

No. 16559

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**UNITED STATES OF AMERICA  
and  
MEXICO**

**Agreement relating to emergency deliveries of Colorado River waters for use in Tijuana. Effected by Minute No. 240 of the International Boundary and Water Commission, United States and Mexico (with annexed maps and schedule). Adopted at Ciudad Juárez on 13 June 1972**

**Agreement amending the above-mentioned Agreement. Effected by Minute No. 243 of the International Boundary and Water Commission, United States and Mexico. Adopted at El Paso on 25 September 1973**

**Agreement amending the above-mentioned Agreement of 13 June 1972, as amended. Effected by Minute No. 245 of the International Boundary and Water Commission, United States and Mexico. Adopted at El Paso on 15 May 1974**

**Agreement amending the above-mentioned Agreement of 13 June 1972, as amended. Effected by Minute No. 252 of the International Boundary and Water Commission, United States and Mexico. Adopted at Ciudad Juárez on 31 August 1976**

**Agreement extending the above-mentioned Agreement of 13 June 1972, as amended. Effected by Minute No. 256 of the International Boundary and Water Commission, United States and Mexico. Adopted at Ciudad Juárez on 22 February 1977**

*Authentic texts: English and Spanish.*

*Registered by the United States of America on 27 April 1978.*

AGREEMENT<sup>1</sup> BETWEEN THE UNITED STATES OF AMERICA AND MEXICO RELATING TO EMERGENCY DELIVERIES OF COLORADO RIVER WATERS FOR USE IN TIJUANA, WHICH WAS EFFECTED BY MINUTE NO. 240 OF THE INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

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INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

Ciudad Juárez, Chihuahua, June 13, 1972.

Minute No. 240

EMERGENCY DELIVERIES OF COLORADO RIVER WATERS  
FOR USE IN TIJUANA

The Commission met at the offices of the Mexican Section in Ciudad Juárez, Chihuahua, Mexico, on June 13, 1972, at 10:00 a.m., to recommend, pursuant to the request of Mexico and the instructions by the two Governments, an agreement for emergency deliveries to a point on the international boundary near the City of Tijuana, Baja California, Mexico, for use by that city of a portion of the waters of the Colorado River allotted to Mexico by Article 10(a) of the Water Treaty of 1944.<sup>2</sup>

The Commissioners reviewed the need for making the above-mentioned emergency deliveries. They noted that drought conditions have continued to prevail over the watershed of the Tijuana River and confirmed the advice given by Mexican authorities that the city's existing sources of water supply are now insufficient and that, unless such emergency deliveries are made, the city, which now has a population of about 400,000, will suffer serious shortages of water. They considered the advice furnished by the agencies in the United States owning the conveyance facilities required in the United States, that although such works are now being utilized near their capacity to meet the needs in their country, the agencies would be willing, in view of the emergency and under certain conditions, to make the necessary arrangements, for a period not to exceed five years, to deliver certain volumes of water to a point on the international boundary near the City of Tijuana. The Commissioners noted the assurances given by the Mexican Government that it will not request use of the conveyance works in the United States after said five-year period, during which Mexico will provide permanent works necessary to fulfill its water requirements for the City of Tijuana.

The Commissioners then considered that in order to make such emergency deliveries, which require the conveyance of the water a distance of approximately 323 miles (520 kilometers), arrangements need to be made for use of the following named existing conveyance works in the State of California, as shown on the map, Exhibit 1 of this Minute: the diversion works from Lake Havasu above Parker Dam and the Colorado River Aqueduct, owned by the Metropolitan Water District of Southern California; the San Diego Aqueducts owned partly by that District and

<sup>1</sup> Came into force on 22 June 1972, after approval by the two Governments.

<sup>2</sup> United Nations, *Treaty Series*, vol. 3, p. 313.

partly by the San Diego County Water Authority; the Otay Reservoir owned by the City of San Diego, and some of the existing facilities owned by the Otay Municipal Water District. They observed that, in addition, arrangements need to be made for construction by the Otay District of certain new connecting works, to deliver the water to a point on the international boundary near the City of Tijuana.

They noted that as an effect of such emergency deliveries the salinity of waters made available to Mexico in the limitrophe section of the Colorado River pursuant to the 1944 Water Treaty would be increased by from 5 to 10 parts per million. They also considered that an increase in water supply for the City of Tijuana would produce an increase in the discharge of sewage waters to the Pacific Ocean, which might require corrective measures additional to those heretofore taken in order to continue to avoid pollution problems along the beaches in the United States and in Mexico.

After discussion of the foregoing and the conditions under which the above named California agencies would be willing to make emergency deliveries of Colorado River waters for the City of Tijuana, the Commission adopted the following resolution subject to the approval of the two Governments:

1. That the Government of the United States undertake negotiations and endeavor to conclude an agreement with the Metropolitan Water District of Southern California, the San Diego County Water Authority, the City of San Diego, and the Otay Municipal Water District, hereinafter referred to as the California agencies, which would provide that, for a period not to exceed five years, emergency deliveries be made to Mexico, at a point on the international boundary in the vicinity of the Tijuana Airport, of a portion of the waters of the Colorado River allotted to Mexico by Article 10(a) of the Water Treaty of 1944, in accordance with this Minute.

