

# A U.S./MEXICO PARTNERSHIP (EARLY/MID 1990's)

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## WORKING TOWARDS PROBLEM SOLUTION

On December 16, 1993, Imperial County petitioned U.S. EPA as follows:

*"After decades of neglect and with significant growth in population and industrial facilities projected for Mexicali, Mexico, Imperial County feels it must initiate action to focus the federal government's attention on the New River. Accordingly, Imperial County, California petitions Administrator Browner, under Section 21 of the Toxic Substances Control Act, 15 U.S.C. Sections 2601, et seq., to issue a rule requiring testing of the chemical substances present in the New River to determine the levels of these chemicals and their effects on the health of the predominantly poor Hispanic population of Imperial County. Imperial County also requests that the Environmental Protection Agency ("EPA") take additional action once it has determined the risks posed by the New River. Imperial County also petitions Administrator Satcher, under Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S. C. Sections 9601, et seq., to conduct a comprehensive health assessment of the New River...Imperial County understands that the federal government has acknowledged that it is responsible for the remediation of the international pollution problem associated with the New River. Given the ratification of the North American Free Trade Agreement, Imperial County feels the time is ripe for resolution of this international pollution problem. As part of this petition, Imperial County requests Administrator Browner and Administrator Satcher to raise the need for a solution with Mexican officials."*

The following excerpts are from a press release discussing a trip by Imperial County officials to Washington D.C. to generate support for a New River cleanup:

*"The basic purpose of the trip was to call attention to the need to clean up the New River and to provide Imperial County support for a proposal by the State of Baja California to establish a project to rid the New River of pollution due to sewage contamination. The State of Baja California proposed a New River Restoration Project which would rehabilitate Mexicali's existing waste water treatment plant and collection system and provide for the construction of a new water treatment system and pumping station. Baja officials opined that approval of the new facilities will end the flow of untreated sewage into the New River, and that, without such a New River*

sanitation project, the flow of raw sewage water into the United States will increase to 26 million gallons per day by the year 2010. The total project would cost some \$34.0 million; Baja officials were attempting to obtain capital investment funding for some \$19.5 million. The remainder of necessary funding would come from Federal grants, user fees, and private investments...Imperial County officials supported this project and related New River clean-up matters at a number of meetings in Washington D.C. Our congressional delegation representatives indicated they would be willing to work with us to facilitate any kind of legislation that might become necessary to New River clean-up efforts and/or to formalize the project proposed by Baja California. One of the major discussion areas which evolved at these meetings was the subject of cleansing the New River of toxic contamination (as contrasted to sewage pollution). It was generally agreed between both United States and Baja officials that a clean up of the New River would also require programs to attack toxics at the same time we are attacking sewage, such as pretreatment and enforcement programs for industrial wastes and possibly with United States assistance and participation in such programs. The World Bank and Inter-American Development Bank officials made it very clear that ample funds were available for such a project but that a strict requirement would be that such funds would be in the form of loans for which repayment must be assured."

In a letter of January 26, 1994, addressed to U.S. EPA, the Chair of the Imperial County Board of Supervisors stated the following:

*"Imperial County has a major stake in the clean-up of the New River, which flows north from the Mexican State of Baja California into the County. Frankly, we believe that there is a connection between the County's poverty and the fact that the New River remains perhaps the nation's most notorious untreated waterway...Recognizing that a long-term solution will require cross-border cooperation, we also began in October a process of consulting with our colleagues in the State of Baja California. Those consultations resulted in the execution on December 14, 1993, of an unprecedented Memorandum of Understanding between the County and Baja California. As a result of that Memorandum of Understanding, and drawing on its prior work, the Secretariat of Human Settlements and Public Works developed the outlines of a plan for an international project, to be located near the border in Mexico. The project would upgrade the existing Mexicali I project and construct a second plant to be known as Mexicali II. Together these projects are intended to treat the New River to secondary treatment standards at a preliminary estimated capital cost of \$34 million. The IBWC, through Minute 288, has made the clean-up of the New River a high priority, although for reasons that need to be examined carefully, the project scale presented by Baja California officials was much smaller than that envisioned by the IBWC...We and Baja California officials believe that a portion of the cost of*

*this project could be paid by private investors who might build and operate the project under a concession or similar arrangement...We look forward to discussing with you our new working relationship with the State of Baja California on plans which can effectively address the contamination of the New River."*

On February 23, 1994, the Environmental Health Coalition, Committee Ciudadano Pro Restauracion del Canon del Padre, and the Southwest Network for Environmental and Economic Justice jointly petitioned U.S. EPA as follows:

*"The petition requests action on the part of EPA in both the U.S. and Mexico. The petition alleges illegal action on both sides of the border. These alleged actions include illegal import, export, release and dumping as well as violations of Sections 5 and 8 of TSCA<sup>[1]</sup>."*

In a press release dated March 24, 1994, U.S. EPA stated the following:

*"...announced that it has denied a December 1993 petition from Imperial County to issue a test rule under the Toxic Substances Control Act (TSCA) to monitor the New River for chemical pollutants. The New River flows from Mexico into Imperial County at Calexico, California...There's no question that the New River is extremely polluted and that tests are needed to understand the extent of chemical contamination of the river', said Harry Seraydarian, water management division director for the western region. 'However, we plan to fund monitoring by the Colorado River Basin Regional Water Quality Control Board which will give us the monitoring data requested in the petition...After the first round of tests, which will be conducted by the regional board in the fall of 1994, the U.S. EPA will assess the need for additional health effects monitoring and testing. The U.S. EPA finds this approach will be faster and more comprehensive than conducting testing under TSCA...In addition to the monitoring, U.S. EPA is pursuing funding for the New River Sanitation Project, which will treat domestic sewage from Mexicali, Mexico."*

