

**INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO**

Minute No. 296

**April 16, 1997
El Paso, Texas**

**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**

The Commission met in the offices of the United States Section in El Paso Texas at 8:00 a.m. on April 16, 1997 to recommend to the two Governments the specific distribution costs of construction, operation and maintenance of the International Wastewater Treatment Plant (IWTP) under the terms of International Boundary and Water Commission (IBWC) Minute No. 283, entitled, "Conceptual Plan for the Solution of the Border Sanitation Problem in San Diego, California/Tijuana, Baja California," signed July 2, 1990.

The Commissioners observed that in Resolution No. 8 of Minute No. 283 the IBWC should recommend, for the approval of the two Governments, the specific cost corresponding to each country for the construction, operation and maintenance of the IWTP.

A. General

The Commissioners reviewed the activities carried out by each country in furtherance of Minute No. 283 and made the following observations:

- o Mexico is completing the sewage collection works and the work necessary in Mexico to convey the collected Tijuana sewage to the IWTP.

- o The United States is completing the construction of the IWTP and conveyance and ocean discharge system. The United States is scheduled to complete construction and begin operation in April 1997 of the advanced primary treatment module with a capacity of 25 million gallons per day (mgd) or 1100 liters per second (lps). The United States has developed an operations and maintenance manual for the advanced primary treatment module. A secondary treatment module is under design and an environmental review is underway to determine the best alternative to achieve secondary treatment. Construction of the outfall system for ocean discharge is underway with completion scheduled for 1998. Also, the Commissioners continue to analyze the environmental studies being

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conducted in the United States as part of an analysis of alternatives to best achieve secondary treatment.

- o The IBWC Commissioners have coordinated, with the responsible authorities in each country, the necessary actions for treatment at the plant site and removal to Mexico of the sludge generated from Tijuana wastewaters in the advanced primary treatment module. The sludge will be removed from the IWTP each day. Mexico is completing arrangements for disposal, in its territory, of the sludge at a site approved for such disposal in accordance with applicable Mexican legislation.

- o The United States is considering alternatives for the interim discharge of the advanced primary treated effluent. The alternatives include a) continued use of the emergency connection up to 13 mgd (570 lbs), b) discharge to the Tijuana River of advanced primary treated effluent, and c) return of an advanced primary treated effluent to Mexico. The Commissioners observed that in the case that the alternative for temporary discharge of an advanced primary treated effluent to Mexico is selected, the IBWC would support the necessary arrangements for the construction of an appropriate conveyance and disposal system in Mexico that would be properly coordinated with Pumping Plant No. 1 in Tijuana. They also observed that in case of a temporary discharge of primary treated effluent using the emergency connection to the City of San Diego, Mexico's cooperation would be necessary to handle, to extent possible, the flows generated in excess of the emergency connection capacity.

- o The IBWC Commissioners observed the progress in the Tijuana wastewater characterization programs for wastewaters that would be conveyed to the IWTP. The data will allow a) identification of pollutant limits that would protect the efficiency of the IWTP and b) delivery of data to Mexico for Mexico's implementation of its industrial wastewater pretreatment programs in Tijuana based on standards in Mexico. Under such programs discharges of industrial wastewaters into this system must not exceed limits for non-conventional pollutants. The Commissioners considered it appropriate that the IBWC, with the expert recommendation of the specialized water quality agencies of each country, should determine the limits of pollutant concentrations that if exceeded would harm the plant's efficiency. The Commissioners observed that the Commission would monitor the plant's effluent for non-conventional pollutants each six months and more frequently in the event that excessive concentrations of non-conventional pollutants are detected. The results would be provided to the appropriate officials in Mexico so that those officials can identify the source of these pollutants and apply the

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appropriate laws. As the IWTP is located in the United States and will discharge to the coastal waters in the United States, the ocean discharge must meet quality standards established in the United States, under a permit granted to the United States Section of the IBWC.

- o The Mexican Commissioner informed that Mexico continues to evaluate alternatives for treatment of future Tijuana sewage in excess of the 25 mgd (1100 lps) assigned for Tijuana in the IWTP, which at an opportune time will be discussed before the IBWC in the context of Minute No. 261. In such case, the IBWC would determine whether it is practical to expand the IWTP to handle Tijuana flows in excess of the 25 mgd (1100 lps) assigned to Mexico in the IWTP and, if so, make recommendations on the terms of Mexico's financial participation in such expansion.

