

# WATER QUALITY STANDARDS (LATE 1970's, MID-1980's)

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## ARGUING FOR THE STANDARDS

In a January 11, 1979 memorandum, William Attwater, Chief Counsel of the State Board, advised Regional Board members that:

*“At your Board meeting of December 13, 1978, you requested a legal review of the possibility of a lawsuit against the United States for failure to abate the pollution of the New River and Alamo River as a result of discharges of waste in Mexico. While the United States has not been effective in solving this pollution problem, I believe that litigation by the State against the United States would be ineffective, time-consuming and expensive. Therefore, I would recommend that such litigation not be requested.”*

A January 15, 1979, letter from the Regional Board Chairman requested that the New River pollution problem be made a part of President Carter’s agenda for the upcoming meeting with President Portillo of Mexico, and that a suggested topic of the meeting “*would be a treatment agreement with Mexico on the quality of water that should come across the Border, and a time schedule to meet that quality, including time schedules for corrections in the event of breakdown.*” The letter was sent to Senators Cranston, Hayakawa, and Craven; Congressman Burgener, Assemblyman Kelley, Secretary of State Vance, and President Carter. Some excerpts from the letter follow:

*“Although Mexico has installed pump stations and stabilization ponds to provide an intermediate level of sewage treatment (when these facilities are operating) prior to the discharge to New River, there are no standby facilities in the event of power outage or other equipment failures, such that in the event of emergency Mexicali discharges all of its sewage directly to New River without treatment. These emergency discharges are the usual,*

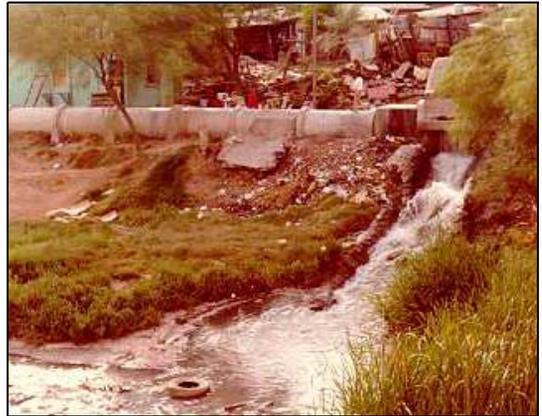


Figure 41: Raw sewage bypass from North Collector to Drain 134 (May 1978)

*rather than the unusual occurrence, and repairs in this regards have always taken at least a year.*

*“The magnitude of the polluttional and contaminating discharges are such that even if Mexico commenced now with all diligence and funding to meet U.S. EPA standards for discharges to the New River, the project would require in excess of a decade.”*

On January 16, 1979, the Imperial County Board of Supervisors adopted a “Resolution Respectfully Urging the President of the United States to Request the Immediate Cleanup of the New and Alamo Rivers During Meetings with the President of the Republic of Mexico.” The Resolution urged the President *“to use his best efforts to provide for permanent solution of this problem by entering into a formal treaty between the United States of America and the Republic of Mexico.”* The Resolution was forwarded to President Carter on January 19, 1979.

On January 17, 1979, the Regional Board adopted Resolution No. 79-34, which requested the State Water Resources Control Board to urge federal action for immediate and permanent correction of the gross pollution and contamination of New River, being caused by Mexican-source discharges. The Resolution stated that the river flow from Mexico *“contains the most polluted and contaminated water of any stream in the United States of America.”* Specifically the Resolution urged that the State Board:

- “1. Urge the President of the United States to make the item of New River water pollution and contamination by Mexicali an important part of the agenda of his forthcoming meeting with the President of the United Mexican States; and urge that the President of the United States impress upon the President of the United Mexican States:
  - “a. The emergency need for permanent correction of this gross pollution and contamination of New River water; and
  - “b. That it is imperative to immediately develop a Minute addition to the United States/Mexican 1944 water treaty, in order to define the quality of waters that should come across the International Boundary, and time schedules to meet that quality, including time schedules in the event of breakdowns.
- “2. Urge President Carter to act in fulfillment of the responsibility and authority delegated to him by Congress under Section 101(c) of the Federal Water Pollution Control Act, to use all of the diplomatic resources at his command to obtain an adequate and permanent correction to this gross pollution and contamination problem; and...that failing definitive action by the President of the United States on the above two resolves, this Regional Board urges that the State Water Resources Control Board consider appropriate legal action against the United States of America for failure to perform these lawful duties...”

During January 1979, there were several significant changes in New River water quality at the International Boundary that are worthy of mention. The hearings and negative publicity on the New River during November and

December 1978, triggered aggressive action in Mexicali. During the first two weeks of January 1979, practically all of Mexicali's sewage was being diverted to the wastewater treatment facilities. New River water quality at the Boundary was better than had been recorded in many years. Fecal coliform levels were averaging about 40,000 MPN/100 ml, still high by federal standards, but indicating a tremendous improvement in New River water quality. The improvements were short-lived, however, as rainstorms overloaded the collection system and raw sewage was again diverted into the New River. Mexican engineers reported that construction of separate storm sewer lines would be necessary to rectify the problem<sup>1</sup>. No date was suggested as to when the correction would be completed. Several days later, the effluent pumps were apparently inoperative, and all the raw sewage in Mexicali was being discharged into the New River. Reportedly, the pumps were to be replaced with a gravity flow line. Shortly thereafter a new problem arose — a leak developed in one of the two pipes which conveys sewage across the New River to Pumping Plant No. 2. During excavation to repair the leak, the headwall was undermined, and it collapsed causing raw sewage from Mexicali's North Collector to be discharged to the river. The correction of this most recent problem was considered a major priority, although repairs would reportedly be completed by the end of April 1979. Testing by Regional Board staff on January 24, 1979, confirmed the presence of considerable raw sewage and industrial wastes in the river.