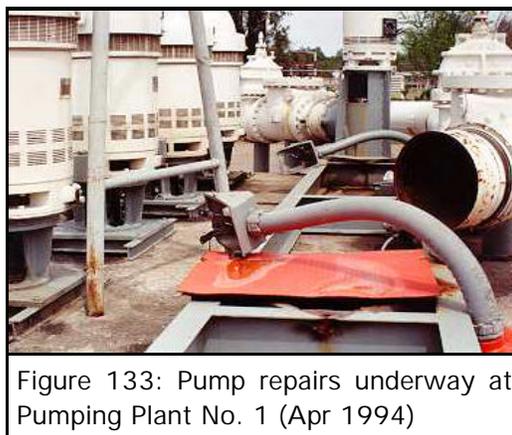


Figure 133: Pump repairs underway at Pumping Plant No. 1 (Apr 1994)

In a briefing packet for a tour of the New River by Senator Boxer, U.S. EPA listed a number of efforts planned to address New River cleanup, some of which included the following:

<sup>1</sup> TSCA is the federal Toxic Substances Control Act.

*"EPA is pursuing specific authorization for border area projects from the 'Hardships Communities' appropriation, which will include funding for the U.S. share of costs to start the New River project described in Minute 288. Once the U.S. government has the funds to devote to the project, further agreements with Mexico can be reached in order to address priority infrastructure needs and complete detailed facility plans. EPA, through the newly created Border Environmental Cooperation Commission (BECC), will also explore alternative infrastructure funding mechanisms currently under development in both the U.S. and Mexican financial communities. The FY95 presidential request includes \$29 million for New River sanitation...EPA has offered and provided technical assistance to IBWC and to Mexico in planning and designing the wastewater collection and treatment facilities for Mexicali. EPA will continue to offer such assistance...The U.S. Section of the IBWC has responded to Mexico's submittal of the proposed wastewater treatment facilities it plans to construct. The U.S. Section has requested that Mexico submit a more detailed facility plan on projects that include U.S. funding...EPA Region 9 is planning to provide financial assistance to RWQCB7 to implement their monitoring proposal for the New River. EPA will ensure that the comprehensive monitoring study incorporates all the parameters of concern mentioned in the Imperial County's Toxic Substance Control Act petition, including pesticides...EPA Region 9 is planning to provide financial assistance for a contaminant modeling study of the New River. The study addresses the fate of organic chemicals as the New River flows from Mexicali, Mexico to the Salton Sea...The U.S. and Mexico will discuss a proposed program for monitoring contaminants of domestic, industrial, and agricultural origin in the Colorado River for implementation beginning in 1994."*



Figure 134: Effluent from Mexicali lagoons (Apr



Figure 135: Mexicali sewage treatment lagoons (Apr 1994)

In a letter, dated June 24, 1994, to Senator Boxer, the Regional Board's Executive Officer made the following request:

*"...the water pollution threat has seriously escalated as a result of failures in Mexicali's sewage system...At present four of the six pumps at Plant No. 1 are inoperative and the remaining two active pumps are in need of repair. Raw sewage is presently being bypassed into the River because of these pump failures, and I'm very concerned that failure of the remaining pumps at Plant No. 1 is imminent and will cause an even greater problem...What is needed is emergency funding for a project to get the pumps at Plant No. 1 back on line. I am requesting any assistance that you can provide in securing this funding. As in the past, project implementation could be accomplished through the International Boundary and Water Commission. As a whole the New River pollution problem is, without question, very severe -- but it certainly has the potential to become much worse."*



Figure 136: Terminus of newly constructed Mexicali II collector at Mexicali Drain (Apr 1994)

In a letter, dated July 1, 1994, to U.S. Secretary of State Christopher, Senator Boxer stated the following concerns and a request for help:

*"I am writing to request that the State Department and the International Boundary and Water Commission (IBWC) take immediate action to stop the flow of raw sewage from Mexicali, Mexico into the United States...I am advised by the State of California's Regional Water Quality Control Board that \$500,000 in emergency funding is needed to end the current emergency. Without immediate action, the remaining pumps could fail, sending additional raw sewage into the New River...The IBWC participated in the funding of the existing treatment plant, and there is a clear federal responsibility to respond to this emergency. I will appreciate the assistance of the State Department in ensuring the speedy implementation of measures to address this emergency."*



Figure 137: Gonzalez-Ortega Pumping Plant (Apr 1994)

In a memorandum dated July 1, 1994, the acting U.S. IBWC Commissioner presented the following concerns to Mexico's IBWC Commissioner:

*"The United States Section is concerned that the pumps and related equipment are allowed to go unrepaired in spite of the understandings for their maintenance. We respectfully request that immediate repairs be undertaken and scheduled preventative maintenance be provided consistent with those understandings...The U.S. Section is concerned that there is a commitment for the characterization of wastewaters, control of industrial wastes, and elimination of untreated discharges to the New River. We are prepared to discuss with you a number of lower cost options that would provide some improvement to the New River quality during the period that financing is defined for the major elements. We would like to discuss low cost improvements to halt Drain 134 discharges. We have provided a proposal by the State of California for technical assistance in improving the Mexicali I lagoons. We want to discuss an opportunity for use of United States funds for water quality monitoring in the New River. We also want to discuss opportunities for cooperative efforts in dealing with industrial wastes controls."*

