 100 mg/L. Furthermore, the Recirculated Draft EIR inconsistently states the average TDS of the desalinated water. In Table 3-1, the TDS is shown as 250 – 350 mg/L, a significant decrease from Metropolitan's Diemer Filtration Plant water of 373 – 491 mg/L. However, Appendix O (Page O-3) shows the TDS of desalinated seawater as 350 – 400 mg/L.

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Page 3-34, (first paragraph, first sentence): The sentence stating, "...the seawater desalination facility would use fewer chemicals of lower dosages than existing conventional water treatment plants in Southern California, because its unique source of water ... is of significantly better quality than other available sources ..." is incorrect. First, the seawater desalination facility will use far greater chemical dosages than typical surface water plants (e.g., 5-10 mg/L ferric sulfate, 30 mg/L of lime [App. O-9], 6 mg/L of carbon dioxide, 15-20 mg/L of sulfuric acid [in the full intake flow, not the product water flow], polymer of 0.5 to 1 mg/L, and membrane cleaning chemicals). Second, the Watershed Sanitary Survey [Appendix E] shows significant contamination potentials that are greater than experienced in surface waters (e.g., an unidentified source of bacteria and ammonia, with ammonia concentrations as high as 1.7 mg/L, red tides, and process water and drainage).

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Page 3-36 (first paragraph, first sentence): Please change this sentence to read as follows: "It is well established that Southern California as we know it today could not exist without the region's historic investment in numerous varied local and imported water projects."

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Page 3-36 (first paragraph, second sentence): Please change this sentence to read as follows: "These well-known regional water projects include: the Los Angeles Aqueduct (operated by the Los Angeles Department of Water and Power); the State Water Project (operated by the California Department of Water Resources [DWR]); and the Colorado River Aqueduct (operated by MWD), as well as award-winning conservation, recycling and other local water supply projects."

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Page 3-37, A: The Project Provides a Drought-Proof Water Supply, (first paragraph): The statement that "California has not experienced the hardships and environmental pressures of a prolonged drought since the early 1990s..." could be misinterpreted to mean there has not been a prolonged drought since the early 1990s. The years 2000 through 2004 were very dry for Southern California; 1999 through 2004 were record drought years for the Colorado River Basin; 2001, 2002, and 2004 were dry years for the State Water Project watershed.

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The IRP for the region, which was first adopted in 1996, establishes a water resource mix that would meet the retail-level demands under all foreseeable hydrologic conditions. As a result, Metropolitan and its member agencies embarked on development of water use efficiency measures, local supplies including recycled water, and storage programs. Metropolitan's storage capacity has increased more than ten-fold from 1996 to 2005. Metropolitan also adopted a Water Surplus and Drought Management Plan in 1999 to guide its management of water through wet and dry years. The investments that Metropolitan and its member agencies have made and the prudent management of water have prevented hardships to end-users during the dry period of the early 2000s.

Additionally, these two sentences state "...but experts agree that similar or worse conditions of unreliable water supplies..." and "During long or extreme droughts, water supplies are less reliable, ..." The use of the word "unreliable" or "reliable" is confusing. In fact, water supplies are reliably less during drought.

Metropolitan suggests clarifying these two sentences with the following: "It is recognized that Southern California, being in a semi-arid region, periodically experiences droughts that could be prolonged. During long or extreme droughts, water supplies are reduced, groundwater levels decline and conflicts increase among water users."

Page 3-37, A. The Project Provides a Drought-Proof Water Supply, (third paragraph, second sentence): This sentence implies that construction of Diamond Valley Lake is not complete. It implies that improvements in infrastructure are needed at Diamond Valley Lake to add flexibility in operating California's water system. In fact, Diamond Valley Lake and the other projects mentioned in this paragraph have been completed and are operating. Metropolitan suggests that the first sentence of this paragraph is changed to read as follows, "**Recent** changes (primarily improvements in infrastructure) **should** make it easier to respond to future drought conditions."

Page 3-37, A. The Project Provides a Drought-Proof Water Supply, (last paragraph): Please update this and all subsequent references to the Draft 2004 California Water Plan to the Public Review Draft of the California Water Plan Update, released in April 2005.

Page 3-38, A. The Project Provides a Drought-Proof Water Supply, (first paragraph): Please change this sentence to read as follows, "...Seawater Desalination Project at Huntington Beach would add even more flexibility in operating California's water system, and would provide particular drought relief in Orange County."

Page 3-38, B. The Project Provides a Replacement Water Supply: Replace "through ongoing contributions to MWD" with "through ongoing water purchases from MWD."



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Page 3-38, B. The Project Provides a Replacement Water Supply: The description under this section is misleading. This section states that environmental constraints have reduced supplies from the SWP and Mono Lake area. Metropolitan's deliveries from the SWP have increased significantly since the availability of storage capacity. Additionally, Metropolitan's IRP has accounted for the variability of supply availability and determined that resource targets are adequate to meet all retail demands under various hydrologies. In other words, there is no additional need to replace water supplies from SWP or Mono Lake.

This section also seems to imply the historic over-usage of up to 1 million acre-feet per year by the State of California is an amount "lost" to the region and needs to be replaced by Metropolitan or Orange County. According to Metropolitan's IRP, the resource target for Colorado River supply is full aqueduct when needed. This goal is achievable with the Quantification Settlement Agreement and Interim Surplus Water Guidelines, and programs Metropolitan and its member agencies have implemented, including the San Diego County Water Agency-Imperial Irrigation District water transfer, the Water Supply Management and Crop Rotation Program at Palos Verde Irrigation District, and storage programs such as the Hayfield Water Storage Project.

Metropolitan suggests that this section be renamed "**The Project Provides a Water Supply to Ensure Reliability to Handle Uncertainties.**" Water supply planning inherently faces a number of uncertainties such as more extreme hydrology than experienced in recorded past, higher than projected economic and population growth, more stringent water quality and environmental regulations, contaminations to water supplies, and delays in implementations of planned water supply projects.

