INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO

El Paso, Texas
February 20, 2004

MINUTE NO. 311

RECOMMENDATIONS FOR SECONDARY TREATMENT IN MEXICO OF THE SEWAGE EMANATING FROM THE TIJUANA RIVER AREA IN BAJA CALIFORNIA, MEXICO

The Commission met at the offices of the United States Section in El Paso, Texas on February 20, 2004 at 1:30 p.m., to address the construction in Mexico of a plant and related facilities for secondary treatment of sewage emanating from the Tijuana River area in Mexico that flows untreated into the United States or is partially treated at the South Bay International Wastewater Treatment Plant (SBIWTP) located in San Ysidro, California.

The Commissioners noted the stipulations in the Treaty between the United States of America and the United Mexican States for the "Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande," signed February 3, 1944, as they relate to the obligation of both Governments to provide preferential attention to the solution of border sanitation problems. They also noted the stipulations in Minute No. 283, entitled "Conceptual Plan for the International Solution to the Border Sanitation Problem in San Diego, California/Tijuana, Baja California," dated July 2, 1990, that provided for the United States and Mexico to design, construct, operate and maintain a treatment plant for up to 25 million gallons per day (mgd) <1100 liters per second (l/s)> of wastewater arriving from the City of Tijuana, Baja California to be treated to a level of secondary treatment in the United States. The Commissioners also noted that the Mexican Government covers the costs of operation and maintenance of the volumes mentioned above in its corresponding portion, in accordance with Minute No. 296, entitled "Distribution of Construction, Operation and Maintenance Costs for the International Wastewater Treatment Plant Constructed under the Agreements in Commission Minute No. 283 for the solution of the Border Sanitation Problem at San Diego, California/Tijuana, Baja California," dated April 16, 1997. Likewise, they noted that due to problems in the United States the level of treatment provided by the present international plant is only at a level of advanced primary treatment.

The United States Commissioner noted that the level of treatment provided at the SBIWTP currently fails to meet the secondary treatment level standard set forth in the State of California discharge permit. The concentration and mass emissions rates for total suspended solids and Carbonaceous Biochemical Oxygen Demand and Whole Effluent Toxicity have routinely exceeded the permit levels since the initiation of advanced primary treatment in 1997. In addition, the United States Commissioner noted the failure to meet

discharge permit requirements had resulted in litigation in Federal District Court. The United States Commissioner further noted that a possible result of this lawsuit is that the United States Section would be required to cease discharges from the SBIWTP. The Mexican Commissioner noted that this would mean that the SBIWTP could not accept any flows from Mexico and this would not be acceptable to Mexico. Both Commissioners noted that this would have serious impacts on health and the environment in the border region.

The Commissioners noted passage by the United States Congress of Public Law 106-457, "Tijuana River Valley Estuary and Beach Cleanup" signed on November 7, 2000, which authorizes appropriation of up to $156 million dollars to comprehensively address the treatment of sewage emanating from the Tijuana River area in Mexico that flows untreated or partially treated into the United States causing significant adverse public health and environmental impacts. They also considered the proposal presented by the United States Section to the Mexican Section through correspondence in January 2002. The implementation of a secondary treatment facility in Mexico in a manner consistent with Public Law 106-457 would provide the secondary treatment which was originally to be provided at the SBIWTP in conformance with Minute No. 283.

The Commissioners noted the efforts of the Comisión Estatal de Servicios Publicos de Tijuana and of the United States Environmental Protection Agency (USEPA) in the development of the Master Plan for Water and Sanitation for the City of Tijuana, Baja California, published on March 7, 2003, which analyzes the present and future generation of wastewater in the City of Tijuana, the available treatment capacity at present, and the facilities required to cover the treatment needs through 2023. The Mexican Commissioner noted that the United States proposal for constructing the secondary treatment for the SBIWTP in Mexico would complement the provisions in the City of Tijuana Master Plan until 2023 that suggests the construction of a wastewater treatment plant with total treatment capacity of 33.5 mgd (1470 l/s). In addition the Master Plan considered secondary treatment consisting of 25 mgd (1100 l/s) of the SBIWTP advanced primary effluent, if secondary treatment of that effluent is not provided for at a facility in the United States. This increases the total needed capacity for the planning period to 2023 to 59 mgd (2570 l/s).