In a Resolution adopted on January 19, 1979, by the Imperial County Board of Supervisors, it was pointed out that Mexicali and other communities in the State of Baja California were using the New River as a repository for raw sewage, and that the bacteria in the river presented a health hazard to residents and tourists in Imperial County.

On January 31, 1979, a letter from W. Don Maughan, then Acting Chairman of the State Board, requested President Carter to help in solving the New River pollution problem. The letter stated that discussions at the highest level should focus on *"obtaining firm guarantees from the Mexican government as to the water quality of the New River at the point it enters into the United States."*

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<sup>1</sup> This effort was never fully accomplished. Unfortunately, the separate storm sewers that were constructed oftentimes also served as conduits for raw sewage.

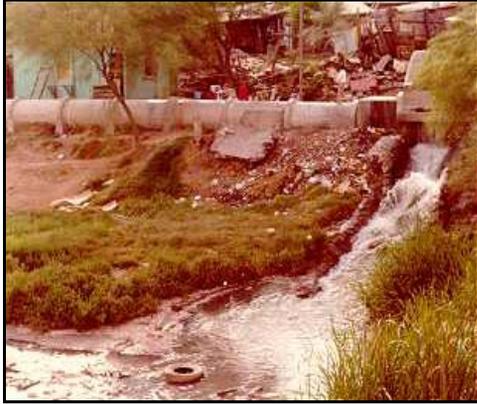


Figure 42



Figure 43

Figures 42 and 43: Effluent from Mexicali's sewage treatment lagoons. The effluent canal was later moved to a point of discharge at the International Boundary (Apr 1978)

A February 2, 1979, letter from U.S. IBWC stated that Mexico gave assurance that *“it will complete repairs and work to connect all of its sewage discharges to its disposal system for treatment prior to discharge into the New River by the end of April and to expand their treatment lagoons at the end of 1979”*.

A February 2, 1979, letter from the U.S. Department of State to the Regional Board Chairman stated that:

*“...the American Ambassador at Mexico City and Commissioner Friedkin have conferred with Mexican officials at high levels of responsibility and have been assured that measures would be taken to provide immediate relief. Many of these measures are already underway, particularly at Mexicali. Secretary Vance will undoubtedly remind President Carter of the existence and seriousness of the problems and the need for a permanent solution. Every practical effort will be made during the presidential visit to advance the two governments toward the permanent correction that we have all sought for so many years.”*

Dr. L. Lee Cottrell, Imperial County Health Department, wrote a letter dated February 9, 1979, to Tim Patterson of the U.S. Department of Justice requesting his help in abating the New River pollution. Some excerpts from the letter are as follows:

*“The City of Mexicali, Baja California, Mexico, uses the New River to discharge their raw sewage. This in terms of volume represents a raw sewage discharge from approximately 800,000 people, in size similar to that of San Diego, California. The City of Mexicali has a sewage system that*

*has not been functioning for several years, and when functioning is totally inadequate for a city of this size. Add to this the manufacturing and rural communities that dump directly into the New River thus bypassing the inadequate treatment plant constitutes an unacceptable hazard to the health and safety of our citizens. Not only the citizens of Imperial County but all travelers and vacationers that pass through our Valley.*

*“Disease-causing bacteria have been isolated and have been identified from water samples taken from the United States’ flow of the New River in the immediate area where it crosses the United States and Mexican Border. We have pending a virus study in connection with the California State Department of Health to isolate and identify disease-causing viruses. The New River constitutes a milieu for the growth, protection, and regeneration of arthropods.<sup>[1]</sup> These vectors have been trapped and the responsible viruses for several types of encephalitis have been found. A constant increase in both the number and types has also been documented.*

*“There can be no justification for waiting until a serious and possibly lethal outbreak of disease occurs before some action is taken to correct this hazard to the health and safety to the United States citizens.”*

In a February 13, 1979 letter, the U.S. EPA assured the State Board that U.S. EPA was very concerned over the New River pollution and was working with the U.S. Department of State and U.S. EPA’s counterpart in Mexico, the Subsecretaria De Mejoramiento Del Ambiente (SMA) to resolve the problem.

