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**BEFORE THE STATE WATER  
RESOURCES CONTROL BOARD**

In the Matter of the State Water Resources )  
Control Board (State Water Board) )  
Hearing to Determine whether to Adopt a )  
Draft Cease & Desist Order against )  
California American Water Regarding its )  
Diversion of Water from the Carmel River )  
in Monterey County under Order WR 95-10 )  
\_\_\_\_\_ )

Hearing Date: July 23 - 25, 2008

Carmel River in Monterey County

**EXHIBIT MPWMD-HS9**

**MONTEREY PENINSULA WATER MANAGEMENT DISTRICT**



SANDRA SHEWRY  
Director

State of California—Health and Human Services Agency  
**Department of Health Services**  
 Northern California Drinking Water Field Operations Branch  
 Monterey District



ARNOLD SCHWARZENEGGER  
Governor

August 16, 2004 **RECEIVED**

Mr. Dave Burger, General Manager  
 Monterey Peninsula Water Management District  
 5 Harris Court, Building G  
 P.O. Box 85  
 Monterey, CA 93942-

AUG 18 2004

**MPWMD**

Dear Mr. Burger:

**RE: Desalination Proposals for Monterey Area**

There are several proposals currently under review for seawater or beach well desalination projects to provide potable water for domestic uses in the Monterey area. Although desalination treatment of seawater is not a new concept in California, the number of proposed treatment plants and volume of flow proposed to be treated is taking on new proportions. The Department of Health Services, Drinking Water Program has the responsibility for ensuring that public water systems reliably provide healthful, safe and potable water. We are updating the Department's guidance document that discusses the protocol for applying the regulatory statutes of the Surface Water Treatment Rule to desalination facilities, which replaces our 1991 Desalination Policy.

The Department desires to work with you on the projects intended to serve the Monterey Peninsula. To facilitate the District's evaluation of these proposals, the Department has summarized our process for reviewing a desalination project for compliance with the Safe Drinking Water Act and regulations pertaining to surface water treatment. This summary is attached in draft form for your use, and will be provided to you in final form along with our updated desalination guidance, when available. We invite you to contact us to further discuss these issues as they relate to the proposed desalination plants.

The Department has also recognized that there are aspects of water system oversight that are under the jurisdiction of both of our agencies. The Department would like to partner with you on water supply issues within your District boundaries. To facilitate communication on such issues, our Monterey District office will begin providing the District with copies of our correspondence on issues related to public water systems under our jurisdiction that are located within the District's boundaries. We have identified the following public water systems under Department oversight that meet this criteria:

- California American Water Company-Monterey
- California American Water Company-Bishop
- California American Water Company-Hidden Hills
- City of Seaside
- City of Sand City (proposed public water system)

David Berger, General Manager  
August 16, 2004  
Page 2

If you have any questions regarding these issues or would like to meet to discuss the desalination proposals or other issues related to water systems under our jurisdiction, please contact me at (831) 655-6933.

Sincerely,

A handwritten signature in cursive script that reads "Betsy Lichti".

Betsy S. Lichti, P.E.  
District Engineer, Monterey District  
DRINKING WATER FIELD OPERATIONS BRANCH

BSL/bl  
Enclosure

cc: Monterey County Division of Environmental Health

**Process for  
CDHS Review, Approval and Permitting of a Desalination Treatment Plant  
DWFOB-Monterey District  
August 2004**

1. Submittal of a Watershed Sanitary Survey and Source Water Assessment that includes characterization of the source water.

The desalination treatment facilities will be required to comply with the State's Surface Water Treatment Regulation (SWTR), with review and permitting by the Department. The Hydrology/Water Quality evaluation in the EIR should include evaluation of a full watershed sanitary survey (WSS) of the source water. The WSS is required prior to Department approval of any new surface water source and will allow the Department to determine the overall pathogen reduction requirements for the source water and evaluate the need of the treatment process to remove any chemical contaminants.