Page 3-40, Southern California's Integrated Water Resources Plan: Please replace the reference, and all subsequent references, to the 2003 IRP Update to the IRP Update, July 2004 or simply the IRP Update. The dual dates of 2003 IRP adopted in July 2004 are confusing to readers.

Page 7-2, 7.1, No Project Alternative

The No Project Alternative would not result in any "shifting" of resource targets in the IRP Update. The IRP resource targets are established based on a number of factors including the desire to have a diversified portfolio, affordability, water quality, and physical, environmental and institutional constraints.

Page 7-4, 2. Increased Use of Imported Water Supplies

As mentioned above, the No Project Alternative would not cause any increased use of imported water supplies. Furthermore, the statement that "water planners are continuing to project increased reliance on imported water supplies" is untrue. The IRP resource target for Colorado River resources is full aqueduct when needed, as was the 1996 IRP target; both of which are

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consistent with past practices: Metropolitan and its member agencies have implemented and are in the process of implementing approved programs (see comment to Page 3-38, B. The Project Provides a Replacement Water Supply, for examples of programs) to manage this supply. Likewise, the IRP resource target for the SWP reflects supplies from existing infrastructure and operations, and identified projects under various stages of implementation.

The assertion that water transfers "have economic dislocation and environmental issues related to the Delta" and "would result in economic and environmental impacts" is not true. Metropolitan's policy on water transfers (Metropolitan Administrative Code § 4203, provided below) addresses economic and environmental issues.

§ 4203. Water Transfer Policy.

To meet its public water supply objectives in the future, Metropolitan will vigorously pursue the development of water transfers, subject to the following considerations:

- (a) Water transfers, including water marketing, will be developed only on a voluntary basis with willing partners;
- (b) A full-range of water transfer options will be pursued, including arrangements with appropriate state and federal agencies, public and private water entities, and individual water users;
- (c) Water transfers will be designed to protect and, where feasible, enhance environmental resources;
- (d) Water transfers will be designed to avoid contributing to or creating a condition of long-term groundwater overdraft;
- (e) Efforts will continue to develop water transfers in cooperation with the agricultural community, which seek to avoid unreasonable operational and financial impacts; and
- (f) Strategies will be developed to appropriately address community impacts of water transfers.

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Page 7-5, 4: Construction of Additional Local Water Supply Projects (last sentence)

It is our position that without the proposed Project, other local water supply projects may be constructed, but not additional projects. Furthermore, currently planned projects by member agencies and their retail water suppliers meet or surpass the IRP target. Please clarify this issue in this paragraph.

W

Appendix N, Page N-9 (third paragraph): The rapid disappearance of combine chlorine residual in the disinfected reverse osmosis permeate must be considered a significant impact on product water quality. Appendix N showed rapid decay of the chloraminated seawater or blended water. The rapid decay of chloraminated water releases additional ammonia that increases the risk of nitrification. Further study must be conducted to assess the impact of the chlorine residual decay.

X

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental documentation on this Project. If we can be of further assistance, please contact me at (213) 217-6242.

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Very truly yours,

(for) Laura J. Simonek
Manager, Environmental Planning Team

LIM/rdl

(Public Polders/EPU/Letters/20-MAY-05A.doc - Ricky Ramos)

Enclosure: Metropolitan letter, dated October 28, 2003



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

COPY

October 28, 2002

Mr. Ricky Ramos
City of Huntington Beach
2000 Main Street
Huntington Beach, CA 92648

Dear Mr. Ramos:

Draft Environmental Impact Report for the Poseidon Seawater Desalination Project

The Metropolitan Water District of Southern California (Metropolitan) has received a copy of the Draft Environmental Impact Report (Draft EIR) for the Poseidon Seawater Desalination Project. The proposed project entails the construction and operation of a 50-million gallons per day seawater desalination facility within the city of Huntington Beach (City). The facility would consist of seawater intake pretreatment facilities, a seawater desalination plant utilizing reverse osmosis technology, product water storage, two pump stations, materials storage tanks, and 42- to 48-inch diameter product water transmission pipelines up to ten miles in length in Huntington Beach and Costa Mesa. The facility would utilize existing seawater intake and outfall pipelines for operations. The proposed desalination facility would be located on seven acres of the existing 22-acre AES Huntington Beach Generating Plant located at 21730 Newland Street, off Pacific Coast Highway. The proposed project includes construction of an underground pump station in a portion of unincorporated Orange County, south of Bonita Canyon Drive, near the eastern border of the city of Newport Beach.

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Both Metropolitan and its member agencies have a responsibility to provide adequate, reliable, high quality water supplies to meet current and projected water demands in Southern California. To that end, alternative water supplies must be explored beyond the additional development of current imported supplies. Over the past several decades, Metropolitan has explored the potential of seawater desalination as a water resource alternative for Southern California. More recently, Metropolitan's Board of Directors adopted policy principles in February 2001, which define a strategy for the development of brackish and seawater desalination. These policy principles will serve as guidelines in defining the future direction of seawater desalination development through strategic planning processes. This letter contains Metropolitan's views, as a potentially affected public agency, on the scope and content of the Draft EIR. General comments are contained within the following paragraphs; specific comments to the Draft EIR are contained within a separate section following the general comments.

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Mr. Ricky Ramos

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Our review of the Draft EIR indicates that Metropolitan has no facilities in the vicinity of the proposed desalination plant. However, Metropolitan owns and operates facilities in the vicinity of the off-site proposed underground booster pump station location. The Irvine Cross Feeder and the East Orange County Feeder No. 2 are within the proposed location for the underground booster pump station. The underground booster pump station is proposed to be located at the convergence of the East Orange County Feeder No. 2 and the Irvine Cross Feeder. According to the Draft EIR, this proposed location is within the Orange County Resource Preservation Easement. The booster pump station is proposed to connect to Metropolitan's Service Connection OC-44 of the East Orange County Feeder No. 2, which is owned and operated by Metropolitan.