B. Distribution of Construction, Operation and Maintenance Costs

The Commissioners noted that discussions were held by the Principal Engineers of the IBWC on studies developed by Mexico's National Water Commission (CNA) regarding the costs of construction, operation and maintenance of the wastewater plant that Mexico planned to construct in the Rio Alamar, had Mexico not participated in the international plant. The Commissioners reviewed the information presented by the Principal Engineers and considered, as appropriate, the amount of \$16.8 million (U.S. currency) as the cost that Mexico would have expended to construct a treatment plant (Rio Alamar plant) in Mexico. Under the terms of Resolution No. 7 of Minute No. 283, Mexico would cover this corresponding share in 10 annual installments of \$1.68 million each upon the start of the IWTP operation, with the first payment due on December 15, 1997. The payment method was developed in a consensus with the Comisión Estatal de Servicios Públicos de Tijuana (CESPT), and the CNA to make the necessary adjustments in an internal cash flow that will allow payment in the amount corresponding to Mexico. This procedure will be followed for subsequent payments toward the total amount to cover the payment on December 15 of each year.

The Commissioners also reviewed the information presented by the Principal Engineers, in Exhibit A, and considered, as appropriate for the capacity of 25 mgd (1100 lps), the amount of \$0.034 per cubic meter (U.S. currency) as the cost that Mexico would have expended in 1997 in the operation and maintenance of the Rio Alamar plant. They observed that for subsequent years, adjustments in costs, as needed, would be applied based on Mexican economy. The CESPT should participate in the annual review of the operation and maintenance costs to enable this organization to incorporate such increases in its budget in subsequent years. Further, the Commissioners observed that Mexico, through CESPT, should begin to cover its part of the costs of the IWTP operation and maintenance once the treatment plant is in operation. Such payments will be made in quarterly. The monthly payments would be made within 10 days of the month corresponding to the end of each quarter. The payment schedule was defined in a consensus with the CESPT allowing for necessary internal cash flow adjustments to cover the payment. A cost

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adjustment factor would be estimated for the next year based on the prior year's performance. A final accounting would be performed at the end of the year.

The Commissioners considered that the two Sections of the Commission will ensure, at least once a month, a systematic exchange and sharing of information with the CESPT and the agency responsible for the IWTP operation, hydrometric data generated through IWTP system measuring devices, including but not limited to, influent from Mexico in order to carry out an adequate accounting of the flows delivered for treatment at the IWTP as well as effluent from the IWTP. The Commissioners considered it appropriate for the Principal Engineers to develop a similar program for the effluent data generated from the treatment and ocean discharge systems in the United States and Mexico before the ocean outfall operations begin.

Finally, the Commissioners observed that in the event that Tijuana wastewaters from canyon and other collectors as may be conveyed for treatment at the IWTP, the operations and maintenance costs that Mexico would cover for these volumes would be the same as those in the prior paragraphs, that is \$0.034 per cubic meter of sewage treated. The Mexican Section will inform the United States Section in a timely manner of such discharges and their estimated volumes. The volumes would exclude flows from ruptured drinking water lines and from storm runoff. The payments for treatment of these wastewaters will be covered in the quarterly payment by Mexico for the waters conveyed to the IWTP in the international collector up to the capacity of 25 mgd (1100 lps). Should the discharges from all of these points exceed an average of 25 mgd (1100 lps), computed each quarter, the Commission will determine the costs chargeable to Mexico for treating such excess discharges.

Based on the above considerations, the Commissioners adopted the following resolutions for the approval of the two Governments:

1. The IWTP construction costs chargeable to Mexico will be \$16.8 million (United States currency) an amount which corresponds to the total amount that Mexico would have expended to construct the Río Alamar treatment plant, had Mexico not participated in construction of the IWTP. Mexico will pay this amount to the United States in 10 annual fixed installments of \$1.68 million (United States currency) each upon the start of the IWTP operations, with the first annual payment to be provided on December 15, 1997. The payment method was developed in a consensus with the Comisión Estatal de Servicios Públicos de Tijuana (CESPT), and the CNA to make the necessary adjustments in an internal cash flow that will allow payment in the amount corresponding to Mexico. This procedure will be followed for subsequent payments toward the total amount to cover the payment on December 15 of each year.

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2. The operation and maintenance costs of the IWTP chargeable to Mexico for up to 25 mgd (1100 lps) will be \$0.034 per cubic meter (U.S. currency) as the cost that Mexico would have expended in 1997 in the operation and maintenance of the Rio Alamar plant. In subsequent years, adjustments, as needed, to costs would be applied based on Mexican economy. The CESPT should participate in the annual review of the operation and maintenance costs to enable this organization to incorporate, in a timely manner, such increases in its budget in subsequent years. Cost adjustment factors would be estimated for the next year based on the prior year's performance. A final accounting would be performed at the end of the year.
3. For the construction and operations and maintenance payments, the Mexican Section of the IBWC will collect the amounts corresponding to the CESPT and, where appropriate, to the CNA in order to complete the payment to the U.S. Section of the IBWC in accordance with IBWC procedures in effect for these purposes.
4. Mexico will begin to cover its proportionate costs of the IWTP operation and maintenance corresponding to point 2) upon the start of operations of the IWTP. The quarterly payment will be made within 10 days after the end of each quarter, in a procedure developed in a consensus with the CESPT for the necessary internal cash flow adjustments that will allow its payment.
5. The United States Section will provide to the Mexican Section a copy of the operations and maintenance manual developed for the IWTP to allow the responsible Mexican authorities to understand the IWTP operations criteria.
6. In the event that Tijuana wastewaters from canyon and other collectors are conveyed for treatment at the IWTP, the operations and maintenance costs that Mexico through the CESPT would cover for these volumes would be the same as those in the prior paragraphs, that is \$0.034 per cubic meter of sewage treated. The Mexican Section, with the prior consultation with the CESPT, will inform the United States Section in a timely manner of such discharges and their estimated volumes which would not include drinking water from ruptured lines or storm runoff. The payments for treatment of these wastewaters will be incorporated by the CESPT in the quarterly payment by Mexico for the waters conveyed to the IWTP in the international collector up to the capacity of 25 mgd (1100 LPs). In the event that discharges from all of these points exceed an average of 25 mgd (1100 LPs), assigned to Mexico, computed each quarter, the Commission