In a February 14, 1979 letter, a U.S. Department of State official reported the following concerning the New River pollution problem:

*“We are, of course, very much aware of the problem and are resorting to every practical means to obtain a solution. We have succeeded in persuading the Government of Mexico to undertake urgent remedies, which should provide some relief within a short time. What is needed in addition, however, are continued proper maintenance of the works installed and prevention of future problems as population continues to grow. We have proposed a general agreement to provide these assurances. The International Boundary and Water Commission, an international body, which would be charged under the 1944 Water Treaty to monitor sanitation operations all along the border and make recommendations to prevent the recurrence of such hazards and nuisances, would conclude it.*

*“In assisting the President in preparing for his visit to Mexico, the Secretary will alert the President about the sanitation problems at Mexicali and elsewhere on the border. Our purpose, and I am confident the President’s desire, will be to remove these problems permanently. We have reason to believe that Mexican officials share this wish.”*

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<sup>1</sup> Probably referring to mosquitoes.

Just prior to a meeting of the United States and Mexico Presidents, a Los Angeles Times article reported the following:

*“State Water Resources Board Chairman John Bryson and State Secretary of Resources Huey Johnson said they refrained from sending President Carter a letter asking federal help in halting the flow of Mexican sewage into the Imperial Valley at the request of State Finance Director Richard Silberman. Bryson and Johnson said they drafted such a letter, but did not send it because Silberman told them ‘quiet diplomacy’ was the best approach and Mexican officials had said the problem was being solved. Last Thursday, however, the Assembly voted 76 to 0 to ask the President to deal directly with Mexican President Lopez Portillo on the issue.”*

On February 16, 1979, a joint communiqué from President Jimmy Carter and President Lopez Portillo was released, stating that:

*“Both leaders reaffirmed the importance of having good quality and abundant water for the health and well-being of citizens on both sides of the border. They instructed the International Boundary and Water Commission in the context of the existing agreements to make immediate recommendations for further progress toward a permanent solution to the sanitation of waters along the border.”*

On April 19, 1979, a Resolution was adopted by the California Environmental Health Association requesting “complete sewage treatment of all domestic and industrial waste prior to entering either the New or Alamo Rivers.”

A May 25, 1979 internal memorandum from the Regional Board’s Executive Officer to the State Board Chairman conveyed the difficulty the Regional Board faced in attempting to investigate the pollution in Mexicali:

*“You may recall that I tried to arrange a similar trip<sup>[1]</sup> through the International Boundary and Water Commission for State Board and Regional Board Members, and for Winston Hickox; but Resident Engineer Castro of the Mexicali office<sup>[2]</sup> said that he would not allow such a trip until the sewerage system is in operation again.”*

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<sup>1</sup> Refers to a cooperative inspection of the New River by Mexico public works officials and Imperial County health officials in Mexicali.

<sup>2</sup> Refers to CILA, the local IBWC office in Mexicali.



## TREATY MINUTE NO. 261

On September 24, 1979, the United States and Mexico approved Minute No. 261 entitled Recommendations for the Solution to the Border Sanitation Problems. This treaty agreement focused on the need to address border sanitation problems in general, along the United States/Mexico border and included recommendations for identifying and addressing problems.

On September 29, 1979, another joint communiqué from President Carter and President Lopez Portillo was released, which requested the IBWC “to proceed as soon as possible to conclude the supplementary recommendations for completion of the works required to provide the good quality water which they had recognized in February to be so important for the health and well-being of the citizens of both countries living and traveling in the border area.”

On October 15, 1979, a letter was sent to IBWC Commissioner Friedkin from Stu Gummer, Regional Board Chair, expressing the following concerns:

*“While we appreciate the apparent interest of the two Presidents regarding the border sanitation problems, and while we are pleased that at least a Minute No. 261 has been developed and approved, we note that raw sewage, untreated industrial wastes, garbage, and community trash continue to flow in New River across the International Boundary.*

*“We also note the tremendous nationwide publicity that had to be generated to get the two Presidents to even acknowledge that these sanitation conditions might exist. The two Presidents previously met on February 16, 1979 (eight months ago); and to this day even our minimum request, that the Mexicali sewerage facilities be repaired and raw sewage not be discharged to New River, has not been granted. Furthermore, after an eight-month period, Minute No. 261 seems to present little more than an agreement to prepare an agreement.”*



Figure 44: Overflow of raw sewage into New River (May 1978)

On October 31, 1979, U.S. IBWC replied to the above letter and explained:

*“...that although Mexico has constructed works to treat the major part of the wastes from Mexicali, there have been repeated breakdowns so that its collection and treatment works have not been effective. We firmly believe that on the basis of the agreement in Minute No. 261, a specific*

*agreement can be reached on the Mexicali problem, which will result in the improved operation and maintenance of existing works, and construction of new works needed to correct the problem. Pending actions under the proposed specific agreement, this office will continue to urge Mexico to take the needed interim relief measures.”*

During 1979-80, considerable debate ensued over appropriate water quality standards, which should apply to the New River at the International Boundary. The Regional Board position was toward more stringent standards than suggested by the State Board. A letter from the Regional Board Chair to the State Board set forth the Regional Board position:

*“In correspondence dated October 15, 1979, Regional Board Chairman Stuart Gummer provided Commissioner Friedkin with a copy of the Summary Report and Amendments to Water Quality Control Plan West Colorado River Basin (7A), on the Pollution of New River and Alamo River from Mexico. At said December 10 conference we went along with your request to use former State Board Chairman Don Maughan’s July 21, 1977, proposal to the Commissioner as the basis for discussions, and we went along with only minimal revisions to said proposal.*

