INTERNATIONAL BOUNDARY AND WATER COMMISSION

UNITED STATES AND MEXICO

Minute No. 283

El Paso, Texas
July 2, 1990

CONCEPTUAL PLAN FOR THE INTERNATIONAL SOLUTION TO THE BORDER SANITATION PROBLEM IN SAN DIEGO, CALIFORNIA/TIJUANA, BAJA CALIFORNIA

The Commission met in the offices of the United States Section in El Paso, Texas on July 2, 1990, at 10:00 a.m., to consider a conceptual plan for an international solution which would provide for the proper collection, treatment and final disposal of sewage in excess of the capacities of existing facilities in San Diego, California/Tijuana, Baja California.

The Commissioners noted the interest of the United States and Mexican Governments at the meeting of United States President George Bush and Mexican President Carlos Salinas de Gortari October 3, 1989 in Washington, D.C., expressed by United States Secretary of State James A. Baker, III and Mexican Foreign Relations Secretary Fernando Solana in their diplomatic notes of that date that the Commission conclude a Minute on the referenced conceptual plan at the earliest time possible.

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", dated February 3, 1944 as they relate to the obligation of both Governments to provide preferential attention to the solution of border sanitation problems; the stipulations in Minute No. 261, entitled "Recommendations for the Solution to the Border Sanitation Problems", dated September 24, 1979, as they relate to prevention, standards and joint actions for solution of border sanitation problems; and implementation by the Government of Mexico of Minute No. 270, entitled "Recommendations for the First Stage Treatment and Disposal Facilities for the Solution of the Border Sanitation Problem at San Diego, California/Tijuana, Baja California", dated April 30, 1985.

The Commissioners concurred with the steady progress by the Government of Mexico to implement the measures stipulated

in Minute No. 270 and made note of the intention of the Government of Mexico to construct, along the right bank of the Rio El Alamar, the second treatment plant module envisioned in Minute No. 270. The Commissioners also reviewed the conclusions from meetings which took place on July 23, 1987 in Ciudad Juarez, Chihuahua and July 24, 1987 and September 9, 1988 in El Paso, Texas in order to comply with resolutions Nos. 6 and 12 of Minute No. 270 as they relate to studies and designs for alternatives for the subsequent sewage treatment and final disposal facilities for the city of Tijuana, Baja California.

The Commissioners noted that sewage in the cities of San Diego, California and Tijuana, Baja California area is handled as follows:

1. Sewage generated in the southern area of the city of San Diego, California is conveyed northwards by pumping facilities and pressure and/or gravity lines to the Point Loma advanced primary treatment plant. The treated sewage is discharged to the Pacific Ocean through an 11,500 feet (3.4 kilometers) long deep ocean outfall at a point 13.5 miles (21.67 kilometers) north of the international boundary.

2. Sewage generated in the city of Tijuana, Baja California is conveyed southwest of the city by pumping facilities and pressure and/or gravity lines to a secondary sewage treatment plant located at San Antonio de los Buenos which has a capacity of 25 mgd (1100 lps). The treated sewage is discharged to the Pacific Ocean at a point 5.6 miles (9.0 kilometers) south of the international boundary.

3. Uncontrolled discharges from Mexico into the United States at Smuggler Gulch (Canon del Matadero), and El Sol Canyons, which include two nearby drains, are intercepted through works in the United States and are returned to the city of Tijuana, Baja California's final disposal system. At times, part of the discharges from Mexico, due to outages at Pumping Plant No. 1, are conveyed in the San Diego, California sewage collection and treatment system in conformance with stipulations in Commission Minute No. 222, entitled "Emergency Connection of the Sewerage Collection System of the City of Tijuana, Baja California to the Metropolitan Sewerage System of the City of San Diego, California," dated November 30, 1965. It has not been possible to eliminate uncontrolled sewage that continuously flows in

amounts of 0.11 mgd (5 lps) at Goats Canyon (Canon de los Laureles) and of 10 mgd (438 lps) in the Tijuana River, respectively.

The United States Commissioner informed that the city of San Diego, California has a comprehensive study underway to upgrade its potable water and sewage collection and treatment systems. One of the treatment plants in the United States could be located in the Tijuana River Valley. The city of San Diego, California, the State of California, and the United States Federal Government, the responsible entities in this country charged with these matters, are obligated to pay the costs associated with sewage treatment for the city of San Diego, California.