The WSS should identify and describe all sources of actual or potential contamination affecting the intake including but not limited to: ocean outfalls (specify the degree of wastewater treatment and disinfection); river, creek and drainage outlets (describe the watershed and the amount of flow); points of urban and agricultural runoff; marinas, docks, ship channels and mooring areas (describe control measures to prevent dumping of wastes from boats) and sewage pump stations; and the occurrence of biotoxins in the source water.

The watershed boundaries should be fully delineated, to include the contributing area to the intake under all tidal and ocean current conditions, as well as the watershed for all fresh water flows into the contributing area. The WSS should evaluate the possible changes in sources of contamination due to known or potential changes in growth, development or industry within the watershed boundaries

The WSS should also include a full characterization of the source water quality. The source water characterization should begin with the implementation of monitoring for coliform and pathogens in the vicinity of the planned intake. Additionally, full chemical monitoring of the source water should be initiated. Identification of toxins associated with algae blooms that may be seasonally present around the intake should be conducted. A compilation of the watershed water quality data gathered by other agencies for the Monterey Bay should be included in the evaluation. The characterization should include special monitoring to identify any impacts from major storm events.

It is recommended that one year of water quality data be collected in support of the WSS to ensure that all seasonal flow conditions affecting the source water quality are evaluated. A plan for conducting the WSS and source water characterization should be provided to the Department for review and comment prior to implementation.

2. Demonstration of pathogen removal capability of proposed reverse osmosis membranes.

Under the SWTR, the RO treatment is deemed to be an alternative technology. As such, the City will need to demonstrate its effectiveness to remove pathogens as required under the California Code of Regulations, Title 22, Section 64653(f), and in

conformance with the requirements of the federal Long Term 1 Enhanced Surface Water Treatment Rule.

3. Demonstration of the treatment unit processes through a pilot study.

This demonstration must be able to show that the treatment will comply with the SWTR turbidity performance requirements and reliably provide water meeting drinking water standards. Compliance with the Interim Enhanced SWTR as well as the Long Term 1 SWTR must be evaluated. Typically, a variety of pre-treatment options are evaluated in this pilot study, in addition to different RO membranes and disinfection processes. The various options for disinfection treatment should consider chemical transport and storage, options for onsite generation of ozone, and clearwell capacity requirements. An evaluation of disinfection by-product formation issues, depending on the type of disinfection treatment to be provided, should be included to ensure compliance with the Stage 2 Disinfection By-Products Regulation. The pilot study protocol and schedule should be submitted for review and approval prior to conducting the study.

4. Submittal and approval of plans and specifications for all facilities related to the desalination treatment, including distribution system storage and piping.

Preliminary plans must be reviewed and approved prior to developing final plans.

5. CDHS DDWEM Water Treatment Committee review and concurrence of desalination proposal.
6. Submittal of a permit application with engineering report for construction and operation of a desalination treatment plant.
7. Distribution system water quality evaluation.

The impact of multiple sources of water in the distribution system should be addressed and the possible resulting water quality problems should be evaluated to ensure that distribution water quality problems do not develop as a result of the commingling of the various water qualities from different sources of water. Mitigation strategies should be developed for implementation.

8. Demonstration of Technical, Managerial and Financial (TMF) Capacity.

It is recommended that all proponents of desalination treatment plants demonstrate adequate TMF Capacity in accordance with the Department's TMF Capacity Assessment for New Public Water Systems. This is a requirement where a new public water system or owner is involved (if, for example, Monterey County Water Resources were to become the owner of a desalination facility, or for the Sand City desalination plant, where Sand City is to become a new public water system). It is also recommended that all other existing water systems demonstrate that they have the TMF capacity for the operation and management of the desalination facilities. Guidance for the Department's TMF Capacity requirements are provided on the Drinking Water Program website at:

<http://www.dhs.ca.gov/ps/ddwem/technical/dwp/tmf/TMFCapAssessFrmNewCommPWS.PDF>