California Assembly Joint Resolution No. 75 relative to the New River was filed with the Secretary of State on July 5, 1994, and the following was memorialized:

*"...the President and Congress to implement measures, in cooperation with the Republic of Mexico and state and local public officials, to correct the contamination of the New River caused by discharges within the Republic of Mexico."*

In a report covering an August 30, 1994 binational inspection, the Regional Board staff made the following recommendation for an environmental enforcement program in Mexicali:

*"The lack of an enforcement program including implementation of punitive measures for sewage spills is evident and needs to be addressed as a priority item. Some spills that have been observed appear to occur for no good reason--either a low level of concern by operators or an inadequate level of personnel on duty. Additionally, Mexico should implement a requirement for reporting of all spills to a centralized enforcement agency with appropriate penalties administered for non-reporting."*

In an August 31, 1994 letter to Senator Boxer, the Regional Board's Executive Officer stated the following:

*"I am pleased to report that Mexico has recently taken appropriate action to repair most of the major pumps which convey the City's sewage to treatment lagoons... However, other severe problems remain and must be satisfactorily addressed before the New River will begin to approach a minimally acceptable condition. Unfortunately, some of these problems will be very costly to deal with -- especially the direly*

*needed renovation of Mexicali's sewage collection system. The present inadequate and incapacitated system results in routine spills of raw sewage to the river on a daily basis. We are hopeful that sufficient federal funds will be appropriated to help facilitate a comprehensive solution to this long-standing problem."*



Figure 138



Figure 139

Figures 138 and 139: Pipe corrosion at Pumping Plant No.1A (Aug 1994)

On September 21, 1994, agencies within the United States and Mexico signed an agreement as follows:

*"Between the Government of the State of Baja California, acting through the Comision Estatal de Servicios Publicos de Mexicali (CESPM) (the 'Grantee'), and the Government of the United States of America, acting through the U.S. Trade and Development Agency ('TDA'). TDA agrees to provide the Grantee under the terms of this agreement 56,000 U.S. Dollars (the 'Grant Agreement') to fund the cost of services required for a technical assistance consultancy on the proposed Mexicali I and Mexicali II wastewater treatment plant project."*

In a letter of November 5, 1994, to the Regional Board's Executive Officer, Senator Boxer reported the following:

*"You will be pleased to know that the Conference Report on Appropriations for Departments of Veterans Affairs, Housing and Urban Development, and Independent Agencies allocated the amount of \$10 million for the construction of cleanup facilities in fiscal year 1995. Please be assured that I will continue to monitor the progress of the cleanup projects in the New River."*



Figure 140: Bypassing of raw sewage from South Collector (Apr 1994)



Figure 141: Bypass of raw sewage from Pumping Plant No. 1 (Aug 1994)



Figure 142: Bypass of raw sewage at Av. Reforma crossing from east bank (Aug 1994)



Figure 143: Bypass of raw sewage from Gonzalez-Ortega (Aug 1994)

In a February 8, 1995, letter from the State Board Vice-Chair to U.S. IBWC Commissioner Bernal<sup>1</sup>, the following was expressed:

<sup>1</sup> John Bernal has served as U.S. IBWC Commissioner since July 14, 1994.



*“On October 20, 1994, at the joint United States and Mexico meeting of the International Boundary and Water Commission, representatives from Mexico proposed to divert existing and future Mexicali wastewater out of the New River Basin. This proposal is consistent with previous State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB) staff recommendations and with Treaty Minute 288...There will be slight negative impacts to Salton Sea salinity and wildlife if the diversion occurs. This impact would be offset, however, by reduced flooding adjacent to the Salton Sea, public health protection to residents of the Imperial Valley, and water quality improvements in the New River and the Salton Sea...Considering the benefits which would result, any effort by Mexico to divert wastewater should be encouraged.”*



Figure 144: The bacteria slime growing on the substrate is evidence of the extremely polluted condition of the Mexicali Drain (Aug 1994)



Figure 145: Influent to Gonzalez-Ortega treatment facility (Aug 1994)



Figure 146: Mexicali Drain near confluence with New River (Aug 1994)



Figure 147: A primary treatment lagoon drained to repair distribution system (Aug 1994)



Figure 148: Development in upper Mexicali Drain watershed (Oct 1994)



Figure 149: Fabrica de Papel de S.F., a paper recycling plant (Oct 1994)



Figure 150: Sludge disposal at Fabrica de Papel de S.F. plant (Oct 1994)



Figure 151: Siderurgica California, a steel recycling plant (Oct 1994)



Figure 152: Discharge from Siderurgica California (Oct 1994)



Figure 153: Maseca, a food processing plant (Oct 1994)



Figure 154: Discharge from Maseca (Oct 1994)

Following an inspection of the major pumping stations for Mexicali's sewage, State Board staff reported the following:

*"My overall assessment of the three pump stations is a mixture of positive and negative impressions. On the positive side are the simplicity of design and operation and the standby pumping capacity which provides a degree of extra reliability. The greatest problems are severe corrosion, the excessive pressure surges noted at P.S. 1A, and possible misapplication of pumps and materials."*



