



September 16, 2003

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**Subject: Border Power Plant Working Group Comments on Mexicali II (Las Arenitas) Wastewater Treatment Plant EA and FONSI**

Dear Doug:

I have reviewed the Mexicali II Wastewater Treatment System Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) on behalf of the Border Power Plant Working Group (BPPWG). BPPWG comments are provided in the following paragraphs. I am aware that the closing date for comments was September 9, 2003. However, I did not become aware that an EA and FONSI had been prepared for this project until September 2, 2003. On that date a colleague at Regional Board 7 forwarded me the link to the EPA Region 9 website containing the EA and FONSI. My existing commitments at the time prevented me from reviewing and commenting on the EA by the September 9 closing date.

The BPPWG has been in regular contact with EPA Region 9 over the past two years regarding the impacts of Mexicali powerplant wastewater diversions on the New River and Salton Sea. The BPPWG also initiated legal action in March 2002 against the U.S. Department of Energy (DOE) in part over the issue of the diversion of Mexicali wastewater from the New River. EPA Region 9 has been following this legal case closely. In this context I was surprised that the BPPWG was not notified by the EPA directly that an EA and FONSI had been prepared for a project that would divert flow from the New River.

It is important to note that my comments have been prepared within two weeks of the informal notification I did receive that the EA and FONSI existed and were available for review. It is my hope that EPA Region 9 will accept these comments as a part of the official comment record given the BPPWG received notification of the availability of the EA and FONSI very late in the 30-day comment period.

**Comments on Mexicali II WWT System EA**

The preferred alternative described in the EA is the construction of the Mexicali II WWT 33 kilometers south of the border in an uninhabited area known as Las Arenitas. The pipeline to the plant will be sized to convey 880 liters per second (lps), equivalent to 20.1 million gallons per

day (Mgd). The treated wastewater will be discharged south of the New River drainage basin into a tributary of the Rio Hardy, which empties into the Colorado River Delta. The EPA estimates a flow reduction of approximately 11 percent at the border.

The EA states (pg. 4-2) that *“there are no “significance” criteria that stipulate a specific federal or state standard for the elevation area or quantity of water in the Salton Sea. Impact would be considered significant if they substantially altered river flows resulting in either increased flooding of areas adjacent to the river or extreme low flows, and thus altering beneficial uses of the Salton Sea Basin.”* The impact of flow reduction on the New River and Salton Sea if the preferred alternative is selected will be significant. Both the Salton Sea Authority and Regional Board 7 stated in expert declarations prepared for the DOE legal action that New River flow reductions approximately one-half the reduction estimated for the proposed Mexicali II project, in the range of 5 to 6 percent at the border, would have a significant negative effect on the New River and/or the Salton Sea. These two expert declarations are attached. Mexicali wastewater, either treated or untreated, is low in total dissolved solids (TDS), also known as salinity. This water serves as an effective diluent to high salinity agricultural runoff and power plant wastewater reaching the New River. This has the positive effect of reducing the toxicity (due to salinity) of river water to freshwater flora and fauna in the New River watershed.

The EA also states that there are significant variations in Salton Sea inflows (pg. 4-4), and that the 880 lps flow reduction represented by the Mexicali II preferred alternative is within the historical fluctuations in flow. This is the same argument that was used by the DOE to justify a “no significant impact” determination regarding the issue of a 5 to 6 percent reduction in New River flow caused by powerplant use of Mexicali wastewater for cooling. This argument was rejected by the court on the grounds that the loss of inflow permanently shifts the entire flow variation “fingerprint” downward. The term “variation” implies a rising and falling over time. What will actually occur is a permanent loss of a portion of New River inflows under all circumstances.

However, it appears that the objective of the preferred alternative is to get treated water to the Colorado River Delta via the Rio Hardy. This is a potentially noble objective, and could be perceived as an environmental "balancing act," reducing inflows to one exceptional wildlife support system (Salton Sea) while increasing flows to another exceptional wildlife support system (Colorado River Delta). This balancing act is implied in EA, though nowhere is it addressed explicitly. How will EPA ensure that the water destined for the River Hardy ever makes it to the Colorado River Delta? Does EPA envision a new minute to the 1944 U.S.-Mexico water treaty to ensure a certain minimum flow reaches the Delta? Without any enforceable treaty minute or similar mechanism, it is unlikely the flow reduction to the New River and Salton Sea that the preferred alternative represents will result in a concomitant increase in flow to the Colorado River Delta.

The IBWC established a conceptual minute to 1944 water treaty (Minute 306) in December 2000.<sup>1</sup> The conceptual minute notes “*entities in their respective countries may seek water and seek to ensure its use for ecological purposes in . . . the Colorado River Delta.*” If the preferred alternative described in the EA is ultimately selected by the EPA and the agency commits \$8 million toward realizing the project (as proposed), the agency must work with Mexico to incorporate a stipulation in Minute 306 clarifying that water discharged from the Mexicali II plant be used “*for ecological purposes in . . . the Colorado River Delta.*” The agency must also ensure that Minute 306 moves expeditiously from conceptual to binding.