2. That the emergency deliveries be started by the California agencies as soon as practical, in volumes per month no greater than those which can be conveyed with the capacities available in the conveyance works in the United States for such deliveries, as follows:

- (a) That following completion by the Otay District of construction of Phase I of the new connecting works described below in paragraph 5(a) of this resolution, and prior to January 1, 1973, the monthly volumes of the emergency deliveries be no greater than those which can be conveyed with the available capacity in the conveyance works, of approximately 660 acre-feet (814,000 cubic meters); that after January 1, 1973, the annual volumes of the emergency deliveries be no greater than those which can be conveyed with the available capacity in the conveyance works, of approximately 14,500 acre-feet (17,886,000 cubic meters), and the monthly volumes no greater than those indicated in Schedule No. 1 in Exhibit 2 of this Minute.
- (b) That if pursuant to Mexico's request the construction of Phase II of the new connecting works described in paragraph 5(b) of this resolution is carried out by the Otay District, upon their completion, but not before January 1, 1973, the annual volumes of the emergency deliveries be no greater than those which can be conveyed with the available capacity in the conveyance works, of approximately 20,600 acre-feet (25,410,000 cubic meters), and the monthly volumes not exceed those indicated in Schedule No. 2 of Exhibit 2 of this Minute.

That the emergency deliveries described herein may be decreased or suspended temporarily at any time, either in the event of an accident to the conveyance works, or if for other reasons any of the California agencies is temporarily unable to supply in its works the capacity necessary for the conveyance of Mexican waters.

That in the event the California agencies determine that the available capacity of their conveyance works can be increased for the emergency deliveries, they will advise the Commission through the San Diego County Water Authority, and the maximum permissible volumes may be adjusted accordingly.

3. That there be charged as a part of Mexico's allotment of Colorado River waters provided for in Article 10(a) of the 1944 Water Treaty, the daily volumes that are delivered at the international boundary near Tijuana, plus 12 percent of those volumes which would cover the increased conveyance losses which occur in conveying the emergency deliveries of waters from the point of diversion on the Colorado River above Parker Dam to the international boundary near Tijuana over the conveyance losses which would occur if the same volumes of water were delivered in the limitrophe section of the Colorado River.

4. That the requests for emergency deliveries at the international boundary near Tijuana be formulated by the Mexican Section with volumes no larger than those referred to in paragraph 2 of this resolution, and be presented to the United States Section as a part of Mexico's annual schedules of deliveries, by months, of waters of the Colorado River pursuant to the 1944 Water Treaty; that in addition to the total deliveries, the schedules show the deliveries to be made in the limitrophe section of the Colorado River, the emergency deliveries to be made at the international boundary near Tijuana, and the sum of such emergency deliveries at the international boundary plus 12 percent thereof, to reflect the charge against Mexico's allotment pursuant to preceding paragraph 3; that the initial schedule which covers emergency deliveries in 1972, following completion of the construction of Phase I of the new connecting works, be presented thirty days before the beginning of those emergency deliveries; that the succeeding schedules be presented before the beginning of each calendar year, as provided in the Water Treaty of 1944, with the understanding that a separate advance schedule covering only the emergency deliveries be presented thirty days before the beginning of each calendar year. That Mexico have the right, upon thirty days notice in advance to the United States Section, to increase or decrease any of monthly volumes established in the schedule of emergency deliveries at the international boundary near Tijuana subject to:

- (a) The total annual volume of emergency deliveries at the international boundary near Tijuana established in the corresponding annual schedule of deliveries presented by Mexico, not be increased;
- (b) The monthly volumes of emergency deliveries not exceeding the maximums referred to in paragraph 2 of this resolution;
- (c) The limitation of 20 percent in increases or decreases in the total monthly volumes of Colorado River waters delivered to Mexico as provided in Article 15, F, of the 1944 Water Treaty.

5. That Mexico pay the actual costs of construction of the new connecting works, shown on Exhibit 3 of this Minute, required to make the emergency deliveries, including all costs of planning, engineering and surveying, as well as the costs of rights-of-way, as follows:

- (a) That for the construction of Phase I of the new connecting works, which include installation of approximately 5,800 feet (1,768 meters) of asbestos-cement pipe 24 inches (0.61 meters in diameter, with valves, accessories, and measuring devices, as well as new pumping facilities, Mexico establish, within a period of sixty days from the date of approval of this Minute, an irrevocable credit in the amount of \$403,000 (four hundred three thousand dollars), United States cur-

rency, in the name of the San Diego County Water Authority in a bank in the City of El Paso, Texas, to be designated by the United States Commissioner.

- (b) That for the construction of Phase II of the new connecting works, which would include installation of approximately 5,200 feet (1,585 meters) of asbestos-cement pipe 24 inches (0.61 meters) in diameter, with valves, accessories, as well as additional new pumping facilities, if it is requested by Mexico, Mexico establish prior to initiation of construction another irrevocable credit in the amount of \$465,000 (four hundred sixty-five thousand dollars), United States currency, in the name of the San Diego County Water Authority in a bank in the City of El Paso, Texas, to be designated by the United States Commissioner.

That the San Diego County Water Authority make withdrawals against each one of the above credits, subject to the countersignatures of the two Commissioners, as is necessary to carry out construction works of the corresponding phase of the new connecting works, including advance payments as are needed. That at the conclusion of construction of each of the two phases of the new connecting works, the Commission make final settlement of the actual construction costs of each phase and make a liquidation of the corresponding irrevocable credit established for its payment.

6. That Mexico pay the charges for the emergency deliveries which would include:

- (a) The charge for the use of the existing diversion and conveyance works from the Colorado River to the end of the San Diego Aqueduct at Otay Reservoir, at the rate of \$86.13 (eighty-six dollars and thirteen cents), United States currency, per acre-foot (1,233.5 cubic meters) of water delivered at the international boundary near Tijuana;
- (b) The charge for the use of the existing conveyance facilities of Otay Municipal Water District used to make emergency deliveries from the San Diego Aqueduct and for operation and maintenance of new connecting facilities at the rate of \$20.60 (twenty dollars and sixty cents), United States currency, per acre-foot (1,233.5 cubic meters) of water delivered at the international boundary near Tijuana, with the understanding that said charge is subject to change in accordance with changes in the costs of operation and maintenance, and that the annual total charge for this item not be less than \$4,000 (four thousand dollars), United States currency;
- (c) The actual cost of repairs of the new connecting works, including new pumping facilities, estimated at \$2.00 (two dollars), United States currency, per acre-foot (1,233.5 cubic meters) of water delivered at the international boundary near Tijuana;
- (d) The charge for the energy not generated at the hydroelectric plants at Parker Dam and downstream therefrom as a consequence of the diversions of Mexican water from the Colorado River above Parker Dam, at the rate of \$0.38 (thirty-eight cents), United States currency, per acre-foot (1,233.5 cubic meters) of water delivered at the international boundary near Tijuana.