The Mexican Commissioner informed that his Government has financed the construction and operation and maintenance of Module I of the first stage sewage treatment facilities for the city of Tijuana, Baja California with a capacity of 25 mgd (1100 lps), based on the agreements in Minute No. 270, and that his Government plans to construct a secondary treatment plant for the sewage generated in east Tijuana, Baja California, in place of the second module of the first stage treatment facilities for that city. The new secondary treatment plant would discharge its effluent into the Rio El Alamar, a tributary of the Tijuana River. The United States Commissioner reported that his Government wishes to propose a binational secondary treatment plant solution in the city of San Diego, California for which the cost to Mexico for construction, operation and maintenance would be equivalent to that of the Rio El Alamar treatment plant.

The Commissioners considered that participation by Mexico in the construction, operation and maintenance of an international wastewater treatment plant in the United States in the manner outlined above is a satisfactory alternative to meet the commitment in Minute No. 270 for the construction of the second module of the first stage treatment facilities for the city of Tijuana, Baja California. At the same time, they considered that the Commission should jointly determine the real costs of the construction, operation and maintenance of the secondary treatment plant proposed along the Rio El Alamar.

The United States Commissioner stated that even with secondary treatment and disinfection provided to sewage from an international plant, the United States authorities charged with water quality would require a deep ocean discharge at the downstream end of the land outfall for final disposal of

effluent at a point to be selected upon completion of oceanographic studies. Because water quality standards are more strict in the United States, the construction, operation and maintenance of the land and deep ocean outfalls would be financed by the United States in recognition of the potential benefits to the Tijuana River Estuary and United States beaches in south San Diego County, California.

The Commissioners then analyzed plans in the United States and Mexico for construction of sanitation facilities in San Diego, California and the city of Tijuana, Baja California. These are:

1. Completion in Mexico of the works planned for Tijuana, Baja California in the construction plans of the Integrated Project for Potable Water and Sewerage including a gravity sewer trunkline from Tijuana Pumping Plant No. 1 to the boundary.

2. Construction in Mexico of sewage collection works necessary to convey to the international sewage treatment plant, city of Tijuana, Baja California sewage that would have been treated at the Rio El Alamar treatment plant.

3. Construction in the United States of an international secondary treatment sewage plant with disinfection and capacity of at least 25 mgd (1100 lps) to treat sewage generated in excess of the capacity of the conveyance and treatment facilities of the first stage works constructed by Mexico in accordance to the recommendations in Minute No. 270, to be located near Dairy Mart Road.

4. Construction in the United States of a pipeline system with capacity of at least 25 mgd (1100 lps) to convey the international treatment plant effluent to the coastal surf waters.

5. Construction in the United States of a deep ocean outfall system with a capacity to discharge into the Pacific Ocean at least 25 mgd (1100 lps) of treated sewage from the international plant. The length of this outfall will be based on the results of oceanographic studies.

The Commissioners agreed that the construction and operation of the conveyance, treatment and final disposal works above described, would permanently and definitively

resolve the existing border sanitation problem and concluded that the joint solution is the best alternative to this common problem. At the same time, they agreed that reuse of the treated sewage by each country is desirable at such time as either country may consider it opportune and arranges for construction of the necessary works.

The Commission then adopted the following recommendations for the approval of the two Governments:

1. Participation by the Government of Mexico in the construction, operation and maintenance of an international treatment plant in the United States in place of the construction of the second module of the first stage sewage treatment facilities for the city of Tijuana, Baja California, initially planned in Commission Minute No. 270.

2. Completion at Mexico's expense of the sewage collection system for the city of Tijuana, Baja California in accordance with the respective integrated project and operation and maintenance at Mexico's expense of that system and the conveyance, treatment and disposal facilities constructed under Minute No. 270.

3. Construction at the expense of the United States and Mexico of the necessary sewage collection works to convey to the international sewage treatment plant, sewage from the city of Tijuana, Baja California that would have been treated in the Rio El Alamar treatment plant. The cost corresponding to the United States shall be in an amount not to exceed $4 million, United States currency, to be provided in a manner determined by the two Governments through the Commission. The Government of Mexico at its expense will assure completion of the construction of these sewage collection works. The operation and maintenance of these works shall be charged to Mexico.

4. The final design and joint construction between the United States and Mexico of an international secondary treatment plant with disinfection facilities, sludge digesters and sludge transport vehicles, to be located in United States territory at a site known as Dairy Mart Road. The construction will be in modules with approximate capacity of 25 mgd (1100 lps) and both Governments will determine the maximum treatment capacity as soon as possible. The site

of the international treatment plant will be in a construction area outside of an environmental protection area, the latter located between the international boundary and the construction area.

5. Construction and operation and maintenance in the United States at United States expense, of a pipeline system with a capacity of at least 25 mgd (1100 lps) to convey treated sewage from the international treatment plant to the coastal surf waters.