Figure 155: Cleanout of one of Mexicali's sewage treatment lagoons (Nov 1994)



Figure 156: Sewer cleanout underway at Av. Reforma (Nov 1994)

Following a February 14, 1995 binational inspection in Mexicali, a registered Regional Board staff engineer after a first-time Mexicali inspection reported the following:

*"The problems noted during this inspection constitute an environmental nightmare. It appears that there is no effective and consistent plan to cleanup and remediate the situation in order to prevent the direct discharge of pollutants into the New River. I was very pleased with the enthusiasm of the Mexican engineers who accompanied us in this inspection and look forward to working with them in the future to solve this problem. The following items should be implemented:*

- "1. An aerial survey of the New River watershed should be conducted in order to provide us with a comprehensive look of all existing and potential sources of pollutants.*



Figure 157: Repairs underway at Gonzalez-Ortega pumping station (Feb 1995)



- "2. An industrial survey of all industrial entities doing business in the City. This should include sampling all wastewater generated at such facilities.
- "3. A survey of all housing developments to evaluate existing sewer conditions. We need to accurately estimate the volume of wastewater generated in the City and disposal practices.
- "4. A workplan should be prepared to eliminate all discharges described in this report, and others which may be discovered as part of the above described surveys.
- "5. A storm water runoff control facilities plan needs to be designed and implemented. This is a major problem which was noted during this inspection.
- "6. The treatment works including the collection system are in obvious need of repair.
- "7. A bi-weekly inspection frequency is recommended for the above location until the problem is corrected."



Figure 158: An opaque blue discharge from the Quipac facility (Feb 1995)

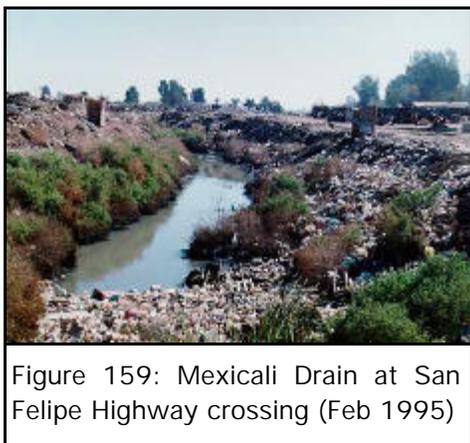


Figure 159: Mexicali Drain at San Felipe Highway crossing (Feb 1995)

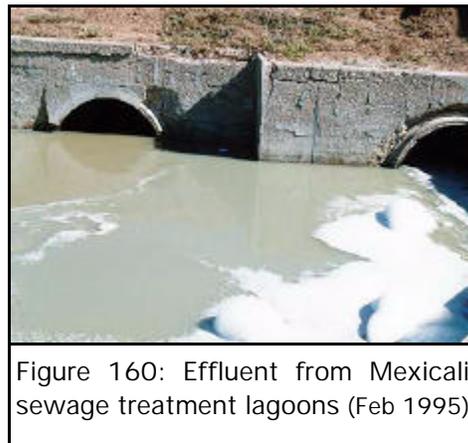


Figure 160: Effluent from Mexicali sewage treatment lagoons (Feb 1995)

In a March 3, 1995 letter to U.S. EPA, the Regional Board Chair expressed the following:

*"We understand that U.S. EPA has approximately \$37 M available to address sanitation problems along the Mexican border (Mexicali and Nogales particularly), but that it still remains unclear whether the funds are restricted to planning or may also be used for project implementation.*

*"Our strong belief is that exclusive use of these funds for strictly planning purposes is ill-advised and unnecessary at this point. Mexico recently completed a facilities plan specifying sewage collection and treatment projects that need to be implemented as soon as possible to abate the New River pollution problem. After reviewing the document, we found it to be basically an impressive and thorough plan, and believe that with appropriate United States oversight many of the recommended projects are now ready for immediate implementation.*

*"I urge your immediate attention toward expediting implementation of recommended projects in the Mexicali area. After many years of gross pollution entering the United States from Mexico, we owe the public some positive and expedient results-not merely more studies and reports."*

On the above same topic, Imperial County went on record as follows:

*"It is Imperial County's view that it is critical to make a commitment to the Mexico Section of the IBWC to financially participate in at least some 'quick fix' projects that are relevant to the long term process and can be immediately implemented."*

After reviewing Mexico's Facility Plan for Wastewater Collection and Treatment in the Mexicali Area, Regional Board staff made the following recommendations to U.S. IBWC:

*"After reviewing the subject plan which Mexico presented to us at the binational meeting on February 24, 1995, we are generally impressed by the scope and detail in the document,*



Figure 161: Outhouse discharging to Mexicali Drain (Feb 1995)



Figure 162: Raw sewage discharge from Mexicali II Collector to Mexicali Drain (Mar 1995)



and believe it provides a satisfactory basis for implementing a number of the specified projects. Those projects which we recommend assisting Mexico in immediately implementing are the following:

- "• Sewer line clean-out of Mexicali I system including purchase of necessary equipment.
- "• Replacement/repair of pumps used in Mexicali I system including correction of corrosion problems.
- "• Provide fencing/security at pumping stations.
- "• Implementation of a maintenance program for the sanitation system.
- "• Construct trunk line and pump station for Mexicali II collection system southeastward beyond present terminus at Mexicali Drain.
- "• Implement improvements to Mexicali I lagoons.