That to pay these charges, Mexico establish separate irrevocable credits in the name of the San Diego County Water Authority, in a bank in the City of El Paso, Texas, to be designated by the United States Commissioner, for each of the calendar years in which the present Minute is in force. That the irrevocable credit corresponding to the year 1972 be established prior to the initiation of the emergency deliveries, and those corresponding to the following calendar years prior to January 1 of each. That the amount for each annual credit be equal to the preliminary estimated total charge of the emergency deliveries requested by Mexico for the corresponding calen-

dar year, determined by the volume, at a rate of \$109.11 (one hundred nine dollars and eleven cents), United States currency, per acre-foot (1,233.5 cubic meters). That the San Diego County Water Authority draw against such credits, with the counter-signature of the two Commissioners, as soon as practical after the end of each month, an amount determined by the volume delivered and the above stated rate per acre-foot (1,233.5 cubic meters). That upon the completion of each calendar year's emergency deliveries, the Commission shall make a final settlement for the charges of said emergency deliveries and make a liquidation of the corresponding irrevocable credit established for its payment.

7. That upon the termination of the period during which this Minute is in effect, for any of the reasons set out in paragraph 9 of this resolution, there be removed the materials and equipment comprising the new connecting works constructed under this Minute, including new pumping facilities, and that they be delivered to Mexico at the international boundary, subject to payment in advance by Mexico of the contract costs for removal and delivery, including the cost of supervision of these works and the estimated cost of restoring Otay Municipal Water District's pumping facilities to the condition which would exist, if the new connecting works had not been constructed, with the understanding that, subject to approval of the Governments of the United States and Mexico, through the Commission, the local authorities in the two countries would have the authority to agree upon and effect a different arrangement for the disposition of such materials and equipment.

8. That it be understood and agreed:

- (a) That deliveries of Mexican waters to the international boundary in the vicinity of the City of Tijuana as contemplated in this Minute would be of an emergency nature, and would be limited to a period which would not exceed five years from the date on which the first emergency deliveries are initiated.
- (b) That neither the Government of Mexico would request that said emergency deliveries continue after the aforementioned five-year period, nor would the California agencies be able to continue them.
- (c) That the obligation of the United States to fulfill the provisions of this Minute, and of State and local agencies of the United States to fulfill the provisions of the agreement referred to in paragraph 1, shall not be the basis for financial responsibility on the part of the United States or such State and local agencies to the Government of Mexico.

9. That this Minute terminate and be no longer effective for any purpose, except as provided in paragraph 7 of this resolution, and except for final payment for emergency deliveries of Colorado River water at the international boundary for Tijuana, and final liquidations of the irrevocable credits, upon the occurrence of any one of the following conditions:

- (a) Upon the expiration of five years from the date of the first emergency delivery pursuant to this Minute;
- (b) Within thirty days after the International Boundary and Water Commission has been informed by the Mexican Government that works required in Mexican territory to fulfill the water requirements of the City of Tijuana have been completed;
- (c) Whenever any of the credits provided for in paragraphs 5 and 6 of this resolution have not been established by Mexico on the dates indicated for its establishment in the same paragraphs.

10. That considering that the Mexican Government recognizes that as a consequence of the emergency deliveries to which this Minute refers there would be a slight increase in the salinity of the waters made available to Mexico in the limitrophe reach of the Colorado River and that it accepts the responsibility for this increase in salinity, it is hereby understood that for the purpose of comparing salinities recorded in waters made available to Mexico at the northerly boundary during the operation of this Minute with the salinities obtained in former years and those which may be reached in later years, the salinities at the northerly boundary would be adjusted to indicate the salinities which would be obtained if the waters diverted to Mexico at Parker Dam were delivered in the limitrophe reach of the Colorado River at the northerly boundary.

11. That in view of the increase in the water supply for the City of Tijuana there would be a consequent increase in its sewage discharge to the Pacific Ocean at the present discharge site, approximately 5.6 miles (9 kilometers) south of the international boundary, that it also be hereby understood that during the operation of this Minute Mexico would take the additional measures required to continue the prevention of the contamination which such increased discharges might occasion to the beaches of the United States and Mexico.

The Commission agrees that this Minute requires the specific approval of the two Governments.