6. Construction, operation and maintenance in the United States at United States expense, of a deep ocean outfall with an estimated length to be determined by the results of oceanographic studies and a capacity to discharge into the Pacific Ocean at least 25 mgd (1100 lps) of treated sewage from the international plant.

7. The cost of construction, operation and maintenance of the international treatment plant shall be covered by the United States and Mexican Governments. The cost corresponding to Mexico shall be in an amount, to be determined by the two Governments through the Commission, equal to that which would have been used in the construction, operation and maintenance of the treatment plant planned for the Rio El Alamar. The costs of construction corresponding to Mexico shall be covered in 10 annual payments, each equal to one-tenth of total construction cost determined by the two Governments through the Commission, beginning at the time that the international treatment plant enters into operation. The costs for operation and maintenance corresponding to Mexico shall be paid annually. The United States Government shall cover the difference between these costs and those that result from the construction, operation and maintenance of the international treatment plant.

8. The final design, the specific division of construction, operation and maintenance costs, the division of work to be carried out by each country and the construction and expenditures schedules corresponding to each country for the international treatment plant, will be established by the Commission in subsequent Minutes, subject to the approval of the two Governments. Standards, criteria and restrictions, including those for odor control, applicable in the city of San Diego and the state of California,

will be utilized in the design, construction and operation of the international treatment plant.

9. The Government of Mexico could cover part or all of the costs corresponding to Mexico for the operation and maintenance of the international plant through the supply of electrical energy for operation of the international treatment plant.

10. The Government of Mexico at a cost to Mexico shall dispose, in its territory, the sludge resulting from treatment of the city of Tijuana, Baja California sewage in the international treatment plant. Mexico would receive such sludge from the international sewage treatment plant in the United States in vehicles operated by Mexican personnel employed directly or indirectly in the operation and maintenance of the international treatment plant.

11. The Governments of the United States and Mexico reserve the right to dispose in their own territory part or all of the untreated sewage, in a manner consistent with the desire of both Governments expressed in Minute No. 261 of the Commission to prevent border sanitation problems. Also, both Governments reserve the right to return for reuse in their respective territories part or all of the international treatment plant effluent corresponding to each country's sewage inflows. The cost of construction of works to allow reuse of the effluent from the international treatment plant will be covered by the Government benefitting from such reuse.

12. The Government of Mexico, in accordance with laws in force in that country, in order to assure efficient treatment of Tijuana sewage in the international plant, will require all industries to provide appropriate pre-treatment of wastewaters that those industries may discharge into the Tijuana sewage collection system which would in turn discharge into the international sewage treatment plant.

13. Any sanitation facilities constructed in the Tijuana River Valley, in addition to those contemplated for this international project shall contemplate, consistent with laws in force in each country, measures necessary to avoid negative impacts in

outlying urban areas on both sides of the international boundary.

14. Consistent with Articles 2, 20, and 23 of the Water Treaty of February 3, 1944, the construction, operation and maintenance of the international treatment plant shall be under the supervision of the International Boundary and Water Commission, United States and Mexico. Similarly the design and construction of the works necessary to convey to the international treatment plant sewage from the city of Tijuana, Baja California that would have been treated in the Rio El Alamar treatment plant shall be under the supervision of the Commission. The construction of jointly financed works in the territory of each country, shall in no way confer jurisdiction to one country over the territory of the other.

15. Upon approval of this Minute by the United States and Mexican Governments the Principal Engineers of both Sections will develop and carry out an appropriate program of sampling and analysis of the water quality of inflows into the Tijuana River that would be captured by collection works in Mexico for conveyance to the international treatment plant.

16. The Government of Mexico will assure that there are no discharges of treated or untreated domestic or industrial wastewaters into waters of the Tijuana River that cross the international boundary, and that in the event of a breakdown in collection or other detention facilities designed to prevent such discharges, the Government of Mexico will take special measures to immediately stop such discharges and make repairs. Should Mexico request it through the Commission, the United States Section will attempt to assist with equipment and other resources in the containment of such discharges and temporary repairs under the supervision of the Commission.

17. This Minute requires the specific approval of the two Governments, and shall enter into force upon such approval with the understandings that: a) the funds to cover the costs to the United States are subject to the availability of those funds, b) the advance payment by the United States Government, in the amount to be determined by the Commission to be reimbursed by the Government of Mexico is also

subject to the availability of funds and c) that the Mexican Commissioner notify the United States Commissioner that the Secretariat of Planning and Budget of Mexico has approved the financing of this joint project corresponding to Mexico.

The meeting was adjourned.

Narendra N. Gunaji
United States Commissioner

J. Arturo Herrera Solis
Interim Mexican Commissioner

Manuel R. Ybarra
United States Section
Secretary

Jose de Jesus Luevano Grano
Acting Mexican Section
Secretary