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Metropolitan is concerned with potential impacts to the East Orange County Feeder No. 2, the Irvine Cross Feeder, and Service Connection OC-44 as a result of the construction of the proposed booster pump station. Metropolitan requests that the City consider Metropolitan's facilities in its project planning and identify potential impacts to these facilities as a result of project implementation. Service Connection OC-44 is owned and operated by Metropolitan and, therefore, coordination with Metropolitan should occur prior to project implementation.

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Further, Metropolitan requests that the City address operational impacts and mitigation measures, if any, related to the introduction of desalinated seawater into Metropolitan's regional distribution system. More specifically, Metropolitan recommends that the City conduct a hydraulic analysis that supports the operational feasibility of connecting to Service Connection OC-44, the East Orange County Feeder No. 2, and the Irvine Cross Feeder. Based on preliminary evaluation of the proposed introduction of desalinated seawater into Metropolitan's regional distribution system, hydraulic conditions would exceed the design gradients of the Irvine Cross Feeder and the reach from Service Connection OC-44 turnout to Coastal Junction Pressure Control Structure at the East Orange County Feeder No. 2.

ac

In order to avoid potential conflicts with Metropolitan's rights-of-way and because the booster pump station is proposed to connect to Service Connection OC-44, we require that design plans for any activity in the area of Metropolitan's pipelines or facilities be submitted for our review and written approval. In addition, Metropolitan must also be allowed to maintain its right-of-way and access to our facilities at all times in order to repair and maintain the current condition of those facilities.

ad

The City may obtain detailed prints of drawings of Metropolitan's pipelines and rights-of-way by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist the City in preparing plans that are compatible with Metropolitan's facilities and easements, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

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Metropolitan believes that the general discussion of seawater desalination in the Draft EIR should convey the message that desalination is necessary to ensure future water supply reliability. In addition, Metropolitan requests that an expanded discussion of water quality impacts and benefits, as a result of the seawater desalination project, be added to the Draft EIR.

ae

Metropolitan does not believe that the issue of potential water quality impacts of blending desalinated water supplies with imported water supplies has been addressed adequately. It is unclear how backwash solids will be treated prior to discharge. The chemicals ferric chloride and polymer were described to treat the influent water, however, it is not clear how residual solids would be removed. Page 4.3-9 describes clarifiers, but these clarifiers are not described in the project description or on schematics (note Exhibit No. 6). An expanded discussion is necessary.

af

Metropolitan requests that the effect of blending water sources with differing temperatures be discussed in the Draft EIR. The report should also demonstrate that blending desalted water with other sources produces an aesthetically-acceptable end product. Additionally, the report should also demonstrate that the delivered water must be acceptable to all downstream users for its aesthetic qualities, temperature, and all regulated and unregulated constituents. It appears that few of the downstream users have been consulted in this regard.

Specific Comments:

Section 3.4 (Project Characteristics), page 3-20: In the Water Delivery subsection, no information was provided to support the statement that delivery reliability would be improved by the proposed project. Delivery reliability depends on numerous factors such as storage, multiple pipelines, and multiple power sources (and backup power supplies). Though the project would add additional treatment capacity, the lack of significant storage may limit the improvement in reliability. Additionally, on page 3-16, the report states that the desalination facility output may be reduced for electricity conservation. It is unknown how this would be implemented. That is, would the power source be interruptible by the electricity provider? Would flow reductions for electricity conservation be offset by other regional water supplies? Adequate storage for a new supply is integral to improving reliability.

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Section 3.5 (Project Needs and Objectives), page 3-20, 2nd paragraph, 1st sentence: The phrase "(except in times of extreme drought)" implies that there were numerous occasions where the imported water system did not meet all of the region's supplemental water supply needs. However, March 1991 to March 1992 was the only one-year period that all of the region's supplement water supply needs were not met. This was the last year of a six-year drought. Metropolitan requests that this statement be revised to more accurately reflect that there was only one year where all of the region's supplemental water supply needs were not met.

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Section 3.5 (Project Needs and Objectives), page 3-21, 2nd paragraph, 1st sentence: Revise this sentence to read, "Solutions to potential water shortage and reliability problems include water management programs on imported water systems as well as an increased reliance on many different sources of water supply and a continued emphasis on water conservation through implementation of State-approved Best Management Practices (BMPs)."

Section 3.5 (Project Needs and Objectives), page 3-21, 2nd paragraph, last sentence: No offset is needed according to Metropolitan's plan. Additional supplies are necessary to accommodate expected increases in population and economic activity. A report on Metropolitan's Water Supplies, dated February 11, 2002 is provided for your information.

Section 3.5 (Project Needs and Objectives), page 3-21, 3rd paragraph, 5th sentence: Revise the fifth sentence to read, "Depending upon technological advancements and economic constraints, the IRP projected that as much as 800,000 acre feet of recycled water could be made available to the region by year 2020."

Section 3.5 (Project Needs and Objectives), page 3-21, 3rd paragraph, 6th sentence: Revise the sixth sentence to read, "Recycled water projects will certainly be relied upon to help meet projected growth in the region.

Section 3.5 (Project Needs and Objectives), page 3-21, 4th paragraph, 2nd sentence: Revise the second sentence to read, "Consequently, seawater desalination was also one of several potential resource options identified in the 1996 IRP."

Section 3.5 (Project Needs and Objectives), page 3-21, 4th paragraph, 4th sentence: Revise the fourth sentence to read "The IRP stated that based on feasibility studies on potential projects, about 200,000 acre-feet per year (of desalinated ocean water) could be developed by 2010 (p.3-12)."

Section 3.5 (Project Needs and Objectives), page 3-21, 4th paragraph, 5th sentence: Revise the fifth sentence to read, "The proposed Poseidon Seawater Desalination Project represents an opportunity to develop approximately 56,000 acre-feet per year, or approximately one-fourth of the potential for seawater desalination development identified by the 1996 IRP."