"Further, we strongly recommend that the above projects be implemented with oversight from a United States engineering firm to ensure that the projects are designed and built in accordance with United States engineering standards... We believe that some of the long range projects which Mexico recommended in their Facilities Plan need further review and planning accomplished before implementation. These are listed as follows:

- "• Industrial pretreatment and wastewater survey.
- "• Mexicali II treatment plant design and location.

"To accomplish the long-range planning necessary for the Mexicali II system, we suggest that a qualified engineering consultant be selected utilizing a binational selection panel. Although not recommended by Mexico, we suggest that consideration toward expansion of the Mexicali I lagoons be considered as part of the long range planning/implementation effort...Some other projects which we believe are necessary and ready for immediate implementation but did not appear to be recommended in the Facilities Plan are as follows:

- "• Backup power and pumps for sewage collection system.
- "• Implementation of a plan to eliminate all raw sewage bypassing within the Mexicali I area which is not already addressed by the sewer clean-out project.

- *Providing backflow and surge protection at pumps where necessary (i.e. PP ¾ backflow and PP ¾ surge protection).*
- *Remove sludge deposits from Gonzalez-Ortega lagoons as an interim measure until the phase-out of the plant is complete”.*

A March 21, 1995 memorandum from the U.S. EPA Director of the Office of Wastewater Management, addressed cost-sharing for border pollution control projects as follows:

*“In the context of a multi-year and multi-community program of border project construction and construction assistance, we should expect rough parity between U.S. and Mexican government capital expenditures. This may vary among projects or project phases depending on their perceived national benefits, their genesis, and separate national standards or expectations...In the case of the Nogales and Mexicali projects, the U.S. government, through EPA, is prepared to pay most, and perhaps all, of the cost of preparing facility plans and design work to levels that satisfy U.S. needs. In this way we will achieve the level of cost and quality control which the Administration and Congress expect of projects using U.S. funds. EPA would expect its initial contributions for this purpose to be factored into negotiations with U.S. State and local governments and the Mexican government over shared costs in the construction phase of these projects, and I believe we can and should expect substantial participation by these governments in that phase.”*



Figure 163: Discharge from Hidrogenadora Nacional (Mar 1995)

In a March 28, 1995 letter, U.S. EPA stated:

*“The report of the Appropriations Conference Committee for FY 1995 (House of Representatives Conference Report 103-715, page 40) states that there is available, \$47,500,000 for architectural, engineering and design, and related activities in connection with wastewater facilities in the vicinity of Nogales, AZ, and Mexicali, Mexico, and planning and design of other high priority wastewater facilities in the area of the Mexico border, to control municipal wastewater from Mexico...”*

During a binational two-day conference sponsored by Imperial County and the National Water Research Institute, the following top ten issues were identified by participants as impediments to getting the New River cleaned up in order of priority:



- "1) Securing financing for pollution control works;
- "2) Timeliness of pollution control implementation;
- "3) The need to reach binational agreement on a Facilities Plan to address pollution control;
- "4) Informational needs on the future value of clean water in the area;
- "5) Deficient data characterizing the pollution threat, including pretreatment information and discharge characterization;
- "6) Insufficient resources for staff involvement to satisfactorily address the problem;
- "7) Lack of public concern;
- "8) Lack of public review and input involving international commitments (such as Minute Treaty agreements addressing transborder pollution control);
- "9) Lack of a lead local international agency to address the problem.
- "10) Lack of a response from the United States to the Facilities Plan which Mexico presented on February 24, 1995, addressing New River pollution control."



Figure 164: Effluent from Mexicali sewage treatment lagoons (Apr 1995)

The conference was well represented by parties involved/interested in the River cleanup from the United States and Mexico.

At a July 31, 1995 interagency meeting to discuss New River pollution, the following was reported:

*"Three Mexican agencies (CNA-CESPM-COSAE)<sup>[1]</sup> have prepared a report on problems, deficiencies and proposed improvements to the existing Mexicali wastewater collection and treatment system. The report is 200+ pages and in Spanish. It roughly follows EPA guidelines for required plan elements. Black and Veatch<sup>[2]</sup> pre-*

<sup>1</sup> CNA is the federal National Water Commission. CESPM is the State Office of Public Works responsible for operation and maintenance of the sewage treatment and collection system in Mexicali. COSAE is the Water Utilities Commission for the State of Baja California.

<sup>2</sup> Black and Veatch is an engineering consultant.

*pared a cursory review of the Mexican report through a contract with IID. The Mexicans feel that they have prepared an acceptable facility plan. IBWC is hiring a consultant team to prepare a facilities plan for a project in Mexico. The roles of the IBWC and Mexican agencies in the Mexicali planning project are not yet clearly defined."*



Figure 165: Discharge of raw sewage to New River from storm drain near Pumping Plant No. 2 (Apr 1995)



Figure 166: Mexicali Drain at Highway 2 crossing (Apr 1995)



Figure 167: Discharge from Hidrogenadora Nacional (Apr 1995)



Figure 168: Gonzalez-Ortega sewage treatment lagoons (Apr 1995)



Figure 169: Raw sewage bypass to New River by Pumping Plant No. 2 (Apr 1995)



Figure 170: Raw sewage discharging to New River via storm drain (May 1995)