*“We accepted this procedure under what we consider to be duress, in that it was more or less forced upon us under circumstances beyond our control. We realize and appreciate the problems that the Commissioner is facing in negotiations with Mexico. Nevertheless, we are very concerned that New River presently constitutes a serious public health hazard, and that it will continue to constitute a public health hazard even if Don Maughan’s proposal with the ‘minimal revisions’ are incorporated into the Minute and are fully implemented.”*

The qualitative standards recommended by Don Maughan were the following:

- “1. Waters should be free from substances entering the waters as the result of human activity, in concentrations which are toxic or harmful to human, animal or aquatic life or which would significantly impair the beneficial uses of such water.*
- “2. Waters should be essentially free from floating debris, oil, scum, and other floating materials entering the waters as a result of human activity in amounts sufficient to be unsightly or deleterious and to prevent adverse impacts on human, fish and wildlife resources.*

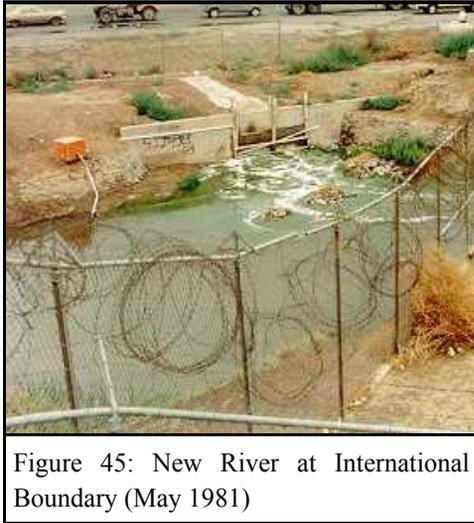


Figure 45: New River at International Boundary (May 1981)

*“3. Waters should be free from adverse levels of pesticides which could cause harmful effects to humans and fish and wildlife resources.*

*“4. Water should be free of sludge deposits resulting from the disposition of sewage solids or industrial wastes.*

*“5. The following numerical standards for the New River are considered a minimum:*

*“Unfiltered BOD (5-day) shall not exceed 30 mg/l as measured by a monthly 24-hour composite sample.*

*“Dissolved oxygen shall not be less than 5 mg/l. Sampling should be conducted on a daily, grab-*

*sample basis.*

*“Ninety percent of the samples taken for total coliform organism shall be less than or equal to 100,000/100 ml. Grab sampling shall be conducted once a week. This is subject to revision based on field investigations to be undertaken.”*

In comparison, the Regional Board recommended that the BOD in the New River not exceed 5 mg/l for any five samples taken during a 30-day period. However, in general, there appeared to be agreement that a reasonable starting point was necessary and that more stringent standards could be pressed for with time.

A February 29, 1980, status report prepared by the U.S. IBWC reported the following:

*“The repairs to the pumping plants have been completed and the solid separator (screen) has been installed at the slaughterhouse in Mexicali. Sewage that is being collected is going through the oxidation ponds. One (1) additional primary pond and four (4) additional secondary ponds are under construction.”*

A cover letter to the February 29, 1980 report also requested that the Regional Board increase its water quality monitoring at the Boundary:

*“In this connection, it is my understanding that about a year ago the State of California reduced its monitoring of the New River at the International Boundary from a weekly to a monthly basis, partly because weekly results were showing no significant changes and partly because of funding limitations.*

*“While this agency recently has increased the frequency of its New River monitoring to supplement data from the state’s program, it would be helpful if the State could reinstitute its weekly monitoring program. Any assistance your office can appropriately offer would be appreciated.”*

As a result of this request, some increase in monitoring was agreed to by the Regional Board.

On March 25, 1980, the Regional Board alerted the County and State Health Departments of a newly discovered public threat in the New River:

*“During our regularly scheduled sampling of the New River at the International Boundary, we have observed the presence of considerable foam in an approximately 0.5 mile reach of the river downstream from the International Boundary. This reach of the river passes through a farm labor parking and loading zone, a shopping center, and a commercial truck parking area. Foam was also observed in the New River at various other locations downstream from the Boundary. The occurrence of the foam at the International Boundary is attributed to the rerouting of effluent from Mexicali’s sewage treatment facilities to a point of discharge just upstream of the International Boundary.*

*“We recently collected samples of foam from the river, converted it to a liquid state, and analyzed for fecal coliform and MBAS. The Regional Board laboratory reported the following results:*

<u><i>Date of Sampling</i></u>	<u><i>Fecal Coliform</i></u>	<u><i>MBAS</i></u>
<i>February 25, 1980</i>	<i>&lt;240,000 MPN/100 ml</i>	<i>537 mg/l</i>
<i>March 17, 1980</i>	<i>700,000 MPN/100 ml</i>	<i>Not analyzed</i>

*“On various occasions wind-blow foam has been observed entering the parking lots adjacent to the river. The possibility of human contact with the foam containing high concentrations of fecal coliform appears to be likely during certain wind conditions.”*

On May 21, 1980, the City of El Centro adopted a Resolution requesting that the New River be immediately restored to the standards set forth in the Federal Clean Water Act of 1977.