Section 3.5 (Project Needs and Objectives), page 3-22, 1st paragraph, last sentence: Metropolitan disagrees with the statement, "In general, anticipated statewide shortages can be expected to translate to equivalent local and regional shortages, with similar economic and environmental effects." Senate Bill (SB) 221 and SB 610 require demonstration of water supply reliability prior to development. Revise the text to include the statement referenced above and include the information provided in the comment regarding SB 221 and 610.

ah

Mr. Ricky Ramos
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October 28, 2002

Section 3.5 (Project Needs and Objectives), page 3-23, Table 3-2: Table 3-2 does not include planned projects and Metropolitan does not believe that this table should be used as the basis for developing conclusions related to future water supply needs. Metropolitan requests that Table 3-2 and the paragraph on page 3-22 that references the table be deleted.

ah

Section 3.7 (Agreement, Permits, and Approvals Required), page 3-25: Add Metropolitan as a responsible agency for access to its rights-of-way.

Section 4.6 (Public Services and Utilities), page 4.6-11: In the Water Compatibility subsection, the report states, "...MWD water would most likely have a slightly higher level of organic carbon content and disinfection by-products...", but offers no evidence for this statement. Metropolitan requests supporting evidence.

ai

Section 4.6 (Public Services and Utilities), Table 4.6-1, pages 4.6-12 - 4.6-16: Table 4.6-1 describes product water qualities from the proposed project and other sources. Certain constituents such as chloride and sodium are substantially greater than from other sources. (Bromide would also be greater, though it is not described in this table). Though chloride, sodium, and bromide do not have direct public health significance, their impact on either reuse (basin-wide chloride objectives) or the formation of disinfection by-products (bromide) should be explored.

aj

Section 4.6 (Public Services and Utilities), page 4.6-17: In the Water Compatibility subsection, the report states, "Impacts in regards to water compatibility are not anticipated to be significant." No data or reports were described to support this statement. Proposed bench- and pilot-scale studies completed during the design phase may be too late to adequately address concerns regarding water compatibility. The compatibility issue must be further investigated.

ak

Section 4.6 (Public Services and Utilities), page 4.6-17: In the first sentence of the Water Quality subsection, the report states, "The final product water will be disinfected at the proposed desalination facility with free chlorine using sodium hypochlorite to meet the Department of Health Services (DHS) treatment technique requirements for potable water disinfection of a surface water source." More information is needed on this process. For example, what are the expected disinfection by-products formed by this process? How will chlorine residual be measured, particularly in the presence of relatively high (~0.5 mg/L) bromide concentrations? [Chlorination of water with high bromide results in the formation of bromine, which may complicate the measurement of and disinfection by free chlorine].

al

Mr. Ricky Ramos

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October 28, 2002

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental documentation on this project. If we can be of further assistance, please contact me at (213) 217-6364.

am

Very truly yours,

Original Signed By
Marty Meisler

Marty Meisler
Interim Manager,
Environmental Planning Team

JAH/rdi

(Public Folders/EPU/Letters/28-OCT-02.doc - Ricky Ramos)

Enclosures: Planning Guidelines

Copy of "Report on Metropolitan's Water Supplies" (February 11, 2002)

Response No. 7

Metropolitan Water District of Southern California
Laura J. Simonek, Manager, Environmental Planning Team

- 7a. These paragraphs provide a summary of the project description and the background of the Metropolitan Water District of Southern California's (MWD). No response is necessary.
- 7b. This text provides an overview of MWD's Integrated Water Resources Plan Update (IRP). Noted with interest, MWD has formally promoted seawater desalination and as such expects its member agencies to address the issues raised in this letter. The July 12, 2005 MWD decision to financially support five reverse osmosis seawater desalination projects confirms MWD's willingness to work with desalination projects to ensure successful integration of desalinated water into Southern California's drinking water supply. No response is necessary.
- 7c. The Safe Drinking Water Act protects drinking water from unsafe disinfection byproduct (DBP) formation by regulating total trihalomethanes (TTHMs) and haloacetic acids (HAAs). Both TTHMs and HAAs consist of chlorine based and bromide based compounds. Currently, total TTHMs and HAAs are regulated while the individual compounds that make up the TTHMs and HAAS are not individually regulated. Individual compounds that make up TTHMs and HAAs are listed in Table2 of Appendix N of the DREIR.

The project's potential to increase disinfection byproduct formation was analyzed in the Disinfection Byproduct Formation Study, included as Appendix N of the DREIR. The DBP Study analyzed various blends of desalinated water with water from other existing sources, including water from MWD's Diemer Water Treatment Plant. The DBP Study concluded that blending existing sources of supply with desalted water will have a very beneficial effect in terms of significantly reducing disinfection byproducts due to the low organic content of the desalinated water. For example, as presented in Table 2, page N-21 of Appendix N, the TTHM concentration of the desalinated seawater after 72 hours of disinfection contact time was only 2.4 ug/L, while TTHM level of Diemer's water after the same disinfection time was 74 ug/L. A 50%/50% blend of the two waters resulted in 27% reduction of the Diemer water's TTHM level to 54 ug/L. Similarly, the desalinated water HAA5 concentration was not detectible, while that of the Diemer water was 34 ug/L. The 50%/50% blend of the two waters reduced the Diemer water HAA5 level down to 18 ug/L.

In addition, the use of desalinated water is not expected to result in a measurable increase in bromide levels in the groundwater for two reasons: (1) the volume of desalinated water produced by the proposed seawater desalination facility would contribute a relatively small portion (less than 8%) of the Orange County water supply, as compared to the other "low bromide" water sources. Only a portion of the desalinated seawater would be converted to wastewater, and only a portion of this wastewater would be treated and used for groundwater recharge, by the OCWD GWRS Project; (2) the groundwater recharged to the local aquifers via

OCWD GWRS's facilities will be processed through GWRS's RO treatment system. Since RO membranes remove bromides as well as they do chlorides (i.e. would reject 90% or more of the bromides in the water), the bromide concentration of the desalinated water that would be recharged through the OCWD will be at a level comparable to that in the other water sources.

