

DATE ISSUED: January 16, 2002

REPORT NO. 02-016

ATTENTION: Honorable Mayor and City Council  
Docket of January 22, 2002

SUBJECT: South Bay International Wastewater Treatment Plant - Options for  
Secondary Treatment

SUMMARY:

Issue - What actions should the City Council take regarding options for secondary treatment at the South Bay International Wastewater Treatment Plant?

Manager's Recommendations - 1) That the Mayor and City Council maintain the position taken previously by the Mayor and City Council as reflected in the August 14, 2000 letter to the Chairman of the House Transportation and Infrastructure Committee supporting the Tijuana River Valley Estuary and Beach Sewage Cleanup Act which calls for development of a privately funded Mexican facility; 2) That the Mayor and City Council take public testimony on this issue, and 3) That, if any issues are raised during public testimony, about which the Mayor and City Council require additional information or analysis to determine whether the City's position should be amended, City staff be directed to provide this information or analysis.

Other Recommendations - None.

Fiscal Impact - None.

BACKGROUND

For 70 years, raw sewage from the Republic of Mexico has flowed unabated into the United States plaguing the residents of San Diego. In July 1990, the United States and Mexican Sections of the International Boundary and Water Commission (IBWC) signed Treaty Minute 283, agreeing that the construction of an international secondary treatment plant, with a capacity of at least 25 million gallons per day (mgd), to be located in the United States, would be part of the solution to permanently resolve the existing border sanitation problem. In September 1993, the City Council declared a State of Emergency in the Tijuana River Valley and has since continued that State of Emergency due to continuing border sanitation problems.

In 1994, the IBWC and the Environmental Protection Agency (EPA) completed an Environmental Impact Statement (EIS) for the International Wastewater Treatment Plant and Outfall Facilities. The preferred alternative was the construction of a 25 mgd activated sludge secondary wastewater treatment plant and an ocean outfall in the United States. The EIS also addressed the eventual expansion of the treatment plant to treat flows up to 100 mgd.

Congress placed a cap of \$239 million on the amount of funding it authorized for the design and construction of the International Wastewater Facilities. Construction of the South Bay International Wastewater Treatment Plant (SBIWTP) began in June 1995 and the ocean outfall in September 1995. The IBWC has expended approximately \$237 million. Due to the funding cap, the federal agencies constructed only the advanced primary portion of the SBIWTP. The SBIWTP became operational in September 1997. In addition, the ocean outfall was completed in January 1999. The SBIWTP is currently operating in violation of its discharge permit which requires secondary treatment, and it is under a cease and desist order from the Regional Water Quality Control Board.

In 1998, as the result of legal actions, the IBWC and EPA agreed to study oxidation ponds as a secondary treatment alternative. The IBWC and EPA prepared a Supplemental Environmental Impact Statement (SEIS) for Long-Term Treatment Options to reevaluate secondary treatment options for the SBIWTP. The alternatives considered included: (1) Activated Sludge/No Action, (2) Activated Sludge with Flow Equalization, (3) Activated Sludge with Expanded Capacity, (4) Completely Mixed Aerated (CMA) Pond System at Hofer Site, (5) Advanced Integrated Pond System at Spooner's Mesa Site, (6) Advanced Primary only, and (7) Partial Secondary Treatment.

In December 1999, the EPA and IBWC issued the Final SEIS and selected the completely mixed aerated (CMA) pond system as their preferred secondary treatment option, and they issued a final Record of Decision. The CMA pond system would be constructed on a 43-acre site (Hofer site) adjacent to the existing SBIWTP. The CMA pond system would consist of four identical treatment trains covering approximately 29 acres. Each treatment train would be a series of four to five concrete-lined ponds: a completely mixed and aerated first pond followed by a series of three to four partially mixed ponds. The ponds would be sized to treat 25 mgd average flow with peaks of up to 50 mgd. However, due to community concerns over odors and aesthetics and a lack of funding, the project did not proceed.

On November 7, 2000, the President signed into law the Tijuana River Valley Estuary and Beach Sewage Cleanup Act of 2000 (Public Law 106-457) to provide for secondary treatment of effluent from the SBIWTP in Mexico. This law authorizes the IBWC to provide for the development of a privately funded Mexican facility, through the execution of a fee-for-services contract with the owners of such facility, in order to provide for secondary treatment of flows from the SBIWTP. The Act required the Secretary of State to initiate negotiations with Mexico for a new Treaty Minute within 60 days after the enactment of the Act. Due to delays in the initiation of negotiations, a Congressional hearing on the progress of implementation of the Act was held on December 12, 2001. After that hearing, the IBWC issued a statement that an interagency consensus had been reached on the U.S. Government position for negotiation with Mexico. On December 19, 2001, the IBWC received approval from the State Department to initiate negotiations with Mexico. The IBWC expects to initiate negotiations with their Mexican counterparts this month. These negotiations will include discussion on whether to locate facilities in Mexico and if so, the methodology for procuring a fee for services contract, i.e., sole source or open competition.