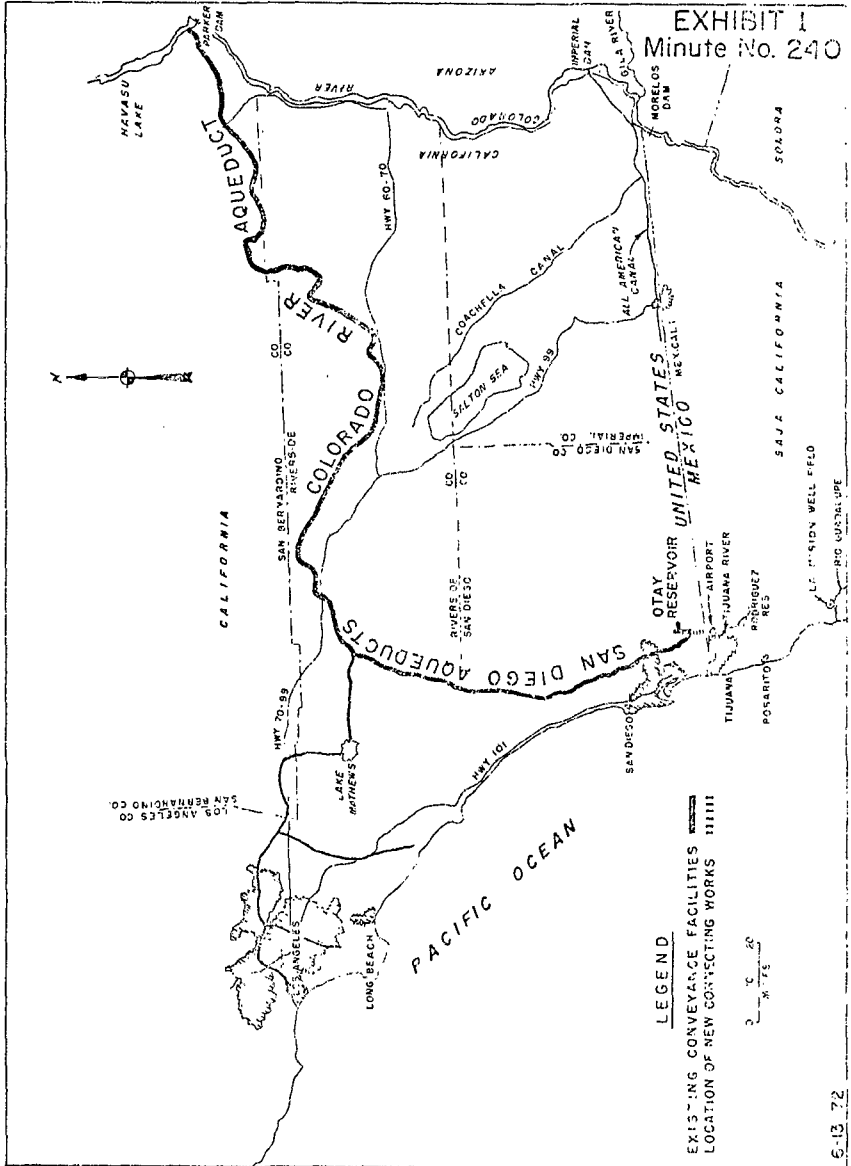
The meeting then adjourned.

J. F. FRIEDKIN  
Commissioner of the United States

D. HERRERA J.  
Commissioner of Mexico

FRANK P. FULLERTON  
Acting Secretary of the United States Section

FERNANDO RIVAS S.  
Secretary of the Mexican Section



Treaty No. I16559 (Vol. 1082)

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## EXHIBIT 2

## ESTIMATED AVAILABLE CAPACITIES IN UNITED STATES CONVEYANCE FACILITIES FOR EMERGENCY DELIVERIES TO TIJUANA, BAJA CALIFORNIA, AS MEASURED AT THE BOUNDARY NEAR TIJUANA

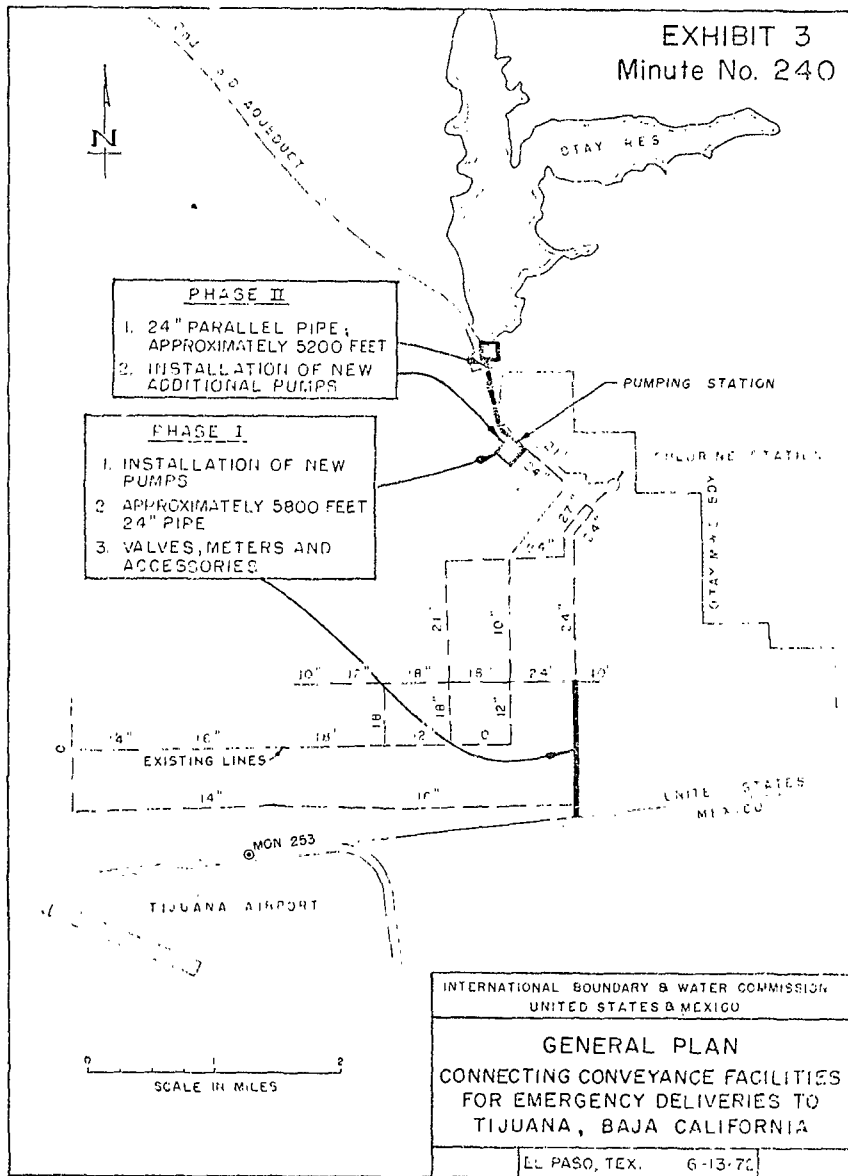
*Schedule No. 1*After Phase I Construction of New Connecting Facilities and After January 1, 1973—  
Approximate Volumes