- 7d. Section 5.11 of the DREIR, *PRODUCT WATER QUALITY*, includes extensive analysis of the proposed project's impacts on the potable water distribution system within Orange County. Various mitigation measures have been incorporated into the DREIR to minimize impacts in regards to corrosion, taste/odor, water quality, and hydraulics. In addition, as stated in Mitigation Measure PW-9 (p. 5.11-24 of the DREIR), the use of existing distribution system pipelines owned by local water agencies for desalinated water distribution would require that the applicant coordinate with and obtain approval from those agencies.
- 7e. Refer to Response 7d, above.
- 7f. Refer to Response 7d, above.
- 7g. The desalinated water temperature will be in the same range as the temperature of the source water produced by the existing MWD Skinner and Diemer water treatment plants, and therefore, will not be a factor that would have a significant impact on the product water quality or would result in a measurable change in the temperature of the blended water.

In 2004, MWD sponsored a Taste Test Study of desalinated seawater, which was completed by the San Diego County Water Authority (SDCWA). The results of this study have been made available to the MWD staff by the SDCWA. This study indicates that the desalinated water has comparable aesthetic quality to that of the tap water produced by MWD. Additional discussions of the desalinated water quality are presented Section 5.11 of the DREIR.

Desalinated water quality's regulated constituents are presented in Table 5.11-3 of the DREIR. Analysis of this table indicates that the desalinated water will be in compliance with the applicable drinking water quality regulations. Request for water quality analysis of "all unregulated constituents" is unreasonable and is not required under any applicable regulatory requirements and under CEQA.

- 7h. An analysis of pressure surges for the proposed Coastal Junction and OC-44 pump stations is provided on page 5.11-21 of the DREIR and Appendix D to the DREIR, *PRESSURE SURGE ANALYSIS*.
- 7i. As stated in the title of Table 3-1 (*DESALINATED WATER QUALITY – KEY PARAMETERS*) on page 3-32 of the DREIR, the purpose of this table is to only show key water quality parameters regulated by the applicable federal and state regulations. A complete characterization of the water quality of the desalinated water and comparison to other water sources in the area is presented in Table 5.11-3 and discussed in detail in Section 5.11, *PRODUCT WATER QUALITY*, of the DREIR.

It is agreed that the desalinated water and the existing water sources have differences. These differences are clearly shown in Table 5.11-3 of the DREIR and are not unusual or exclusive to the desalinated water. For example, MWD's Diemer water has chloride level of 69 mg/L which is over 5 times higher than the 13 mg/L chloride level in the Seal Beach Potable groundwater (see Table 5.11-3, page 5.11-11). That does not necessarily make MWD's Diemer water inferior in comparison with the Seal Beach potable water because both of them are in compliance with the Safe Drinking Water maximum limit for chlorides of 250 mg/L. Similarly, the MWD's Diemer water is significantly higher than Seal Beach Potable water in terms of sulfates (149 mg/L vs. 26 mg/L – page 5.11-12), but both waters comply with the sulfate limit of 250 mg/L. We hope that the writer will agree that five times higher levels of chloride and sulfates in the MWD water do not necessarily make this water 5 to 6 times more corrosive than the Seal Beach potable water or in any way unsuitable for distribution for public consumption. Similarly, the desalinated seawater is in compliance with all applicable drinking water quality regulations and differences of individual constituents do not detract from its benefits and from the suitability of this water for distribution and public consumption.

Chloride and sulfate in the potable water are only two of the many constituents that have effect on the drinking water corrosivity. The chloride and sulfate limits in the Safe Drinking Water act of 250 mg/L were established in recognition that water that contains these constituents in concentrations lower than the regulatory limits will be safe in terms of distribution system corrosion. The concentration of both chloride and sulfate in the desalinated water is significantly below the regulatory limits.

The accurate representation of the typical desalination facility daily average TDS concentration will be from 250 to 350 mg/L (average of 300 mg/L) as shown in Table 3.1 and Table 5.11-3 of the DREIR. On an instantaneous basis the desalinated water may reach 350 to 400 mg/L at times. The more conservative upper range of instantaneous TDS concentration of 350 to 400 mg/L was used for the purposes of the corrosion control analysis presented in Appendix O of the DREIR. Using these instantaneous levels allows to account for the maximum dosages of lime that may need to be added to implement a conservative corrosion control strategy.

- 7j. The open ocean seawater is a cleaner water source than some surface water sources such as the Colorado River, which serves as one of the main existing sources of water supply for Orange County. The Colorado has a turbidity and organic content an order of magnitude higher than that of the ocean water planned to be used by the desalination project. As a result, the MWD's Diemer and Skinner surface water treatment plants processing Colorado River water have to use chemical coagulants at dosages of 40 to 100 mg/L which is several times higher than those planned to be used by the seawater desalination facility (5 to 10 mg/L).

The desalination facility's source water is the HBGS once through cooling water discharge. The HBGS withdraws the seawater from the ocean from an intake

structure that is submersed under the ocean surface and is over 1,840 feet off shore. Based on the source water assessment and sanitary survey attached in the DREIR, the area of the HBGS source water intake has no industrial dischargers or potential from impact from agricultural runoff. In addition, due to the significant depth of the HBGS intake, red tides have no measurable effect on the source water quality. As indicated in the Watershed Sanitary Survey (Appendix E of the DREIR), except for salinity, turbidity and pathogens the source water for the desalination facility meets all other drinking water regulatory limits.