I. PROPOSED PROJECT

The Commissioners considered it possible to implement the concept of the referenced United States proposal in Mexico for a secondary treatment facility for sewage emanating from the City of Tijuana, Baja California, under a public-private participation arrangement. The United States Section would agree to fund, subject to availability of annual appropriations, up to $156 million for the engineering, construction, and for a period of 20 years for the operation and maintenance of a 59 mgd (2570 l/s) wastewater treatment plant in Mexico if the treatment of 25 mgd (1100 l/s) of advanced primary effluent of the SBIWTP is not provided in the United States. Any additional costs will be subject to

subsequent Commission agreements. The Government of Mexico would continue to cover the corresponding costs for the first 25 mgd (1100 l/s) as stipulated in Minutes Nos. 283 and 296.

Specifically, the proposed project will consider at a minimum the following:

- To locate the required primary and/or secondary treatment facilities in Mexico and associated facilities directly related to the project in the United States and Mexico.
- To provide secondary treatment of the SBIWTP effluent in Mexico, if such treatment is not provided for at facilities located in the United States.
- To provide the treatment capacity, including all processes necessary to provide secondary treatment level, in Mexico, for flows of 59 mgd (2570 l/s) if the treatment of 25 mgd (1100 l/s) of advanced primary effluent of the SBIWTP is not provided in the United States.
- To obtain all the permits required by the Mexican authorities in order to facilitate the verification and oversight of compliance with laws related to the treatment structures that are constructed in Mexico.
- To comply with the water quality laws of the United States and of the State of California in order to allow the discharge in the United States of treated effluent that is not utilized in Mexico through the Southbay Ocean Outfall (SBOO), constructed in the United States within the framework of Minute No. 283.
- To provide the pumping, conveyance and secondary treatment in Mexico for a flow of 59 mgd (2570 l/s), as derived from the results of the City of Tijuana Master Plan.
- To have supervision and approval of each phase of the projects resulting from the United States proposal undertaken by the Commission with participation of the appropriate United States and Mexican technical advisors.
- Ownership and disposition of wastewater from Tijuana, Baja California, treated or not treated under this proposal, will remain under the jurisdiction of the Government of Mexico. Likewise, the Government of Mexico will maintain the jurisdiction for disposal of said wastewater in accordance with applicable Mexican laws.

II. CONTRACT SERVICES

Likewise, both Commissioners observed it acceptable to develop the United States proposal to engineer, construct, operate and maintain treatment works in Mexico in conformance with applicable Mexican legislation, under an operating lease contract between the Commission and the service provider of the Mexican facility. The United States Section would make payments to the service provider, subject to the availability of annual appropriations, under the contract, which would be administered by the Mexican Section in accordance with the 1944 Water Treaty. The payments to be made to the service provider would be offset by compensations or credits that reflect an agreed upon percentage of payments received by Mexico through the sale of water treated by the facility. Said

compensations or credits would be mutually agreed upon by the two governments through the Commission. In no instance will the service provider be authorized to decide on the fate or use of the Tijuana, Baja California wastewater, treated or untreated. This decision will be made solely by the Government of Mexico. The service provider may propose mechanisms and specific actions to this respect, but, in any case, will require the authorization of the Government of Mexico.

The Government of the United States would provide, subject to the availability of annual appropriation up to a total of $156 million for the implementation of the project. Any costs above this amount will be subject to subsequent Minutes of the Commission.