The EA correctly notes that Mexico has the right to re-use or redirect all water that enters the New River south of the border (pg. 4-1). Mexicali has already demonstrated a willingness to sell wastewater to power plants for use in cooling, and there is no reason to doubt that Mexicali will continue to seek wastewater sale opportunities with new power plants in the future. Also, relatively clean river water is attractive for a wide variety of useful purposes. Unless “ecological purposes” are given an explicit flow guarantee is a binding agreement, it is likely that treated Mexicali wastewater will be diverted over a relatively short period of time for purposes other than Salton Sea or Colorado River delta inflow.

### **Additional Alternative**

The EA does not evaluate the one alternative that would address many local concerns on a fast timetable and assure the largest inflow of Mexicali wastewater to the New River and the Salton Sea without a formal flow agreement between the U.S. and Mexico. The two Mexicali power plants are diverting up to 15 Mgd from the Mexicali I (Zaragoza) treatment plant. The Mexicali I plant is underutilized, while the Mexicali II collection system discharges up to 15 Mgd of raw sewage into the New River. Mexicali wants to construct a connector from the Mexicali II collection system to the Mexicali I treatment plant to efficiently use currently available resources. This proposal appears to have merit, especially if conducted in conjunction with complimentary actions on the U.S. side of the border. These actions would include: 1) greatly expanding the very successful and very cost-effective New River wetlands project that is designed to treat New River water and provide wildlife habitat, and 2) potentially covering the river as it passes through Calexico if the connector is not built in Mexicali or if for whatever reason the river odor and pathogen issues are not sufficiently addressed by the integration of the Mexicali II collection system and the Mexicali I treatment plant.

The New River wetlands project currently consists of two sites, the Brawley site and the Imperial site. The sites consist of a series of ponds that progressively filter the water, reduce nutrient loading, and greatly increase dissolved oxygen. Relatively clean water is then returned to the river. See <http://www.newriverwetlands.com> for photos of the sites and water quality performance. The goal of the New River wetlands project is to develop water cleansing wetlands along the entire 65-mile river corridor from the border to the Salton Sea. Ultimately the New

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<sup>1</sup> Bergman, Charles, *Red Delta – Fighting for Life at the End of the Colorado River*, Fulcrum Publishing, Golden, Colorado, 2002, pg. 220.

Mr. Doug Liden  
September 16, 2003  
Page 4 of 5

River wetlands could substantially replace the Salton Sea, should it become hypersaline and unsuitable for wildlife, as the premier regional avian habitat if wetlands are constructed along all or most of the river corridor. The problem is adequate funding. Funding a sustained expansion of the New River wetlands, while supporting Mexicali in its efforts to connect the Mexicali II collection system and the Mexicali I treatment plant, could simultaneously mitigate (to a major extent) New River water quality problems and wildlife habitat loss associated with the gradual deterioration of the Salton Sea. At the same time this approach would be creating a 65-mile long wildlife oasis in what is now a largely degraded landscape.

Many of the seemingly intractable binational cooperation issues that have stalled all attempts to date to move forward with a second Mexicali wastewater treatment plant would be avoided by this alternative. Binational cooperation, although preferred, is not essential to moving the alternative forward. If for whatever reason no connector is built between the Mexicali II collection system and the Mexicali I treatment plant, the default plan built into this alternative is the construction of an enclosure over the New River for the first few kilometers north of the border as it passes through Calexico.

The primary objective of this alternative is in the construction of additional wetlands in the New River corridor. This objective is completely within the control of the U.S. and provides water quality improvement equal to that of the preferred alternative while also providing critically needed wildlife habitat as the Salton Sea declines.

### **Recommendations**

The EA should be revised or upgraded to an EIS and address the following issues: 1) assess the feasibility of assuring that discharges from the preferred Mexicali II alternative described in the EA reach the Colorado River Delta, 2) quantify the air quality impacts of new power plants using treated water from the proposed Mexicali II plant for cooling, and 3) include the expansion of the New River wetlands project, in potential conjunction with the construction of a connector between the Mexicali II collection system and the Mexicali I treatment plant, as an additional alternative.

Thank you for this opportunity to comment. Please call me at (619) 295-2072 if you have any questions about this letter.

Sincerely,

Bill Powers, Chair  
Border Power Plant Working Group

Mr. Doug Liden  
September 16, 2003  
Page 5 of 5

Attachments:

- 1) Salton Sea Authority June 15, 2003 expert declaration, DOE Mexicali powerplant lawsuit
- 2) Regional Board 7 June 16, 2003 expert declaration, DOE Mexicali powerplant lawsuit

cc: Senator Diane Feinstein  
Senator Barbara Boxer  
Congressman Bob Filner  
Congressman Duncan Hunter  
Imperial County Supervisor Joe Maruca  
Phil Gruenberg, Regional Board 7  
Tom Kirk, Salton Sea Authority  
Marie Barrett, New River Wetlands Project