Concurrently with the discussions on alternative methods of secondary treatment, on

February 15, 2001, the California Attorney General sued the IBWC for failing to treat its effluent to secondary treatment standards. The State Attorney is seeking an order to require the IBWC to complete a secondary treatment facility by January 23, 2003. The State is also seeking fines of up to \$25,000 per day for each violation of the Clean Water Act after that date. The State lawsuit is still pending.

## DISCUSSION

Over the years a number of alternatives for secondary treatment have been proposed. The three most recent options under consideration and their pros and cons are outlined below. In order for any of these secondary treatment options to be implemented, the Congressional funding cap will need to be raised and federal funding authorized.

### Conventional Activated Sludge

#### Pros:

1. Project is already designed;
2. Environmental document completed, although it may need some modifications;
3. Project could be implemented quickly, assuming Congressional funding;
4. Minute 283, the agreement between the United States and Mexico, calls for construction of a 25 mgd secondary treatment plant in the United States; and
5. Allows for future expansion.

#### Cons:

1. There is the potential for more toxic upsets to the plant. However, there are differing opinions about the probability of this happening, and further study is required;
2. Potential for toxics in the sludge; and
3. Potential for third party lawsuit (i.e. Surfriders) delaying the project. At a recent IBWC public meeting, representatives from the Surfriders stated an intent to sue if the IBWC implemented this alternative.

### CMA Ponds at Hofer Site

#### Pros:

1. Environmental document completed;
2. Portion of design (90%) completed;
3. Better at mitigating impact of toxic spikes entering the plant, ponds provide more detention time and dilution of wastewater, thus reducing the impact of toxic spikes; and
4. Can be constructed quicker than activated sludge, i.e. construction time is shorter.

#### Cons:

1. Is very land intensive;
2. Will limit the capacity that can be provided at the Hofer site to 25 mgd, and will preclude expansion;
3. Is located within a half mile of a new residential development, and there are concerns about odors, aesthetics, and vector control;

4. An August 14, 2000 letter from Mayor Golding and the City Council to the Honorable Bud Shuster, Chairman of the House Transportation and Infrastructure Committee, expressed strong opposition to building ponds (Attachment 1); and
5. The local community does not support ponds at the Hofer site.

#### Public Private Partnership (Public Law 106-457)

##### Pros:

1. It is an international solution to an international problem;
2. It leaves the SBIWTP site available for future expansion;
3. Allows for expansion in Mexico;
4. It can provide for reclaimed water in Mexico, in the future;
5. It does not require up-front capital expenditures;
6. An August 14, 2000 letter from Mayor Golding and the City Council to the Honorable Bud Shuster, Chairman of the House Transportation and Infrastructure Committee, expressed strong support for Public Law 106-457 (Attachment 1); and
7. Has support of local Congressional delegation.

##### Cons:

1. It requires the negotiation of a new Treaty Minute with Mexico, potentially delaying the project;
2. Environmental document will need to be completed.; and
3. There has been some opposition expressed with regards to this alternative.

This third option is commonly referred to as the Bajagua Project. Bajagua<sub>LLC</sub> is a Limited Liability Company that has proposed to enter into a contract with the IBWC to construct and operate a secondary treatment plant in Mexico in accordance with Public Law 106-457. No decision has been made on the method for procurement of the public private contract. Bajagua<sub>LLC</sub> has had discussions with the federal government, but there is no commitment that Bajagua<sub>LLC</sub> would be the firm selected to implement this alternative.

#### RECOMMENDATIONS

1. That the Mayor and City Council maintain the position taken previously by the Mayor and City Council as reflected in the August 14, 2000 letter to the Chairman of the House Transportation and Infrastructure Committee supporting the Tijuana River Valley Estuary and Beach Sewage Cleanup Act which calls for development of a privately funded Mexican facility, and
2. That the Mayor and City Council take public testimony on this issue, and
3. That, if any issues are raised during public testimony, about which the Mayor and City Council require additional information or analysis to determine whether the City's position should be amended, City staff be directed to provide this information or analysis.

Respectfully submitted,

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Scott Tulloch  
Director

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Approved by: Richard Mendes  
Utilities General Manager

Metropolitan Wastewater Department

MENDES/TULLOCH/AKS:oc

Note: The attachment is not available in electronic format. A copy is available for review in the Office of the City Clerk.

Attachment 1: August 14, 2000 letter from Mayor Susan Golding to the Honorable Bud Shuster,  
Chairman of the House Transportation and Infrastructure Committee