The contract will at a minimum include the following items:

- Conveyance of the advanced primary effluent from the SBIWTP, located in the United States, to the Mexican facility for secondary treatment, if secondary treatment for the effluent is not provided at a facility located in the United States.
- Treatment to the secondary level at the facility in Mexico, in compliance with applicable water quality laws of the United States, the State of California, and Mexico.
- Return conveyance from the Mexican treatment facility to the United States of any treated effluent that cannot be reused. The effluent may be discharged through the SBOO into the Pacific Ocean in compliance with water quality laws of the United States and the State of California.
- Wastewater treatment capacity that provides secondary treatment for volumes in addition to the capacity of the SBIWTP, for a total capacity of 59 mgd (2570 l/s) if the treatment of 25 mgd (1100 l/s) of the advanced primary effluent of the SBIWTP is not provided in the United States.
- A contract term of 20 years. When the contract terminates, the facilities will be transferred, in good operating conditions, to the responsible Mexican authorities.
- Attainment of permits in order for the Commission to monitor, verify and assure compliance with United States, California, and Mexican water quality standards.
- Arrangements in order for the Commission to assure the proper disposal and use, at a site or sites in Mexico, of sludge produced at the SBIWTP and the Mexican facility.
- Payment by the United States Section, subject to annual availability of appropriations, for the contracted wastewater treatment services, including the necessary processes to attain treatment at a secondary level for a capacity of 59 mgd (2570 l/s), if the treatment of 25 mgd (1100 l/s) of advanced primary effluent is not provided in the United States. The payment will cover all agreed upon costs associated with the development, financing, construction, operation and maintenance of the Mexican facilities, on an annual basis.
- Provisions for non-compliance with the terms of the contract.
- The use of competitive procedures applicable in Mexico in the procurement of all

property and/or services for the engineering, construction, and operation and maintenance of the Mexican facility.

- Oversight of a Binational Technical Committee composed of appropriate United States and Mexican technical advisors, presided over by the Commission, to provide support to the Commission in the supervision of the different phases of the proposed actions included in this and subsequent Minutes. The Technical Committee may include for the United States the State of California and USEPA and for Mexico Comisión Nacional del Agua (CNA) and Government of Baja California.
- Provisions for the Commission, with the support of the Binational Technical Committee, to review and approve the selection of all contractors to perform the engineering, construction, and operation and maintenance for the Mexican facility.
- Ensure the maintenance by the service provider of the Mexican facility of all records (including books, documents, papers, reports, and other materials) pertaining to the operation of the facility necessary to demonstrate compliance with the terms of the contract and those in this Minute.
- Access by the Commission for audit and examination of all records maintained in accordance with the previous item, to facilitate the monitoring and evaluation of the performance of the Mexican facility

The Commissioners noted that the implementation of this Minute would require supervision by the Commission with the support of the Binational Technical Committee that includes the monitoring, on a quarterly basis, of the progress and status on the implementation of any contract executed under this Minute, as well as an evaluation of the extent to which the terms of such contract have been met. They also considered the recommendations that the findings of such observations will be presented, through the respective Section, to domestic agencies requiring such reports, beginning no later than two years after the execution of such a contract and every year after until contract close-out.

III. PREVIOUS CONSULTATIONS

The Commissioners also noted the ongoing discussions convened by the two Sections since January 2001. Meetings of the Commission have taken place and letters have been exchanged within the Commission as well as at the diplomatic level, in which the Government of Mexico has shown interest in the United States proposal and expressed its willingness to further discuss this matter on the basis that the concept is compatible with the option recommended in the City of Tijuana Master Plan, presents opportunities for additional investment in Mexico, includes an arrangement for the disposal of the effluent by means of the SBOO, allows opportunity to realize the existing potential for reuse of the effluent, decreases the pressure on the supply sources by placing the treated effluent closer to the potential sites for potable and non-potable reuse, and involves cooperation between

both countries for treatment and disposal of a volume of Tijuana wastewater greater than the present 25 mgd (1100 l/s).

From the various meetings and exchange of letters of the Commission, the following understandings were noted:

1. It would be feasible to incorporate the participation of a public-private service provider for the treatment of wastewater in accordance with applicable regulations in Mexico.
2. The Commission could participate in an operating lease contract for the engineering, construction, operation and maintenance in accordance with Mexican law and in accordance with additional terms to be established in a subsequent Commission Minute.
3. The operating lease contract would be administered consistent with provisions in the 1944 Water Treaty, applicable Mexican laws and in accordance with the terms and conditions established through subsequent Commission Minutes.
4. That the adopted project would be consistent with the solution identified in the Tijuana Master Plan; that it would address infrastructure capacities, land use, land acquisition, type of treatment and disposal of effluent; they would satisfy the requirements of CNA and the State of Baja California; that it would dedicate special attention to odor control; that it would address the selection of the service provider, in accordance with procedures in applicable Mexican laws; and it would define the fate of the facilities when the contract period ends.