- 7k. This change has been incorporated into Section 3.0 of the Responses to Comments, *ERRATA*.
- 7l. This change has been incorporated into Section 3.0 of the Responses to Comments, *ERRATA*.
- 7m. This change has been incorporated into Section 3.0 of the Responses to Comments, *ERRATA*.
- 7n. This change has been incorporated into Section 3.0 of the Responses to Comments, *ERRATA*.
- 7o. This change has been incorporated into Section 3.0 of the Responses to Comments, *ERRATA*.
- 7p. This change has been incorporated into Section 3.0 of the Responses to Comments, *ERRATA*.
- 7q. This change has been incorporated into Section 3.0 of the Responses to Comments, *ERRATA*.
- 7r. This comment adds additional information to that provided in paragraph B on page 3-38 of the DREIR. The information provided in this comment is consistent with the information provided in the DREIR. The sentence in the DREIR regarding reduced imported supplies from the State Water Project (SWP) and Mono Lake area specifically clarifies that the reduction is “compared to system capacity and earlier projections” and not compared to recent deliveries. There is no argument that MWD’s IRP (discussed in the DREIR at pages 3-40 and 3-41) has identified resource targets for the SWP and the Mono Lake area. The only point is that those targets are lower than the system capacity and the earlier projections for these resources. Likewise, there is no debate that California’s Colorado River allocation has been reduced from the amount the commentator characterizes as an “over-usage” amount of 5.4 million acre-feet per year to 4.4 million acre-feet per year. There is no intent in Paragraph B at page 3-38 of the DREIR to be misleading or to imply anything more than a “concern regarding the amount of water that would continue to be available for delivery through the imported water system.” For added clarity, Paragraph B will be re-titled “**The Project Provides a Water Supply to Ensure Reliability to Handle Uncertainties**” as requested (refer to Section 3.0 of the Responses to Comments, *ERRATA*).

- 7s. This change has been incorporated into Section 3.0 of the Responses to Comments, *ERRATA*.
- 7t. The No Project Alternative does not include the Seawater Desalination Project at Huntington Beach and assumes that the MWD IRP Update is in place and would be relied on by local water purveyors in Orange County. The adoption of the No Project Alternative would not result in any shifting of resource targets as set by MWD in its IRP Update. The proposed project offers a “new potable water supply” of up to 56,000 acre-feet per year to meet future water demands in Orange County.
- 7u. The No Project Alternative includes a “planned for” increased use of imported water supplies (when compared to the plans in the 1996 IRP). Table 7-2 in the DREIR (derived from MWD’s IRP Update) compares the 2020 supply projections for the Colorado River Aqueduct (CRA) and the SWP in the 1996 IRP and the IRP Update and shows that the IRP Update includes an “increased reliance on imported water supplies” in the amount of 50,000 acre-feet per year for the CRA and 57,000 acre-feet per year for the SWP.
- 7v. The Metropolitan Water Transfer Policy provided in this comment recognizes that water transfers can result in economic and environmental impacts. The Policy includes measures to avoid “unreasonable” financial impacts as well as measures to “protect” environmental resources and to “appropriately address” community impacts. It may be that implementation of this Policy could avoid all economic and environmental impacts resulting from such water transfers. Of course, other agencies seeking such water transfers may not employ the same policies as MWD.
- 7w. The proposed project is not included as one of the “local projects” in the IRP Update. The point being made by comparison in Paragraph 4 (on page 7-5 of the DREIR) is that 10 to 12 additional local projects (projects that have not been included in the IRP Update) would be needed to match the proposed 56,000 acre-feet per year additional water supply offered by the project.
- 7x. The process of chloramination of desalinated water has been analyzed in the *DISINFECTION BYPRODUCT FORMATION STUDY* (DBP Study), included as Appendix N of the DREIR. The results in the DBP Study indicate that because of the relatively higher levels of bromides in the desalinated water, a portion of the ammonia introduced to the disinfected water reacts with the bromide and forms bromamines. Although bromamines are an order of magnitude stronger oxidant/disinfectant than chloramines, they are less stable. Therefore, a portion of the initially formed bromamines dissociates to ammonia and bromides. Introduction of additional chlorine to the desalinated water beyond the levels currently used for disinfection of the existing water sources provides the excess chlorine needed to re-engage the ammonia released as a result of the bromamine dissociation. This additional chlorine and the ammonia released from the bromamine dissociation form chloramines and ultimately yield chlorine residual levels similar to these observed in the existing water sources. The modified disinfection strategies proposed to be used for the desalination system

do not require the use of ammonia dosages higher than these used for the chloramination of the existing water sources. Since no additional ammonia would be introduced into the distribution system beyond its current level, the risk of nitrification in this system is not expected to be elevated.

As indicated on pages N-29 through N-31 of Appendix N of the DREIR, the successful chloramination of desalinated water requires a disinfection strategy slightly different than the disinfection strategies used for chloramination of the existing sources of water introduced into the distribution system. The use of a different disinfection strategy for desalinated water in order to match the existing chloramine residual of the other water sources in the distribution system would not result in a significant impact on product water quality of the desalinated water or the blend of this water with MWD water from the Diemer plant, as shown on Table 5, page N-31 of Appendix N.

The super-chlorination approach for achieving stable chloramine residual is not new – it has been used successfully by Tampa Bay Water, which blends water from five different sources in the distribution system. The plant has been introducing chloraminated desalinated water in their water distribution system since March 2003 without any observed nitrification related problems.

Marina County Water District has been blending chloraminated desalinated seawater with other chloraminated water sources in their distribution system since 1996 without any measurable nitrification problems or disinfection issues.

During the operational implementation phase of the project, the proponent will complete a distribution system water quality and corrosion control study. The test facility will incorporate testing of piping and fittings similar to those used in the existing distribution system and will have provisions to compare the potential nitrification effects of desalinated water and imported water and other existing water sources. The results of this operational study will be made available to MWD staff for review in the course of project implementation and preparation of contractual arrangements for introduction of desalinated water into the existing distribution system.