	<i>In Acre-Feet</i>	<i>In 1000s of cubic meters</i>
January .....	1,700	2,097
February .....	1,500	1,850
March .....	1,700	2,097
April .....	1,400	1,727
May .....	1,200	1,480
June .....	1,100	1,357
July .....	1,000	1,234
August .....	900	1,110
September .....	700	863
October .....	900	1,110
November .....	1,000	1,234
December .....	1,400	1,727
	ANNUAL VOLUME	17,886

*Schedule No. 2*

## After Phase II Construction of New Connecting Facilities—Approximate Volumes

	<i>In Acre-Feet</i>	<i>In 1000s of cubic meters</i>
January .....	2,000	2,467
February .....	1,900	2,344
March .....	2,000	2,467
April .....	1,900	2,344
May .....	1,900	2,344
June .....	1,700	2,097
July .....	1,600	1,973
August .....	1,400	1,727
September .....	1,200	1,480
October .....	1,400	1,727
November .....	1,600	1,973
December .....	2,000	2,467
	ANNUAL VOLUME	20,600
		25,410



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Treaty No. I-16559 (Vol. 1082)

AGREEMENT<sup>1</sup> AMENDING THE AGREEMENT OF 13 JUNE 1972<sup>2</sup> RELATING TO EMERGENCY DELIVERIES OF COLORADO RIVER WATERS FOR USE IN TIJUANA. EFFECTED BY MINUTE NO. 243 OF THE INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

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INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

El Paso, Texas, September 25, 1973

Minute No. 243

AN AMENDMENT TO MINUTE NO. 240<sup>2</sup> RELATING TO EMERGENCY DELIVERIES OF COLORADO RIVER WATER FOR USE IN TIJUANA

The Commission met in the offices of the United States Section in El Paso, Texas, at 10:00 a.m., on September 25, 1973, in accordance with instructions which the two Governments issued to their respective Commissioners, to consider provisions to assure that the emergency delivery of Colorado River water for use in Tijuana, agreed to in Minute No. 240<sup>2</sup> of this Commission, not reduce the minimum rate of delivery of water to Mexico in the limitrophe reach of the Colorado River, stipulated in the Water Treaty of February 3, 1944.<sup>3</sup>

The Commission reviewed the provisions of Minute No. 240 and of the Water Treaty and adopted the following Resolution which, subject to the approval of the two Governments, adds a Point 12 to the Resolution of Minute No. 240 as follows:

12. That Mexico's requests for deliveries of water in the limitrophe reach of the Colorado River be not less than 900 cubic feet (25.5 cubic meters) per second, excluding the flows charged for the emergency deliveries made to the City of Tijuana as part of the volume of Colorado River water allotted to Mexico by the Water Treaty of February 3, 1944.

The Commission agrees that this Minute requires the specific approval of the two Governments, inasmuch as it is an amendment to Minute No. 240, which required the specific approval of the two Governments.

The meeting then adjourned.

J. F. FRIEDKIN  
Commissioner of the United States

D. HERRERA J.  
Commissioner of Mexico

F. H. SACKSTEDER Jr.  
Secretary of the United States Section

FERNANDO RIVAS S.  
Secretary of the Mexican Section

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<sup>1</sup> Came into force on 24 October 1973, after approval by the two Governments.

<sup>2</sup> See p. 120 of this volume.

<sup>3</sup> United Nations, *Treaty Series*, vol. 3, p. 313.

AGREEMENT<sup>1</sup> AMENDING THE AGREEMENT OF 13 JUNE 1972<sup>2</sup> RELATING TO EMERGENCY DELIVERIES OF COLORADO RIVER WATERS FOR USE IN TIJUANA, AS AMENDED<sup>3</sup>. EFFECTED BY MINUTE NO. 245 OF THE INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

El Paso, Texas, May 15, 1974

Minute No. 245

ADDITIONS AND MODIFICATIONS TO MINUTE NO. 240<sup>2</sup> ENTITLED "EMERGENCY DELIVERIES OF COLORADO RIVER WATER FOR USE IN TIJUANA"

The Commission met in the offices of the United States Section in El Paso, Texas, on May 15, 1974, at 2:00 o'clock, to recommend certain additions and modifications to Minute No. 240 entitled "Emergency Deliveries of Colorado River Water for Use in Tijuana", of June 13, 1972:<sup>2</sup>

The United States Commissioner referred to the energy problem in the United States and the resultant shortages in electrical energy in the southern part of the State of California, which create difficulties for the Metropolitan Water District of Southern California to continue the required pumping for the emergency deliveries of Colorado River waters for use in the City of Tijuana, Baja California, provided for in Minute No. 240.

The Commissioners reviewed the feasibility of Mexico furnishing to the United States at the international boundary line near San Luis, Arizona, and San Luis, R.C., Sonora, the electrical energy necessary to continue the emergency delivery of water at the boundary line near the City of Tijuana, currently estimated at approximately 10,500 acre-feet (13,000,000 cubic meters) per year. They noted that the energy which would be required for transfer at the international boundary near San Luis amounts to 2,307 KWH per acre-foot (1,233.5 cubic meters) of water delivered at the international boundary near Tijuana which includes 2,000 KWH per acre-foot pumped, plus 60 KWH (3 percent) for power transmission losses from the point of transfer to the point of replacement of the energy, plus 247 KWH (12 percent of 2,060) for the pumping of the additional water necessary to be diverted from the Colorado River to cover the conveyance losses of the water delivered to Tijuana. They also noted that the annual volume of water delivered to Tijuana may vary, subject to the provisions of Minute No. 240 and to the limitation of the facilities for the transfer and receiving of electrical energy at the boundary, presently about 24,200,000 KWH annually.