Figure 171: Mexicali Drain at Highway 2 crossing. Discoloration due to discharge from Hidrogenadora Nacional plant. The discharge to the right is raw sewage (May 1995)



Figure 172: Raw sewage spill to New River (Jun 1995)



Figure 173: Discharge from Quipac facility (Jul 1995)



The following data of concern were reported by the State Board's Toxic Substances Monitoring Program for New River fish collected near the International Boundary<sup>1</sup>:

<u>Date</u>	<u>Species</u>	<u>Total PCB's (ppb)*</u>	<u>Total PCB's(ppb)**</u>	<u>Mercury (ppb)*</u>
11-02-94	Carp	429.	4959.5	0.50
06-16-93	Carp	135.	1562.5	0.51
12-18-91	Carp	176.	3378.1	0.47
07-31-90	Carp	130.	1226.4	0.38
07-20-89	Carp	ND	ND	0.60

\* Fillet (Muscle Tissue)

\*\* Lipid (Fat)

These concentrations of PCB's and mercury are abnormally high, even for a waterway as polluted as the New River.

In an August 2, 1995 letter to U.S. IBWC, U.S. EPA staff emphasized the importance of Operation and Maintenance (O&M) of Mexicali's wastewater treatment works as follows:

*"One of the most important requirements for EPA funding is adequate assurance that the infrastructure funded will be properly operated and maintained. This is a standard component of EPA's construction grant program and will be an important part of BECC certification...Mexico shall submit a manual describing how it will operate and maintain the wastewater infrastructure, including the treatment plant, collection system, and equipment. The manual will include an emergency operating program,*

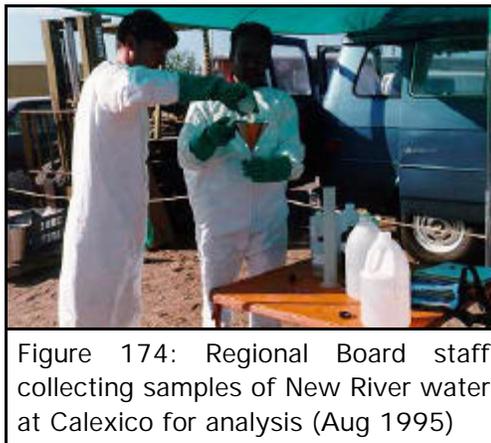


Figure 174: Regional Board staff collecting samples of New River water at Calexico for analysis (Aug 1995)

<sup>1</sup> The presence of fish in the New River in the border area from 1989-94 was a positive sign; prior to and after this period the polluted conditions have apparently been unsuitable even for pollution tolerant species such as carp. A return of fish was reported during mid 1997.

*personnel training, and an adequate budget for funding operating and maintenance costs...Mexico shall operate and maintain the wastewater infrastructure to meet the project performance requirements for the useful life of the system."*

## THE "QUICK FIXES" PROGRAM

On October 25, 1995, the Principal U.S. and Mexico IBWC Engineers signed a joint report regarding construction of immediate need projects and planning of facilities for solving border sanitation problems of the New River. The signed report provided for the following:

*"...we identified 11 immediate need project components within the areas of both Mexicali I and Mexicali II that provide a rapid improvement to the sanitary condition in the city, as well as the water quality of the New River at the international boundary...funds are available to the U.S. Section of the IBWC to cover the cost by the United*



Figure 175: New check valves and manifold installed at Pumping Plant No. 1A (May 1995)

*States of construction of these immediate need projects not to exceed 55 percent of the cost. Mexico, through Baja California, will provide the remaining 45 percent of the cost and will assume the total cost of their operation and maintenance performed in such a manner that...will ensure that the water quality improvements proposed for each of the projects are met...We recommend that for these cost-shared projects between the two countries, the Mexican Section, in the earliest time possible, would provide to the IBWC, for each of the 11 identified projects, the construction plans for review and approval as to their adequacy in meeting the water quality improvements...and the operations and maintenance procedures to be included in an operations and maintenance manual to be developed for the applicable component that addresses routine operations and maintenance as well as emergency procedures. The U.S. Section of the IBWC would have available at a cost charged to the EPA funds, a United States Architectural/Engineering consulting firm that will provide technical support to that Section in the development of projects...We also observe that for the longer term there is a need to explore alternatives in more detail to allow definition of United States and Mexico financial participation in works to be constructed, as well as their operation and maintenance, contemplating facilities planning for those components which in the judgment and request of local authorities need to be submitted for certification by BECC<sup>[1]</sup> for NAD Bank<sup>[2]</sup> financ-*

<sup>1</sup> BECC is the Border Environmental Cooperation Commission established in 1993 for the purpose of evaluating and certifying United States/Mexico border area environmental improvement projects.

<sup>2</sup> NAD Bank is the North American Development Bank which was established with BECC to assist in financing of BECC certified projects.