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will determine the charges to Mexico corresponding to treat the excess discharges.

7. The two Sections of the Commission will ensure, and at least monthly, a systematic exchange of information with the CESPT and the agency responsible for the IWTP operation, hydrometric data generated through IWTP system measuring devices, including but not limited to, influent from Mexico in order to carry out an adequate accounting of the flows delivered for treatment at the IWTP as well as effluent from the IWTP. The Commissioners consider it appropriate that the Principal Engineers develop a similar program for the effluent data generated from the effluent data generated from the treatment and ocean discharge systems in the United States and Mexico before the ocean outfall operations begin.
8. The IBWC will review, in the context of Minute No. 261, alternatives being considered by Mexico for treatment of future Tijuana sewage in excess of the 25 mgd (1100 lps) identified for Tijuana in the IWTP. As part of this review, the IBWC will make recommendations to the governments as to the practicality of expanding the IWTP to handle flows in excess of 25 mgd (1100 lps) assigned to Mexico in the IWTP and if so, develop recommendations for the terms of Mexico's financial participation in such expansion.
9. The IBWC will continue to analyze the environmental studies being conducted in the United States regarding alternatives for the best means of achieving secondary treatment.
10. The Commission will continue to characterize inflows to the IWTP and determine, with the expert recommendation of the appropriate water quality authorities of each country, the limits of pollutant concentrations in the system that, if exceeded, would harm the efficiency of the international plant. The Commission will monitor inflows at the international boundary for potential exceedences and provide the information to the Government of Mexico so that the proper authorities in Mexico can apply those limits in applying appropriate pretreatment laws.
11. In case of an interim discharge of advanced primary treated effluent to Mexico, the IBWC will make the necessary arrangements for an appropriate conveyance and disposal infrastructure system in Mexico.
12. In the case of an interim discharge of advanced primary treated effluent utilizing emergency connection to the city of San Diego, the cooperation

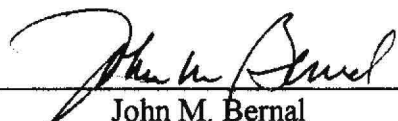
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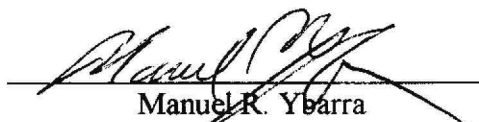
of Mexico would be necessary to handle, to the extent possible, the flows in excess of the emergency connection capacity as may be generated.

13. The IBWC will review and recommend to the two Governments the additional infrastructure needed to collect sewage that is currently discharged to the Tijuana River through storm and other drains such that there is no discharge of untreated sanitary or industrial wastewaters in the international boundary between San Diego and Tijuana.
14. All activities carried out pursuant to this Minute will be subject to the availability of appropriated funds, resources and personnel and applicable laws and regulations of each country.
15. This Minute shall enter into force when the Government of the United States of America and the Government of the United Mexican States have each provided written notification through their Section of IBWC of its approval.

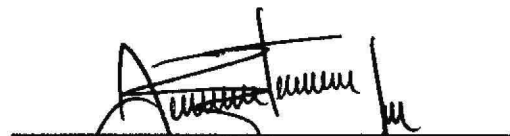
The meeting was adjourned.



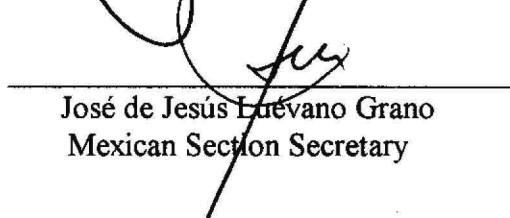
John M. Bernal
United States Commissioner



Manuel R. Ybarra
United States Section Secretary



J. Arturo Herrera Solís
Mexican Commissioner



José de Jesús Luévano Grano
Mexican Section Secretary