IV. IMPLEMENTATION PLAN

The Commissioners noted the legislation set forth by the United States Congress in Public Law 106-457, the conclusions set forth by the Tijuana Master Plan and the discussions held by the Commission were sufficient basis to move ahead in relation to the secondary treatment of the effluent from the SBIWTP and the future flows of Tijuana. Therefore, the Commissioners considered it appropriate to implement the following actions:

1. Once the initial appropriated funds are available, the Commission would develop an operating lease arrangement contract, as defined under Section II of this Minute, "Contract Services," for the financing and development of the engineering, construction, operation and maintenance of the facilities in Mexico. This arrangement will need to have the approval of both governments, expressed in a subsequent Minute.
2. The final design of the facilities to be constructed in Mexico and the final arrangement for its implementation, as well as the terms under which the United States Section will make payments for the design, construction, operation and maintenance of said facilities, will be established in a subsequent Minute of the

Commission. In case that agreement on an operating lease arrangement or design that is acceptable to both governments is not reached, the stipulations established in Commission Minutes Nos. 283 and 296 will apply.

3. At the termination of the contract, the facilities constructed in Mexico will be transferred in adequate operating condition to the responsible Mexican authorities. The terms for subsequent operation will be established in a Commission Minute, and if necessary, the terms for the discharge of the plant effluent.

Based on the above, the Commissioners present the following recommendations for the approval of the two governments:

1. The United States Section shall fund, subject to availability of annual appropriations, up to a total of $156 million for the engineering, construction, and for a period of 20 years the operation and maintenance of a 59 mgd (2570 l/s) secondary wastewater treatment plant in Mexico, if the treatment of 25 mgd (1100 l/s) of advanced primary effluent of the SBIWTP is not provided in the United States. Any additional costs shall be subject to subsequent Commission agreements. The Government of Mexico shall cover the corresponding costs for the first 25 mgd (1100 l/s) as stipulated in Commission Minutes Nos. 283 and 296. Treatment to the secondary treatment level will be in compliance with water quality laws of the United States, the State of California and Mexico.
2. The Commission shall adopt the implementation plan contained in Section IV of this Minute.
3. The Commission, with support from their respective technical advisors, shall review and approve the terms of reference for the selection of a service provider.
4. The Commission shall administer the project guided by the solution identified in the Tijuana Master Plan, to satisfy the requirements of the responsible Mexican authorities and to address infrastructure capacities, land use, land acquisition, type of treatment, odor control, sludge management, and disposal of effluent that cannot be reused in Mexico. The effluent may be discharged through the SBOO into the Pacific Ocean in compliance with water quality laws of the United States and the State of California.
5. The Commission shall supervise the project including quarterly monitoring of progress and status of performance on any contract executed to fulfill the objective of this Minute, and an evaluation of the degree to which the service provider of the facilities in Mexico has complied with the terms of the contract. The results of these observations shall be presented, through the corresponding Section of the Commission, to the authorities which require these reports in each country, beginning no later than two years after execution of the contract referred to in Section II of this Minute, and annually thereafter.

6. All activities undertaken pursuant to the provisions of this Minute shall be subject to the availability of appropriated funds, resources, and corresponding personnel, as well as to applicable laws and regulations in each country.
7. This Minute shall enter into force upon notification of approval by the Government of the United States of America and the Government of the United Mexican States through the respective Sections of the Commission, and shall terminate when the operating lease contract referenced in Paragraph No. 1 of Section IV of this Minute concludes.

The meeting was adjourned.

Arturo Q. Duran
United States Commissioner

J. Arturo Herrera Solís
Mexican Commissioner

Carlos Peña, Jr.
Secretary of the United States Section

Jesús Luévano Grano
Secretary of the Mexican Section