*ing...Every effort should be made to complete a wastewater facilities plan in a period not to exceed one year, at which time, the results shall be presented to the IBWC, such that the United States may define its financial participation in the sanitation project components, selected by local authorities and CNA... We recommend that for the bilateral coordination work including planning, subject of this report, following the terms of Articles 2 and 24 of the 1944 Water Treaty, the IBWC will designate an engineer for each Section to coordinate a binational technical team<sup>[1]</sup> to oversee the long term facilities planning, construction, operation and maintenance of the works. Those IBWC engineers, with technical advisers from institutes in both countries participating in such team, will coordinate technical meetings with the frequency necessary to oversee the work underway."*

The eleven projects<sup>2</sup> identified were the following:

1. Rehabilitate the North Collector.
2. Replace and extend the Right and Left Bank Collectors with corrosion resistant and larger diameter pipe.
3. Replace Mexicali I subcollectors.
4. Replace collectors in southwest section of Mexicali I.
5. Rehabilitate and replace lift stations.
6. Replace and repair pumps at the pumping stations including abatement of corrosion, back flow and surge protection problems and purchase spare parts.
7. Implement improvements to the Mexicali I lagoons including dredging of the lagoon bottoms and repair diversion structures and works.



Figure 176: Work underway to correct problems at Pumping Plant No. 3 (formerly PP1A) (Aug 1995)

<sup>1</sup> Within the United States, the technical team that was formed to address the New River issue includes representation from U.S. IBWC, U.S. EPA, the Regional Board, the State Board, Imperial County, and Imperial Irrigation District. A New River Policy team was also formed with similar agency representation, but at a higher level.

<sup>2</sup> These are oftentimes referred to as the "quick fix projects."

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8. Acquire and operate additional sewer cleaning equipment and immediately implement a system-wide inspection. This would include cleaning the collection lines and conducting a television inspection for an estimated 120-day period.
9. Remove sludge from the Gonzales-Ortega lagoon.
10. Construct Alamo River diversion weir.
11. Install Flow Meters at Pumping Station 1, 1A, and 2.



Figure 177: Sewer line cleanout for slip pipe installation (Aug 1995)



Figure 178: Replacement of concrete pipe with PVC pipe (Apr 1995)



Figure 179: PVC pipe being delivered for sewer line replacement (Apr 1995)



Figure 180: A sewer cleaning unit provided for use in the Mexicali effort by the U.S. (Apr 1995)



Figure 181: Repairs underway at Pumping Plant No. 1 (Apr 1995)

A draft December, 1995, report entitled Summary of Information Collected from U.S. Parent Companies of Maquiladoras Relating to the New River<sup>1</sup> was summarized as follows:

*"The report summarizes information about the New River and its pollution, EPA's information collection effort, and information collected from U.S. parent companies of maquiladoras in response to both EPA's April 1994 letter and September 1994 subpoena...Based on the releases reported by the U.S. parent companies, these 83 maquiladoras do not appear to be major contributors to industrial pollution in the New River. However, the information contained in the responses was insufficient to permit the agency to independently assess whether the data contained in the responses from the U.S. parent companies are representative of the actual releases of industrial pollutants from the maquiladoras. Further, EPA does not currently possess the data necessary to make such a determination. EPA believes that the continued monitoring of the New River is the most effective way to provide accurate information on the pollutants in the river."*



Figure 182: Drain 134 emptying into New River (Aug 1995)

A report, dated February 28, 1996, prepared by U.S. Department of Health and Human Services to evaluate New River pollution contained the following summation:

*"The New River poses a potential public health hazard because area residents could be exposed to fecal streptococci, and other pathogens through contact with contaminated surface water and foam."*

Recommendations were to:

- *Restrict access to the New River*
- *Advise area residents against collecting and eating organisms from the New River*



Figure 183: Mexicali Drain at Highway 2 (Jan 1995)

<sup>1</sup> U.S. EPA prepared this draft report.

- *Promote coordination and cooperation between the U.S. and Mexican governments to reduce contamination in the New River*"

In February 1996, the City of Calexico and Imperial County adopted Resolutions requesting "support from our local, state, and federal representatives to see that funding is provided to pipe the New River through the City of Calexico".

In a March 27, 1996 report to the Regional Board, the Executive Officer expressed the following:

*"I believe Mexico deserves praise for recent successful efforts to address New River pollution in Mexicali. The desire to clean up the river appears genuine and sincere. Further, the Mayor's office in Mexicali recently announced plans to construct roads paralleling the New River on both banks, construct a parkway, and remove residential development in the floodplain. This implementation would address the illicit dumping along the banks and sewage discharges from bankside residences. Although Mexico has made similar previous promises which remain unfulfilled, we need to give the new administration a fair chance before expressing doubt. My understanding is that the President of Mexico<sup>[1]</sup> has made the New River cleanup a priority issue with the new Mayor of Mexicali<sup>[2]</sup>, and a resource of commitment has been made...Mexico has reported completion of \$515,775 worth of work on water pollution control projects in Mexicali. This effort has led to the elimination, or practical elimination, of raw sewage bypassing at four locations in the City. Most of this effort focused on replacement of collapsed sewer collector lines to prevent sewage bypassing to the City's stormwater drainage system. The Baja California Public Works Department is to be commended for this effort."*

An April 1, 1996 letter from U.S. EPA to the U.S. IBWC Commissioner expressed the following:

*"I just wanted to let you know how pleased I am with the recent progress on the Mexicali wastewater project...I believe that the open discussion and exchange of*



Figure 184: Plans by Mexicali to address cleanup in the New River floodplain include fencing to prevent dumping (Aug 1995)

<sup>1</sup> Ernesto Zedillo

<sup>2</sup> Eugenio Elorduy



information that occurred at the Mexicali technical team meeting was crucial to the significant agreements and understandings reached at the meeting. As you know, I believe that open communication, especially at the technical level, is a vital need for our border projects. I was particularly glad to hear of the important role played by the states of California and Baja California at the meeting. The emerging state-to-state relationship can be a real asset for our project...I recognize that this is a new way of doing business for the IBWC and I appreciate your efforts to make it happen..."