A May 30, 1980, letter from the Regional Board Chair to U.S. IBWC contained the following concern regarding the erratic operation of Mexicali’s wastewater system:

*“During the above-mentioned inspection trip our Executive Officer provided you with a copy of our New River monitoring data for May 20, 1980, which indicated some improvement in New River water quality. However, Phil Gruenberg of our staff inspected the New River at the Boundary on May 29, and he reports that the river is again indicating gross pollution, with sewage sol-*

*ids plainly visible. Unfortunately, this information was not available to provide to you during your inspection trip. But it indicates the erratic manner in which Mexicali is operating its sewerage system.”*



## TREATY MINUTE NO. 264 (THE STANDARDS)

On August 26, 1980, Minute No. 264, a Treaty agreement entitled Recommendations for Solution of the New River Border Sanitation Problem at Calexico, California - Mexicali, Baja California Norte was approved by the United States and Mexico. A press release explained that the agreement which was to become effective on December 4, 1980, would require that Mexico “...proceed as quickly as practicable to provide a permanent sanitation disposal system for the City of Mexicali. That system will have as its goal the elimination of any domestic or industrial waste waters in the New River at the boundary. Pending completion of this permanent system, the Mexican Government will make significant improvements to the system by June 1981. Additional works necessary to ensure treatment of all domestic and industrial wastes entering the New River from Mexicali will be completed by 1982. These interim and permanent works will include maintenance programs designed to prevent any interruption of operation.” The agreement “should ensure for Calexico and other communities on the New River the good quality water that both Presidents have recognized to be so important for the health and well-being of the citizens of both countries living and traveling in the border area.”

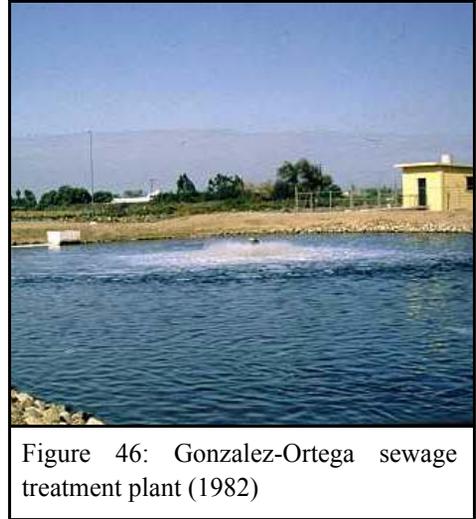


Figure 46: Gonzalez-Ortega sewage treatment plant (1982)

In a March 28, 1981, letter from the Regional Board to U.S. IBWC, concerns were raised over several items scheduled for correction in Minute 264. These were:

- Installation of adequate standby equipment for use at times of breakdowns.
- Implementation of a comprehensive operation and maintenance program to include preventive maintenance measures.

In reply to the above concerns, the U.S. IBWC Commissioner reported the following:

- “• Construction of the five additional oxidation lagoons has been completed. These additional lagoons will about double the capacity of Mexicali’s treatment system. After the new lagoons are brought into operation, the older existing lagoons will be dredged to improve their efficiency. The five new lagoons were put into service early this month.
- “• A water spray device has been installed at the discharge end of the effluent canal from the oxidation ponds and is working effectively to suppress foam in the New River.

- “• Four new smaller lagoons, two equipped with mechanical aerators, have been completed and are in operation at Gonzalez-Ortega, an industrial area about nine miles southeast of Mexicali. These lagoons will help eliminate the discharge of untreated domestic and industrial wastewater to the New River from this area.
- “• Installation of standby pumping equipment at the two pumping plants is scheduled to be completed not later than June 1981.
- “• Efforts are underway by Mexico to eliminate all remaining discharges of untreated domestic and industrial wastewaters to the New River not later than July 1982.
- “• Operation of the Mexicali sewerage system has been turned over to the state organization, Comision Estatal de Servicios Publicos de Mexicali, which is expected to result in significantly improved operation and maintenance. The state's operation is under the supervision of the Mexican Section of the Commission.

“The question of pesticides in the New River, which I know your Board is concerned about, is being brought to the attention of the Mexican authorities.”

A June 10, 1981, internal memo records a phone conversation between the Regional Board's Executive Officer and Bob Bond of the Yuma office of IBWC as follows:

“Bob inspected New River, and found it to be quite bad. So he investigated in Mexicali. Pumping Plant No. 2 was bypassing approximately 2 1/2 cfs of raw sewage to New River. The plant operator (seeing Bob Bond and the bypass) expressed great surprise, and stated that he would immediately turn on another pump, which he did, and the bypass ceased.

“Mr. Bond conjectures that they just figured on saving money as long as most of the sewage was going to the ponds.”

## THE TREATY VIOLATIONS

On June 30, 1981, Regional Board staff reported that the foam suppressant apparatus installed by Mexico near the Boundary was apparently not functional as evidenced by large quantities of foam in the river. Regional Board staff alerted U.S. IBWC of the problem.