<sup>1</sup> Came into force on 28 June 1974, after approval by the two Governments.

<sup>2</sup> See p. 120 of this volume.

<sup>3</sup> See p. 138 of this volume.

They recognized that, by Mexico furnishing the electrical energy needed by the Metropolitan Water District, there would be a reduction in the charge to Mexico for the deliveries of water for Tijuana of \$19.00 (nineteen dollars), United States currency, per acre-foot (1,233.5 cubic meters) of water delivered at the international boundary. They also observed that the transfer of electrical energy would require the installation of certain connection and regulation facilities in the electrical network in the Yuma area owned by the United States Bureau of Reclamation, which is operated and maintained by the Yuma County Water Users' Association, and that contractual agreements would have to be concluded to make the installation and for the use of the said electrical network.

The cost of installation and removal upon the termination of Minute No. 240 is estimated at \$20,000 (twenty thousand dollars), United States currency, approximately, and the cost for the use, operation and maintenance of the electrical network in the United States is calculated at \$2.91 (two and 91/100 dollars), United States currency, per acre-foot (1,233.5 cubic meters) of water delivered to Tijuana. They further noted the need for Mexico to provide assurances that it would make reimbursement for damages to the electrical network in the United States which might result from the transfer of electrical energy.

After considering the foregoing, the Commissioners adopted the following Resolution, subject to the approval of the two Governments:

1. That the Government of the United States undertake negotiations and endeavor to conclude the necessary agreements with the Metropolitan Water District of Southern California, the United States Bureau of Reclamation, and the Yuma County Water Users' Association, which would provide that, for the remainder of the life of Minute No. 240, Mexico would transfer to the United States Bureau of Reclamation for its transfer to the Metropolitan Water District of Southern California the electrical energy necessary to pump the water for the emergency deliveries to Tijuana, Baja California, pursuant to Minute No. 240, subject to the limitations of the facilities for transfer and receiving of electrical energy at the boundary of approximately 24,200,000 KWH annually.

2. That for the installation of the required connection and regulation facilities, owned by the United States Bureau of Reclamation, in the electrical network in the Yuma area for the transfer from Mexico to the United States of the electrical energy required to pump the waters of the Colorado River delivered to Mexico at the international boundary near Tijuana, and for the subsequent removal of the installed facilities, Mexico shall establish within a period of 30 days from the date of approval of this Minute an irrevocable credit in the amount of \$20,000 (twenty thousand dollars), United States currency, in the name of the San Diego County Water Authority in a bank in the City of El Paso, Texas, to be designated by the United States Commissioner.

3. That the San Diego County Water Authority make withdrawals against the said credit, with the countersignatures of the two Commissioners, for advances to the Bureau of Reclamation, as necessary to install the connection and regulation facilities referred to in point 2 of this Resolution. That upon completion of the installation and subsequent removal of the facilities which belong to the United States Bureau of Reclamation, the Commission make final settlement of the actual installation and removal costs and liquidate the irrevocable credit established for its payment.

4. That beginning on the date of initiation of Mexico's electrical energy supply to the United States, Minute No. 240 be modified as follows:

- (a) The text of subparagraph (a) of point 6 is substituted for by the following:
- “The charge for the use of the existing water diversion and conveyance works from the Colorado River to the end of the San Diego Aqueduct at Otay Reservoir, at the rate of \$67.13 (sixty-seven and 13/100 dollars), United States currency, per acre-foot (1,233.5 cubic meters) of water delivered at the international boundary near Tijuana.”
- (b) A new subparagraph (e) is added to point 6 as follows:
- “The charge for the use of certain electrical transmission facilities of the United States Bureau of Reclamation and for the operation and maintenance of a part of those facilities by the Yuma County Water Users' Association, at the rate of \$2.91 (two and 91/100 dollars), United States currency, per acre-foot (1,233.5 cubic meters) of water delivered at the international boundary near Tijuana.”
- (c) The text of the final paragraph of point 6 is substituted for by the following:
- “That, to pay these charges, Mexico establish separate irrevocable credits payable to the San Diego County Water Authority, in a bank in the City of El Paso, Texas, to be designated by the United States Commissioner, for each of the calendar years in which the present Minute is in force. That the irrevocable credit established for the year 1974 not be modified, and those corresponding to the following calendar years be established prior to January 1 of each year. That the amount for each annual credit be equal to the preliminary estimated total charge of the emergency deliveries requested by Mexico for the corresponding calendar year, determined by the volume, at a rate of \$93.02 (ninety-three and 02/100 dollars), United States currency, per acre-foot (1,233.5 cubic meters). That the San Diego County Water Authority draw against such credits, with the countersignature of the two Commissioners, as soon as practical after the end of each month, an amount determined by the volume delivered and the above established rate per acre-foot (1,233.5 cubic meters). That upon the completion of each calendar year's emergency deliveries, the Commission shall make a final settlement for the charges of said emergency deliveries and liquidate the corresponding irrevocable credit established for its payment.”
- (d) A new subparagraph (d) is added to point 8 as follows:
- “That the Government of Mexico agrees to pay to the United States the value of the damages to the electrical distribution system which could occur because of the transfer of electrical energy from Mexico.”

5. That all the provisions of Minute No. 240 which are not specifically amended by the provisions of this Minute shall remain valid and in full force until the expiration of the said Minute No. 240 in accordance with the provisions of point 9 of its Resolution.

6. That Mexico begin the delivery of energy to the United States at a point on the boundary near San Luis, Arizona, and San Luis, R.C., Sonora, within the five days following notification by the United States, in writing, through the Commission, that the necessary agreements have been reached with the United States agencies and that the installation of the connection and regulation facilities has been completed.