- 7y. This paragraph provides a conclusion to the comment letter and does not require a response.

The commentator encloses a comment letter dated October 28, 2002. In accordance with CEQA Guidelines Section 15088.5, those who desired to comment on the DREIR were directed to submit new comments. Accordingly, comments received during the earlier circulation period do not require any response. “The lead agency need only respond to those comments submitted in response to the recirculated revised EIR.”

Although responses to the prior comment letters were previously made and are not required for the DREIR, each of the prior comments has again been responded to here. See Responses 7z through 7am, below

- 7z. This paragraph provides a summary of the project description, and does not require a response.
- 7aa. This text provides a description of MWD and its responsibilities, and also provides information regarding MWD facilities within the vicinity of the underground booster pump station site. No response is necessary.
- 7ab. All of the facilities identified in this comment are addressed in the DREIR. Coordination with MWD will be a prerequisite to project implementation.
- 7ac. In response to this comment on the originally circulated Draft EIR, the requested information and analyses have been conducted and are included on page 3-29 and in the Appendix D and G to the DREIR. The applicant continues to meet with MWD, MWDOC and local water purveyors to discuss operational issues.
- 7ad. Design plans will be submitted to MWD as requested. MWD will maintain its right-of-way and access at all times.
- 7ae. In response to this comment on the originally circulated Draft EIR, an expanded discussion of water quality impacts and benefits has been included in Section 5.11 and Appendix N of the DREIR.
- 7af. Refer to Response 7ae, above, and Appendices D, N, and O of the DREIR.
- 7ag. The increase in delivery reliability for the regional system that results from the project is solely due to the fact that the project introduces a new source of supplemental water supply located in Orange County and is drought proof. Variability in sources of supply is a factor in delivery reliability. In addition, the desalination project design will allow maximizing electricity conservation by the following three operational practices:
1. Energy Load Management: Refer to Response 2n, above.
 2. Use of State-Of-The Art Energy Recovery Devices: The desalination facility will be equipped with energy recovery equipment which will allow for the reuse at least 30 percent of the energy introduced with the high-pressure pumps of the RO system.
 3. Use of Heated HBGS Water: The desalination facility will use warm generating station cooling water to reduce the overall power demand by at least 10 percent. The beneficial reuse of the thermal energy in HBGS's discharge will result in significant conservation of power.

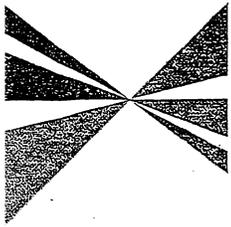
The effect of the power conservation measures listed above is additive (i.e. the total amount of power conserved will be approximately 60 percent [20 percent from off-peak use + 30 percent from energy recovery + 10 percent from use of warm power plant water] as compared to conventional desalination facility designs.

- 7ah. This comment requests specific clarifying changes to the text of the originally circulated Draft EIR which are no longer relevant to the DREIR. The text changes were addressed previously as an errata item in the Response to Comments for the originally circulated EIR dated March 21, 2003.
- 7ai. Refer to Response 7ae, above.
- 7aj. The assumption that Table 5.11-3 of the DREIR (previously Table 4.6-1 of the originally circulated Draft EIR) reflects desalination permeate water quality rather than product water quality is incorrect. Table 5.11-3 shows the average desalination facility product water quality after post-treatment and shows the desalinated water concentrations for all Primary and Secondary constituents regulated by the California Department of Health Services. Combination of lime and carbon dioxide will be used for permeate post-treatment. The effect of the addition of these two chemicals on the desalinated permeate is already reflected in the product water quality, shown in Table 5.11-3. Caustic soda will not be used for intake seawater or permeate treatment/pH adjustment. The specifications for post-treatment chemical additions are determined based on analytical, bench-, and pilot-scale studies. In addition, refer to Response 7ae, above.
- 7ak. Refer to Response 7ae, above, and Appendices D, N, and O of the DREIR.
- 7al. Refer to Response 7ae, above, and Appendices D, N, and O of the DREIR.
- 7am. This paragraph provides contact information for the agency, and does not require a response.

City of Huntington Beach

MAY 26 2005

SOUTHERN CALIFORNIA



ASSOCIATION of GOVERNMENTS

26 May 2005

Mr. Rickey Ramos
City of Huntington Beach
Planning Department
2000 Main Street
Huntington Beach, CA 92648

RE: **Comments on the Draft Environmental Impact Report for the Seawater Desalination Project at Huntington Beach- SCAG No. I 20020200**

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tura County: Judy Mikels, Ventura County • n Becerra, Simi Valley • Carl Morehouse, San naventura • Toni Young, Port Hueneme

nge County Transportation Authority: Lou rea, County of Orange

rside County Transportation Commission: in Lowe, Hemet

tura County Transportation Commission:

Dear Mr. Ramos:

Thank you for submitting the **Draft Environmental Impact Report (DEIR) for the Seawater Desalination Project at Huntington Beach** to the Southern California Association of Governments (SCAG) for review and comment. As areawide clearinghouse for regionally significant projects, SCAG's responsibility as the region's clearinghouse per Executive Order 12372 includes the implementation of the California Environmental Quality Act (CEQA) §15125 [d]. This legislation requires the review of local plans, projects and programs for consistency with regional plans.

We have reviewed the aforementioned DEIR, and have determined that the proposed Project is regionally significant per California Environmental Quality Act (CEQA) Guidelines (Section 15206).

Policies of SCAG's Regional Comprehensive Plan and Guide, Regional Transportation Plan, and Compass Growth Vision, which may be applicable to your project, are outlined in the attachment. We expect the final EIR to specifically cite the appropriate SCAG policies and principles and address the manner in which the Project is consistent with applicable core policies or supportive of applicable ancillary policies. **Please reference our policy numbers to provide a side-by-side comparison of SCAG policies and Compass Growth Vision Principles with a discussion describing in detail how the proposed project is consistent with and supports that policy or principle.**

The intent of this process is to provide guidance to local agencies that will contribute to the attainment of regional goals and policies. Please provide a minimum of 45 days for SCAG to review the Final EIR when this document is available. If you have any questions regarding the attached comments, please contact me at (213) 236-1851. Thank you.