On November 19, 1981, the Regional Board convened a workshop to discuss New River concerns. Some excerpts from the minutes follow:

*“The Executive Officer explained that, for approximately 30 years, large quantities of untreated sewage and industrial wastes from the City of Mexicali, Mexico, have been discharged into New River which then crosses the International Boundary into California’s Imperial Valley... Despite the recent reduction in sewage load, New River water quality conditions are not consistent, and Mexico continues to discharge untreated sewage and industrial wastes to the river. Under Minute No. 264, all discharges of untreated domestic and industrial wastes are to be eliminated by July 1982. Of particular concern, however, are the relatively high concentrations of certain chlorinated hydrocarbon pesticides... These high levels of pesticides, as well as physical evidence of industrial wastes, indicate that Mexico would need to take far more stringent control measures on industrial and commercial discharges to New River.*



Figure 47: Equipment awaiting installation at Pumping Plant No. 1 (Mar 1982)

*“Mr. Friedkin presented a statement on behalf of the U.S. IBWC. He explained that the situation at this time, with respect to the New River is that the degree of pollution of the river is much reduced from that of a year ago. This is due to measures taken by Mexicali to improve its facilities. However, the health hazard still continues to exist, and the New River is still polluted. The IBWC still continues its efforts with Mexican officials to urge them to take whatever measures are needed to correct the problem. These efforts also continue through the Department of State in working with the Secretary of Foreign Relations of Mexico. The IBWC would also like continued support from the Regional Board and other State officials... Mr. Friedkin explained that under Minute No. 264, Mexico made improvements to its existing facilities. Five new oxidation ponds*

were constructed at Mexicali's main treatment plant, making a total number of 13 oxidation ponds. A screen was installed to screen out the solids from the Mexicali slaughterhouse discharge. Another screen was installed to screen out solids from a major dairy in Mexicali. A foam-depressing device was installed at the point of discharge at the effluent channel into the New River. Improved operation and maintenance has been observed at the plant. A serious breakdown of the treatment plant has not taken place within the past two years...

"Mr. Friedkin presented a chart, which explained the reduction of fecal coliform levels. It indicated that the fecal coliform level has dropped from...10,000,000 to...80,000 averaging about 30,000 this year...One area of substantial improvement is the chemical oxygen demand, which, however, indicates some toxic industrial wastes are still flowing through. The interim standards for dissolved oxygen, pH, fecal coliform, and biological oxygen demand are not being met...The additional actions the United States can take is to continue current efforts in urging the Mexican authorities to recognize the seriousness of this health hazard and Mexico's obligation to the Agreement to act in correcting the conditions. On the Mexican side, the federal authority is responsible for construction and outlay of capital costs. The Regional Board should contact Congressmen and Senators to urge them to continue their efforts upon the appropriate federal authorities. Congressman Burgener has been very effective in working with IBWC and the federal authorities. Mr. Gummer questioned whether anything has been done regarding the standby equipment in case of failure. Mr. Friedkin explained that the Mexican Government has indicated it recognizes the need for standby equipment. The equipment is on order, but Mexico is still awaiting the assignment of funds to proceed. There has been a slowdown due to the new administration; but hopefully it will proceed with these projects."



Figure 48: Aerator units for Mexicali's sewage lagoons. Although installed, the units did not function (Mar 1982)

In a letter of December 9, 1981, the Regional Board Chair requested that the U.S. IBWC Commissioner review several outstanding concerns:

"The frequency and/or extent of violations of Minute No. 264.

"The Mexican Section's method of documenting violations, including frequency, extent, and reasons for violations, informing your office of same, and steps taken not only to correct the violations quickly, but also to ensure against future such violations.

*“The extent of compliance with...elimination of all remaining sewage and industrial waste discharges to New River by July 1982.*

*“Preliminary discussions on possible additional water quality items that should be considered for future controls.”*

A letter from the Imperial County Health Officer contained the following concerns:

*“A return of foaming has been noted on the New River at the U.S.-Mexican Border. This return of foaming is due in part to the non-operational status of the water pump previously used to spray the foam as the effluent enters the New River from the settling ponds in Mexicali. The pump has not been operational for approximately six weeks. I cannot report any evidence of repairs underway at this time.”*

A letter of April 16, 1982, from U.S. IBWC discussed the present status of the New River problem, some of which follows:

*“While Mexico is not meeting all of the agreed-upon New River water quality standards and their progress towards improvements has been slow, I think we can be encouraged by recent events. Specifically, within the past month, two new large sewage pumps and 14 new 50-horsepower lagoon aerators arrived in Mexicali...Mexican authorities report that these works are to be installed this year. There have been unfortunate delays in Mexico's procuring of a dredge to clean out the old ponds, but a dredge is on order and should be delivered and in operation this year. With these works, significant improvements in New River water quality should be effected.*

*“I can also report to you that Mexican authorities advise that they are now considering plans for the long-range solution to eliminate the discharge of sanitary wastewaters to the New River by utilizing the waters in their territory for irrigation and other purposes.”*

A Regional Board staff memo of June 28, 1982, contained the following:

*“Staff members from the U.S. Section of the International Boundary and Water Commission (IBWC) reported to me this week that Mexicali is discharging 10-12 cfs of raw sewage to the New River. The discharge has been occurring for about three weeks, and was first indicated by weekly sampling conducted by IBWC. When IBWC staff questioned Mexican officials about the discharge of raw sewage to the New River, the Mexicans stated that they were unaware of any problems. During a follow-up inspection by IBWC, it was found that a 50 foot section of pipeline along the north collector has collapsed, and all of the raw sewage in that collector system was being bypassed to the New River. When confronted again, Mexican officials conceded that raw sewage was being discharged to the river but said that the necessary repairs would be completed in two weeks.*

*“On June 23 and 24, we conducted a 24-hour sampling of the New River at the boundary. Considerable quantities of sewage solids were observed. The river was anaerobic during most of the sampling period.”*

A letter of September 3, 1982, from the Regional Board Chair to the U.S. IBWC mentioned the following concerns:

*“...please note the following conditions which were observed during the August 12, 1982 monitoring of the New River, and which are typical of previous monthly observations:*

*“From 0800 to 1700 sewage solids were routinely observed in the river;*

*“From 1200 to 1315 numerous globules with a greasy consistency were observed floating in the river;*

*“From 0700 to 1700 dissolved oxygen levels ranged from 1.4 mg/l to 3.5 mg/l (below levels for sustaining fish life); and*

*“Other observations indicated the presence of foam, oil, and garbage in the river at times.*

*“In reviewing Minute 264 it is our understanding that the quantitative and qualitative standards became fully effective not later than August 4, 1982. Therefore, it appears that the above noted conditions in the New River are all in violation of the standards set forth in Minute 264.*

*“An additional violation of Minute 264 has reportedly been ongoing since August 28, 1982. Apparently, a section of pipeline along the north collector in Mexicali is broken and raw sewage is being bypassed to the river. This is the second event of this type which has occurred since June 1982. We understand that all of the pipe along the north collector is badly deteriorated and needs to be replaced, but that Mexico intends to replace sections of the collector system only when breaks occur. How can the obligations in Minute 264 be honored under these circumstances?*

*“Another item we would like to bring to your attention concerns the relatively high concentrations of certain toxicants, particularly pesticides, which have been reported in the New River at the International Boundary. Since December 1981, we have been monitoring the river on a monthly basis for pesticides and metals as part of an agreement with the State Water Resources Control Board and Department of Water Resources... As some of the pesticide concentrations are considerably higher than mean concentrations in California's Imperial Valley drains, we question if the source of these pesticides in the New River is from normal agricultural spray operations. High levels of Phosdrin, in particular, suggest the possibility of a direct discharge from a pesticide applicator site, a formulation facility, and/or a manufacturing plant into New River or its tributar-*

ies.

*“Would you please bring the above-mentioned violations to the attention of the appropriate Mexican officials; and we would hope that they will provide you with a definitive statement on real steps that they will take for corrective action. As you may expect, we are very concerned about the extent of resolve of the Mexican Government to meet its obligations under Minute 264.”*

A reply was received from U.S. IBWC to the Regional Board letter of September 3, 1982. It generally acknowledged the serious concerns and promised to press Mexico for correction. It ended on this note:

*“You will understand, I’m sure, that the recent economic crisis in Mexico has, temporarily at least, dashed the optimism I expressed to you in my letter of April 16, 1982. Even so, I am hopeful that when the new Administration takes over in Mexico, we will see renewed effort to make the needed improvements to the Mexicali disposal system.”*

Periodic letters were received by the Regional Board from citizens complaining of the polluted conditions in New River. The following typical reply to one such letter appeared in a September 28, 1982 letter from the Regional Board’s Executive Officer:

*“The Regional Board is very determined to obtain corrections on New River contamination. Since Mexico is a foreign power, obviously the Board’s actions are necessarily limited to pressing the United States government to make increased representations to Mexico. One thing that I can assure you is that the Regional Board is well aware of the New River problem, and the Board will remain unrelenting of its representations to the United States government.*

*“Concerned citizens like yourself can be of considerable assistance in the New River cleanup effort by writing to your federal representatives, such as your Congressman, Senators, and by all means to the President of the United States. If several of your neighbors wrote such letters it would definitely have impact. The United States Commissioner also welcomes letters from citizens directed to the elected officials, because it strengthens his bargaining position with the Mexican Commissioner.”*

An October 22, 1982, internal memo prepared by a Regional Board staff person contained the following concerns:

*“Bob Bond of IBWC reported to me on October 18 that repairs to the broken section of pipeline on the north collector in Mexicali were complete and that the discharge of raw sewage to the river would cease from that source on October 20.”*

*“I sampled the New River on October 21 and routinely observed sewage solids throughout most of the day. Additionally, substantial quantities of a petroleum product appeared to be present in the water as evidenced by a strong diesel fuel odor and an extensive film on the surface.”*

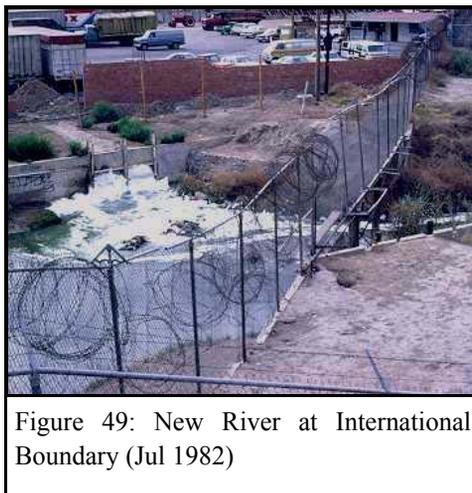


Figure 49: New River at International Boundary (Jul 1982)