7. That Mexico deliver the electrical energy at a point on the boundary near San Luis, Arizona, and San Luis, R.C., Sonora, to the electrical network in the

Yuma area in the United States at a nominal voltage of 34.5 KV and in the monthly amounts of 2,000,000 KWH approximately, until it is determined by the Commission that for each calendar year, or lesser period as agreed upon, the annual quantity of electrical energy received corresponds to the volume of Colorado River water scheduled to be delivered at the international boundary near Tijuana in that period, calculated at the rate of 2,307 KWH per acre-foot (1,233.5 cubic meters). Adjustments for the over- or under-delivery of electrical energy with respect to the volumes of Colorado River water delivered at the international boundary near Tijuana, shall be made as soon as practical, as determined by the Commission.

8. That the monthly quantities of energy delivered to the United States be determined by meter readings made at the boundary by representatives of the Commission at the end of each month.

9. That temporary suspensions of the transfer of energy due to short-term system emergencies may be required by either country, and in such cases advance notice to system operators in the other country will be given when possible. That if experience demonstrates that the electrical systems of the two countries are not compatible, and that irreparable damages may be caused either country, as determined by either Commissioner for his country, the transmission of electrical energy from Mexico at San Luis may be permanently discontinued, with the proviso that emergency deliveries of Colorado River water to the international boundary near Tijuana shall be continued in accordance with the provisions of Minute No. 240 as signed June 13, 1972, exclusive of the amendments herein.

The Commission agrees that this Minute requires the specific approval of the two Governments.

The meeting then adjourned.

J. F. FRIEDKIN  
Commissioner of the United States

D. HERRERA J.  
Commissioner of Mexico

F. H. SACKSTEDER Jr.  
Secretary of the United States Section

FERNANDO RIVAS S.  
Secretary of the Mexican Section

AGREEMENT<sup>1</sup> AMENDING THE AGREEMENT OF 13 JUNE 1972,<sup>2</sup>  
RELATING TO EMERGENCY DELIVERIES OF COLORADO  
RIVER WATERS FOR USE IN TIJUANA, AS AMENDED.<sup>3</sup> EFFECT-  
ED BY MINUTE NO. 252 OF THE INTERNATIONAL BOUNDARY  
AND WATER COMMISSION, UNITED STATES AND MEXICO

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INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

Ciudad Juárez, Chihuahua, August 31, 1976

Minute No. 252

AN AMENDMENT TO MINUTES NOS. 240<sup>2</sup> AND 245<sup>4</sup> RELATING TO EMER-  
GENCY DELIVERIES OF COLORADO RIVER WATERS FOR USE IN  
TIJUANA

The Commission met in the offices of the Mexican Section in Ciudad Juárez, Chihuahua, at 10:00 A.M. on August 31, 1976, to consider the proposal by authorities of the State of California for payment by Mexico of a charge for the treatment of the waters of the Colorado River which are delivered for use in the City of Tijuana, pursuant to Minutes Nos. 240 and 245.

The Commission reviewed the advice of the California authorities that, to meet United States health standards for potable waters, a plant will soon be completed in California for treatment of the waters of the Colorado River for the southern part of San Diego County which include waters for emergency delivery to Tijuana. The Commissioners noted that the treatment of the waters will be complete, including coagulation, sedimentation, filtration and chlorination.

The two Commissioners considered the proposal of the California authorities that, for the treatment of the water, Mexico pay a charge per acre-foot (1,233.5 cubic meters) of water which is delivered to Tijuana equal to that which will be paid by United States users in San Diego County; this charge would be \$13.00 (thirteen dollars 00/100) United States currency per acre-foot (1,233.5 cubic meters), beginning with the deliveries of treated water to Tijuana about October 1, 1976, and would increase to \$17.00 (seventeen dollars 00/100) United States currency per acre-foot (1,233.5 cubic meters) effective July 1, 1977. This charge would be in addition to the charges to Mexico for the emergency deliveries to Tijuana established in Point 6 of the Resolution of Minute No. 240 and modified by Point 4 of the Resolution of Minute No. 245.

The Mexican Commissioner advised that the competent authorities of his Government agree to pay this additional charge.

The Commissioners expressed accord that, inasmuch as a charge for this purpose is not provided for in Minutes Nos. 240 and 245, the present amending Minute is required.

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<sup>1</sup> Came into force on 29 September 1976, after approval by the two Governments.

<sup>2</sup> See p. 120 of this volume.

<sup>3</sup> See pp. 138 and 140 of this volume.

<sup>4</sup> See p. 140 of this volume.



The Commission then adopted the following Resolution:

1. That in addition to the charges to Mexico for the emergency deliveries to Tijuana, established in Point 6 of the Resolution of Minute No. 240 and modified by Point 4 of the Resolution of Minute No. 245, Mexico pay a charge for the treatment of the water which is delivered to Mexico at the international boundary near Tijuana of \$13.00 (thirteen dollars 00/100), United States currency per acre-foot (1,233.5 cubic meters) beginning with the deliveries of treated waters to Tijuana about October 1, 1976, and of \$17.00 (seventeen dollars 00/100) United States currency per acre-foot (1,233.5 cubic meters) beginning July 1, 1977.

2. That Mexico adjust the requests for the deliveries of water at the international boundary near Tijuana in the present year of 1976, so that the irrevocable credit already established by Mexico to pay the charges of the deliveries of 1976 will be sufficient to pay for the total charges for said deliveries, including the charge for the treatment of the water described in Point 1 of this Resolution; and that the irrevocable credit that Mexico establishes to pay the charges of the deliveries of 1977 be sufficient to pay the total charges for said deliveries, including the charge for the treatment of the water described in Point 1 of the present Resolution.

3. The Commission agrees that this Minute requires the specific approval of the two Governments, inasmuch as it is an amendment to Minute No. 240 which required the specific approval of the two Governments.