Sincerely,

Brian Wallace
Associate Regional Planner
Intergovernmental Review

a



1965 2005

COMMENTS ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT
FOR THE
SEAWATER DESALINATION PROJECT AT HUNTINGTON BEACH
SCAG NO. I 20050200

PROJECT DESCRIPTION

The proposed Project considers the development and implementation of a 50 million gallon per day seawater desalination facility within the City of Huntington Beach. The proposed Project is located on an 11 acre site at the AES Huntington Beach Generating Facility located at 21730 Newland Street.

b

CONSISTENCY WITH REGIONAL COMPREHENSIVE PLAN AND GUIDE POLICIES

The Growth Management Chapter (GMC) of the Regional Comprehensive Plan and Guide contains a number of policies that are particularly applicable to the Poseidon Seawater Desalination Project.

Core Growth Management Policies

- 3.03 *The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.*

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL QUALITY OF LIFE

- 3.18 *Encourage planned development in locations least likely to cause adverse environmental impact.*
- 3.20 *Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.*
- 3.21 *Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.*
- 3.22 *Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.*
- 3.23 *Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans*

c

AIR QUALITY CHAPTER CORE ACTIONS

- 5.11 *Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.*

OPEN SPACE CHAPTER ANCILLARY GOALS

Resource Protection

9.08 *Develop well-managed viable ecosystems or known habitats of rare, threatened and endangered species, including wetlands.*

WATER QUALITY CHAPTER RECOMMENDATIONS AND POLICY OPTIONS

The **Water Quality Chapter** core recommendations and policy options relate to the two water quality goals: to restore and maintain the chemical, physical and biological integrity of the nation's water; and, to achieve and maintain water quality objectives that are necessary to protect all beneficial uses of all waters.

11.07 *Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.*

GROWTH VISIONING/COMPASS

The fundamental goal of the Growth Visioning effort is to make the SCAG region a better place to live, work and play for all residents regardless of race, ethnicity or income class. Thus, decisions regarding growth, transportation, land use, and economic development should be made to promote and **sustain** for future generations the region's **mobility, livability** and **prosperity**. The following "Regional Growth Principles" are proposed to provide a framework for local and regional decision making that improves the quality of life for all SCAG residents. Each applicable principle below is followed by a specific set of strategies intended to achieve this goal.

Principle 3: Enable **prosperity** for all people

- Provide, in each community, a variety of housing types to meet the housing needs of all income levels.
- Support educational opportunities that promote balanced growth.
- Ensure environmental justice regardless of race, ethnicity or income class.
- Support local and state fiscal policies that encourage balanced growth
- Encourage civic engagement.

Principle 4: Promote **sustainability** for future generations

- Preserve rural, agricultural, recreational and environmentally sensitive areas.
- Focus development in urban centers and existing cities.
- Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.
- Utilize "green" development techniques.

C

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG) is a *Joint Powers Agency* established under California Government Code Section 6502 et seq. Under federal and state law, SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). SCAG's mandated roles and responsibilities include the following:

SCAG is designated by the federal government as the Region's *Metropolitan Planning Organization* and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. '134, 49 U.S.C. '5301 et seq., 23 C.F.R. '450, and 49 C.F.R. '613. SCAG is also the designated *Regional Transportation Planning Agency*, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080 and 65082 respectively.

SCAG is responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the *South Coast Air Quality Management Plan*, pursuant to California Health and Safety Code Section 40460(b)-(c). SCAG is also designated under 42 U.S.C. '7504(a) as a *Co-Lead Agency* for air quality planning for the Central Coast and Southeast Desert Air Basin District.

SCAG is responsible under the Federal Clean Air Act for determining *Conformity* of Projects, Plans and Programs to the State Implementation Plan, pursuant to 42 U.S.C. '7506.

Pursuant to California Government Code Section 65089.2, SCAG is responsible for *reviewing all Congestion Management Plans (CMPs) for consistency with regional transportation plans* required by Section 65080 of the Government Code. SCAG must also evaluate the consistency and compatibility of such programs within the region.

SCAG is the authorized regional agency for *Inter-Governmental Review* of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

SCAG reviews, pursuant to Public Resources Code Sections 21083 and 21087, Environmental Impacts Reports of projects of regional significance for consistency with regional plans [California Environmental Quality Act Guidelines Sections 15206 and 15125(b)].

Pursuant to 33 U.S.C. '1288(a)(2) (Section 208 of the Federal Water Pollution Control Act), SCAG is the authorized *Areawide Waste Treatment Management Planning Agency*.

SCAG is responsible for preparation of the *Regional Housing Needs Assessment*, pursuant to California Government Code Section 65584(a).

SCAG is responsible (with the Association of Bay Area Governments, the Sacramento Area Council of Governments, and the Association of Monterey Bay Area Governments) for preparing the *Southern California Hazardous Waste Management Plan* pursuant to California Health and Safety Code Section 25135.3.

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Response No. 8

Southern California Association of Governments
Brian Wallace, Associate Regional Planner
Intergovernmental Review

- 8a. Consistency with the applicable policies of the Regional Comprehensive Plan and Guide is analyzed in Section 5.1 (*LAND USE AND RELEVANT PLANNING*). Refer to that section for further discussion.
- 8b. This paragraph briefly summarizes the project description and does not require a response.
- 8c. Project consistency with these policies of the Regional Comprehensive Plan and Guide are analyzed in Section 5.1 (*LAND USE AND RELEVANT PLANNING*). Note that policies not already included within the DREIR have been incorporated as part of Section 3.0 of the Responses to Comments, *ERRATA*.
- 8d. These paragraphs summarize the statutory responsibilities of SCAG. No response is required.