*“On October 22, I discussed my observations of October 21 with Bob Bond. Bob said that although repairs to the north collector were complete, about 2-3 cfs of raw sewage from pumping plant No. 2 was being bypassed to New River; thus accounting at least in part for the sewage solids I observed on October 21. Bob had no explanation as to why this quantity of raw sewage was being bypassed as the pumps appeared to be fully operational. Bob said he would investigate the petroleum discharge to the New River.”*

On November 19, 1982, Regional Board staff presented a briefing to the U.S. IBWC on the New River pollution at the International Boundary based on sampling and observations. The findings presented included the following:

*“The results from our monitoring of the New River indicate that water quality has varied considerably from month to month, and the field observations would indicate that such inconsistency is directly related to the quantity of untreated sewage and/or industrial wastes in the river.”*

*“From our routine monitoring of the New River on August 12, September 16, and October 21 we have noted the following apparent violations of Minute 264:*

*“Raw Sewage*

*“Sewage solids were routinely observed, throughout the day, on September 16. Slightly lesser quantities were observed on August 12, October 21, and November 18.”*

*“Untreated Industrial Wastes*

*“On August 12 and October 21 numerous globules with a greasy consistency were observed floating on the river:*

*“Dissolved Oxygen Content Below 5 mg/l*

*“Dissolved oxygen content was substantially below 5 mg/l on August 12, September 16, October 21, and November 18.*

*“Dead and Dying Fish*

*“River conditions were such that dead and dying fish were routinely observed on October 21.*

*“Oil*

*“An oil film was observed in the river at times on August 12, September 16, and October 21. On October 21 the film was particularly apparent and the river had a strong petroleum odor.*

*“Floating Trash*

*“On August 12, September 16, October 21 and November 18 varying quantities of debris were observed in the river at times including several tires, vegetable refuse, and bottles.*

*“Foam*

*“Foam was present at times on August 12, September 16, October 21, and November 18. Foam is created by the turbulence of the water at the point where the sewage return flow canal enters the New River right at the International Boundary. A foam suppressant apparatus has been installed at this point, but has not always been operational.”*

On December 15, 1982, New River water at the International Boundary was analyzed for volatile organic compounds (VOC). The results were forwarded to U.S. IBWC with a December 31, 1982 cover letter from the Regional Board Chair. Some excerpts follow:

*“On December 15, 1982, during our regularly scheduled monthly sampling of the New River at the International Boundary a special sample was collected for analyses of trace volatile organics. We are not aware of any previous analyses of New River water at the boundary for these constituents. The analytical results for this sample are attached.*

*“The results are quite disturbing in that from this very limited and preliminary sampling a wide*

variety of organic toxicants were detected, many of which are on EPA's list of "129" priority pollutants (refer to 40 CFR 401.15, Code of Federal Regulations).

"Some of the organics detected suggest a discharge from the following industrial sources:

<u>"Organic Pollutant</u>	<u>Use</u>	<u>Suggested Industrial Source</u>
2-methyl pentane	degreasing agent	auto parts salvage
n-hexane	degreasing agent	auto parts salvage
1,1,1 trichlorethane	degreasing agent	auto parts salvage
perchloroethylene	degreasing agent	auto parts salvage
acetone	solvent	plastics industry
chloroform	solvent	plastics industry
toluene	solvent	plastics industry
ethyl benzene	styrene mfg. solvent	plastics industry
xylene isomers	solvent	plastics industry
isopropylbenzene	solvent	plastics industry
1-methyl naphthalene	solvent	plastics industry
benzene	solvent	plastics industry
ethyl toluene	flavoring	food processing

"I request your consideration of conveying this information to the appropriate Mexican authorities. It does not seem unreasonable to request Mexico to provide a list of industries in Mexicali that are discharging wastes to the New River, along with quantities and types of wastes being discharged, and a time schedule for treatment or abatement."

In a December 30, 1982, letter to the State of New Mexico, the Regional Board's Executive Officer suggested a joint effort between the United States/Mexico border in addressing border pollution issues. Some excerpts follow:

"Our Regional Board is desirous of learning about sewerage-oriented sanitation problems that the other states are experiencing with Mexico, and the extent and type of progress that has taken place, together with the methods that were used to achieve same. We also wish to seek your opinion as to whether there might be advantages if border-state representatives met periodically to review these problems and to assess the possible effectiveness of joint efforts. It may be that our joint efforts would strengthen the positions of both Commissioners of the International Boundary and Water Commission.

"We are forwarding similar letters to the Arizona and Texas environmental water resources agencies; and we plan to keep each state and the United States Commissioner informed of replies received."<sup>[1]</sup>

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<sup>1</sup> Although a favorable reply was received notably from Arizona toward a joint border state effort in addressing border pollution, this concept apparently never got off the ground.