The meeting then adjourned.

J. F. FRIEDKIN  
Commissioner of the United States

D. HERRERA J.  
Commissioner of Mexico

WM. H. MILLS  
Secretary of the United States Section

FERNANDO RIVAS S.  
Secretary of the Mexican Section

AGREEMENT<sup>1</sup> EXTENDING THE AGREEMENT OF 13 JUNE 1972<sup>2</sup> RELATING TO EMERGENCY DELIVERIES OF COLORADO RIVER WATERS FOR USE IN TIJUANA, AS AMENDED<sup>3</sup>. EFFECTED BY MINUTE NO. 256 OF THE INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

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INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

Ciudad Juárez, Chihuahua, February 22, 1977

Minute No. 256

EXTENSION OF MINUTES NOS. 240,<sup>2</sup> 243,<sup>4</sup> 245<sup>5</sup> AND 252<sup>6</sup> REGARDING EMERGENCY DELIVERIES OF COLORADO RIVER WATERS FOR USE IN TIJUANA

The Commission met in the offices of the Mexican Section in Ciudad Juárez, Chihuahua, at 10:00 A.M. on February 22, 1977, to consider the need to extend for one year the emergency deliveries by the United States to Mexico of a portion of the waters of the Colorado River allotted to Mexico by the 1944 Water Treaty,<sup>7</sup> at a point on the international boundary near the City of Tijuana, Baja California Norte, Mexico, pursuant to Minutes Nos. 240, 243, 245 and 252, which provide that those deliveries be made for a period of five years which would terminate August 14, 1977.

The Commission noted that Mexico is actively constructing permanent works to supply water to the City of Tijuana, which consist of an aqueduct of 141 cubic feet (four cubic meters) per second capacity and 78.3 miles (126 km) long, to carry the waters from the westernmost part of the Mexicali Valley to a treatment plant located 8.7 miles (14 km) east of Tijuana. Forming part of the aqueduct are six pumping plants each of 70.6 cubic feet (two cubic meters) per second, initial capacity, to lift the water 3,770 feet (1,150 meters), a tunnel 2.4 miles (3.8 km) long and another 4.2 miles (6.8 km) long, and a dam to form a reservoir of 27,560 acre-feet (34 million cubic meters) capacity, to store waters pumped, which would be used during emergencies which may occur in the pumping plants and in the part of the aqueduct located upstream from the dam.

The two Commissioners considered the progress of the construction of the permanent works to supply water to Tijuana which they observed on a visit in July 1976 to the site of the works, and the information furnished to them during the visit concerning the measures that Mexico is taking so that the operation of the works may begin in July 1977. They agreed that, in spite of those measures, there is a possibility that the completion of the works may be delayed by difficulties inherent in the excavation and lining of the 4.2 miles (6.8 km) of tunnel and in the manufacture, transporta-

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<sup>1</sup> Came into force on 15 July 1977, after approval by the two Governments.

<sup>2</sup> See p. 120 of this volume.

<sup>3</sup> See pp. 138, 140 and 148 of this volume.

<sup>4</sup> See p. 138 of this volume.

<sup>5</sup> See p. 140 of this volume.

<sup>6</sup> See p. 148 of this volume.

<sup>7</sup> United Nations, *Treaty Series*, vol. 3, p. 313.

tion and installation of the equipment necessary for the initial pumping of 70.6 cubic feet (2 cubic meters) per second.

The Commission considered that, if the completion of the permanent works should be delayed until after termination of the five-year period for the deliveries of water to Tijuana provided for in Minute No. 240, Mexico would have to begin strict rationing of potable water in the City of Tijuana, which would have a grave economic impact on its inhabitants and would risk the health of that community and neighboring U.S. communities. The Commission therefore considered that it would be in the interest of the two countries to extend for one year the period of deliveries stated in Minute No. 240.

The Commission then considered the information provided by the United States Commissioner that the agencies of his country that own and operate the hydraulic facilities used to make the emergency deliveries of Colorado River waters to Mexico are willing and able to extend the period of said deliveries for one year, until August 14, 1978, under the conditions established in Minutes Nos. 240, 243, 245 and 252, provided that Mexico actively continue the construction of the permanent works for the supply of potable water for the City of Tijuana to put them into operation as soon as possible, and with the following further conditions:

- a) In the event that, during the one-year extension, it is not practical to continue the transfer from Mexico to the United States of the electrical energy required to pump the waters of the Colorado River which are delivered to Mexico at the international boundary near Tijuana, as provided for in Minute No. 245, Mexico will suspend that transfer and will pay the additional charge for the energy required for the same purpose.
- b) During the one-year extension, Mexico will pay increases in the charge for treatment of waters which are delivered to Mexico at the international boundary near Tijuana, equal to increases imposed by agencies of the United States on water users in San Diego County, over the charge of \$17.00 per acre-foot, which will begin July 1, 1977, in accordance with Minute No. 252.

Based on the foregoing considerations, the Commission adopted the following Resolution:

1. That the emergency deliveries by the United States to Mexico of a portion of the waters of the Colorado River allotted to Mexico by the 1944 Water Treaty at a point on the international boundary near the City of Tijuana, Baja California Norte, pursuant to Minutes Nos. 240, 243, 245 and 252, be extended for one year, until August 14, 1978, with the additional conditions stated in preceding paragraphs *a*) and *b*).

2. That Mexico actively pursue the construction of the permanent works to supply potable water to the City of Tijuana, with the objective of putting them in operation as soon as possible.

3. That this Minute requires the specific approval of the two Governments.

The meeting was adjourned.

J. F. FRIEDKIN  
Commissioner of the United States

D. HERRERA J.  
Commissioner of Mexico

WM. H. MILLS  
Secretary of the United States Section

LORENZO PADILLA S. P.  
Secretary of the Mexican Section