Figure 185



Figure 186

Figures 185 and 186: New sewer line being installed as part of Mexicali II sewage collection system (Oct 1996)

During the week of April 1, 1996, a contract was awarded to CH2M Hill by U.S. IBWC to provide technical assistance on the New River cleanup in Mexicali.

In a May 21, 1996 letter to the U.S. IBWC, the Regional Board's Executive Officer recommended the following:

- *Arrangements need to be established to facilitate communications and logistics between our consultant, CH2M Hill, and CESP 3/4- Mexico's primary project implementation agency.*
- *All agreed upon immediate needs projects should commence as rapidly as possible with primary U.S. oversight provided by CH2M Hill.*

- *An especially high priority item should be implementation of quick-fix improvements to the Mexicali I lagoons.*
- *Facilities planning for the Mexicali II proposal should be continued and brought to completion without delay."*

On June 1, 1996, hundreds of people reportedly held a candlelight gathering near the banks of the New River to protest 50 years of broken promises by governments on both sides of the border to clean up the river.

An August 6, 1996 letter from U.S. EPA to Mexico's Comision Nacional del Agua (CNA) contained the following:

*"...we would look favorably on locating the Mexicali II treatment plant at a site that would facilitate opportunities for reuse of the treated effluent and possible discharge out of the New River watershed...As is generally required for EPA-funded projects, we expect that the U.S. will have a reasonable opportunity to review, prior to construction, the detailed technical plans, specifications, and supporting documentation for each of the projects for which EPA funding or credit is being considered. We expect that the documentation will address the long-term viability of the project, its expansion capability, and the quality of construction. In this way, we can ensure that options which minimize transboundary impacts are preserved."*



Figure 187: Bypass of raw sewage at Pumping Plant No. 2 (Oct 1996)

In an October 4, 1996 letter to the U.S. IBWC Commissioner, the Chair of the Regional Board proposed the following:

*"I believe that an important element is missing in our Minute treaty agreements with Mexico addressing international water quality concerns. That element being an absence of any meaningful punitive assessment if specified water quality standards are not met. For example, Mexico has been complaining about excessive levels of suspended sediment in their Colorado River delivery. We in the United States have been complaining about the serious pollution in some of the north-flowing rivers, such as the New River...First, reasonable standards would be developed and agreed upon. If there were exceedances, an*



Figure 188: Replacement of concrete pipe with steel pipe on the South Collector (Jan 1997)

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*agreed upon schedule would specify monetary penalties which would become due and payable to the affected country.*

*"Implementation of this concept would provide a sorely needed impetus for both the United States and Mexico for meeting standards specified in Minute treaty agreements covering water quality."*

In a February, 1997 report, CH2M Hill reported the following progress on the "quick fix" projects in Mexicali<sup>1</sup>:

<u>Project No.</u>	<u>Percent Complete</u>
1	81
2	99
3	65
4	88
5	75
6	55
7	35
8	100
9	33
10	90
11	80

A March 5, 1997 letter from the Imperial County Health Officer to U.S. IBWC contained the following:

*"As a Public Health Officer for the County of Imperial, I am obligated to write you to officially protest the procedures used by your office to notify the appropriate public officials about the dumping of raw sewage into the New River. County Administrative Officer, Richard Inman received the attached letter from your office, two days after the fact, notifying him that approximately 9 million gallons a day of wastewater flow would be discharged into the New River over the next two weeks. This notification process is unacceptable. I fully understand that the New River, is by its very nature, a public health hazard and that work on the 'quick fixes' in Mexicali might necessitate having to discharge wastewater into the*



Figure 189: New River at International Boundary (Mar 1997)

<sup>1</sup> Refer to pages 6-24 and 6-25 for a description of the quick-fix projects.

*New River. However, the discharge of 9 million gallons of raw sewage per day further contaminates the river and aggravates an already dangerous public health hazard. Such an event can surely be anticipated to allow for appropriate notice to public health officials in Imperial County."*

In a March 11, 1997 letter to the Imperial County Health Officer from U.S. IBWC, the following was conveyed:

*"I assure you that we at the International Boundary and Water Commission, U.S. Section, are working to see that in the near future this public health hazard is eliminated...As you may know, we are working toward improvement of the Mexicali sewer and wastewater treatment systems. On a short term basis, a program of 'quick fixes' is being implemented which has required the recent bypasses of raw wastewater to the New River. This program will still continue for approximately 90 days, and other temporary raw wastewater bypasses to the New River may be necessary. We recognize the need for better coordination with the contractors in Mexico so we can more opportunely advise you and other interested parties of any spills that may be necessary as part of this work effort. We will work to minimize spills and will conduct our notification process in a more timely manner to provide information prior to their occurrence."*

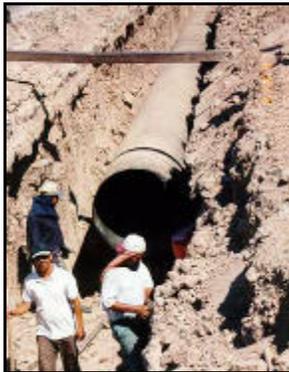


Figure 190: Mexicali II force main installation project underway (Aug 1997)



Figure 191: Pumping Plant No. 1 (Aug 1997)