

## Executive Summary

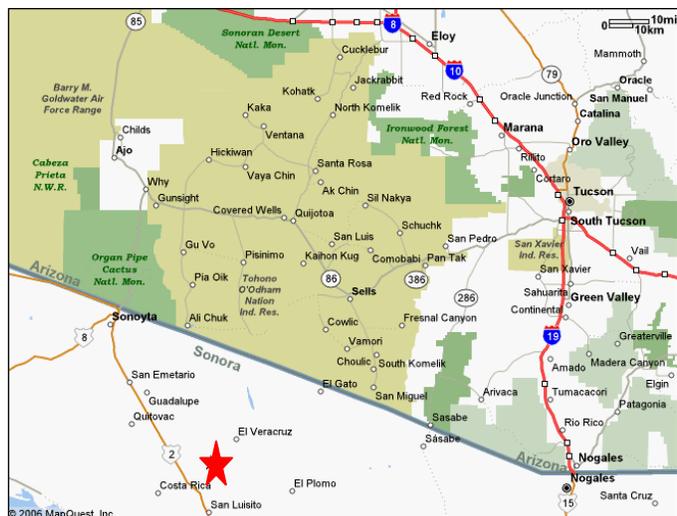
In November 2006, the United States Environmental Protection Agency (USEPA) released a report titled “Assessment of Potential Impacts to the United States of the CEGIR Hazardous Waste Landfill in Sonora, Mexico” (See web link <http://www.epa.gov/usmexicoborder/>). The report, prepared by Booz Allen Hamilton, evaluated the potential impact to the United States of a planned hazardous waste landfill headed by a private sector initiative named CEGIR, and assessed whether these potential impacts are adequately mitigated. The report also provides recommendations for further study and coordination, and explains the limitations due to lack of information. EPA shared a draft assessment report with the Arizona Department of Environmental Quality (ADEQ) and the Tohono O’odham Nation to solicit their respective comments in writing. EPA is actively engaged in communications with Mexico’s Secretary for Environment and Natural Resources (SEMARNAT) about the CEGIR project and is facilitating communications between the ADEQ and the Tohono O’odham Nation.

The proposed CEGIR landfill would be about 41 km (25.4 miles) from the United States border in the state of Sonora, Mexico. In accordance with Mexican regulations on landfill siting and construction, the proposed CEGIR landfill received an environmental license from SEMARNAT in October 2005 (Permit No. 26-48-PS-VIII-01-2005). However, the project is still seeking a land use and a construction license from the local municipality.

The USEPA is not involved in the decision-making process for hazardous waste facilities in Mexico. Under the La Paz Agreement, the USEPA is notified of facilities that are going to be constructed within 100 kilometers (62.5 miles) of the border, but the USEPA has no authority in the permitting process in Mexico. The USEPA received official notification of the CEGIR project from SEMARNAT in September 2005.

The assessment was based primarily on an evaluation of data provided to USEPA by SEMARNAT, including the facility’s Environmental Impact Statement. The assessment found that for several aspects of the project there is insufficient information to confidently assess impacts to the U.S., and concludes the following:

- Impact to surface waters of the United States is unlikely because the general direction of surface water flow in the vicinity of the proposed landfill is to the southwest toward the Gulf of California.
- Risk of contaminated groundwater from the facility reaching the United States is also extremely low due to the local geology, distance from the United States, lack of precipitation and proposed engineering controls for the landfill. However, without additional hydrological data from monitoring wells, the presence and flow of



Map of Proposed Landfill Location (red star)

groundwater in the immediate vicinity of the landfill cannot be fully determined and impact to local communities cannot be completely ruled out.

- Atmospheric transport to the United States of hazardous and toxic materials resulting from explosions, large-scale fires, and operational activities is possible; however, the distance from the facility to the U.S.-Mexico border would significantly attenuate any impact. Additional detailed information would be needed, particularly regarding emergency response procedures and preparedness, to aid in accurately assessing the ability of the facility to prevent, control, and respond to incidents.
- Additional coordination with local communities is needed to address concerns regarding impacts to migratory bird populations and local archeological resources.
- SEMARNAT should directly consult with the Tohono O’odham Nation to determine and mitigate concerns.

The following table provides a list of project information that was either unavailable or lacked sufficient detail for the purposes of this assessment.

**Table 1. Areas of Insufficient Information**

<b>Contaminant Transport by Air</b>	
Planning	<ul style="list-style-type: none"> <li>• Emergency planning and preparedness for the landfill, including coordination with the surrounding communities</li> <li>• Analytical requirements to ensure that the wastes are accurately characterized</li> </ul>
Design	<ul style="list-style-type: none"> <li>• Description of waste stabilization and treatment process technologies</li> <li>• Corresponding equipment/facility design</li> </ul>
Construction	<ul style="list-style-type: none"> <li>• Landfill construction to ensure that each cell is self-contained</li> <li>• Quality assurance/quality control procedures and inspection schedules</li> </ul>
Employee Training	<ul style="list-style-type: none"> <li>• Level of training and preparedness of the operating personnel</li> <li>• Health and safety training</li> </ul>
Equipment Availability & Maintenance	<ul style="list-style-type: none"> <li>• Adequacy of site equipment</li> <li>• Equipment list and maintenance schedule</li> </ul>
Standard Operating Procedures	<ul style="list-style-type: none"> <li>• Detailed written instruction to which all operating personnel are to adhere in the acceptance of waste, treatment/stabilization of wastes, construction of individual landfill cells, etc.</li> <li>• Emergency procedures, including worst-case scenarios of events and appropriate response actions</li> </ul>
<b>Groundwater Contamination</b>	
Hydrology of Site and Surrounding Area	<ul style="list-style-type: none"> <li>• Additional information, if available, about site hydrogeology and possible interconnection of aquifers in the surrounding area</li> <li>• Detailed information regarding groundwater elevations in wells in the surrounding area, including local municipalities, to definitively determine direction of groundwater flow</li> </ul>
<b>Transportation</b>	
Traffic Impacts	<ul style="list-style-type: none"> <li>• Adequacy of local roads for handling landfill traffic (e.g., road conditions)</li> <li>• Factors contributing to the generation of noise and dust</li> </ul>
<b>Access of Birds to Landfill</b>	
Migratory Birds	<ul style="list-style-type: none"> <li>• Provisions to prevent access of birds to evaporative ponds or other areas that may cause an injury or mortality to birds</li> <li>• Consultation between Mexican and U.S. natural resources specialists, as necessary</li> </ul>