



US-Mexico Border 2012 Program: 2005 National Coordinators Meeting

Summary of Accomplishments

March 8-10, 2005

Goal 1: Reduce Water Contamination

Accomplishments for 2004 - 2005

- Since the inception of the BECC and NADBank, approximately \$1.5 billion of potable water and wastewater projects have improved the public health and the environment of over 6 million residents of the U.S. and Mexico Border area. The projects were accomplished by local and state contributions, together with significant federal funding from the U.S. Border Environmental Infrastructure Fund (BEIF) and Mexican governments. During 2004, the U.S. Environmental Protection Agency (EPA), recognizing the limits of federal funding in relation to the reported needs, worked with the BECC to develop a system that prioritizes projects to be certified for BEIF funding.
- Three water bodies that exceed water quality standards based on 2003 water quality data have been identified. Two binational agreements have been reached on water quality indicators and will serve as the bases of a binational database. The first phase of a Geographical Information System for the Rio Bravo/Rio Grande basin was developed.
- California and Texas have active monitoring programs within 100 km of the border and participate with the national Clean Beach monitoring program. Current water quality data is posted on the web at <http://www.earth911.org> and www.waterboards.ca.gov. Mexico's National System of Information on the Quality of Water at the Mexican Beaches has been established in accordance with the World Health Organization criteria for recreational waters. This includes the beaches of Tijuana and Rosarito, Baja California.
- A list of water system efficiency improvement needs were created. This effort will identify resources for technical and financial support.

Goal 2: Reduce Air Contamination

Accomplishments for 2004 - 2005

- A draft baseline emission inventory for the U.S.-Mexico border region has been developed by the Western Governors Association in fulfillment of the first part of interim objective 1 under Goal 2. The draft baseline emission inventory was assembled from data arising from the much broader effort to develop the Mexico National Emissions Inventory. The draft report was presented at the October 6-7, 2004 Air Policy Forum meeting and is available at www.erg.com/mnei/ (User ID: Mexico; Password: emissions (all lower case)). The draft Mexico National Emissions Inventory is scheduled for completion in 2005.
- The Air Policy Forum (APF) held its first stand-alone meeting on October 6-7, 2004 in Tijuana bringing together a broad group of stakeholders from the border region to begin to identify and prioritize a set of common priorities and build consensus about the federal actions needed to address those priorities. The APF meetings, structured around stakeholder discussion with the purpose of deriving consensus and national policy direction from local and regional input, will culminate in 2005.
- As a result of various coordination efforts among the various jurisdictions and stakeholders, the Paso del Norte region implemented various pollution reduction projects. Air quality now meets United States standards in El Paso and is approaching standards in Ciudad Juarez. Consequently, the Texas Commission on Environmental Quality will officially propose reclassifying El Paso for attainment for ozone, carbon monoxide and particulate matter.
- Numerous efforts were begun to address diesel emission reductions. A Pilot Study was begun in San Diego-Tijuana and diesel retrofit projects are underway in Nogales and Laredo. Studies have also begun to characterize emissions from diesel truck traffic crossing the border in Texas, California and Arizona.
- Road paving projects in Ciudad Juarez, Chihuahua and Ensenada, Mexicali, Rosarito, Tecate, and Tijuana, Baja California are underway and are anticipated to significantly reduce PM10 emissions. The North American Development Bank (NADBank) has provided 276.2 million pesos for the first phase of the project, paving 2.3 million square meters of streets in the six municipalities. Projects in Sonora and other areas are in various stages of development.
- A Cross-Border Emission Reduction Credit (ERCs) Project evaluated the feasibility of generating cross-border ERCs for use in Federal and State Air Permit Programs. The study looked first at the legal feasibility for such a concept and evaluated potential legal issues in both the federal Clean Air Act and the State of California Clean Air Act and identified how legal hurdles could be overcome. Related, El Paso Electric (EPE) completed a project under Texas State law to meet Texas requirements for nitrous oxide reductions with cross-border, multi-pollutant trading. EPE replaced some traditional brick kilns with a new innovative design that reduces particulate emissions by over 80%. This project is also being evaluated for its potential to generate ERCs.
- On June 24, 2004, EPA and SEMARNAT signed a Memorandum of Cooperation to transfer the operation and maintenance of air monitoring stations in Tijuana, Rosarito, Tecate,

Mexicali, and Calexico to the government of Baja California within two years. The Memorandum of Cooperation established a working group to develop an action plan detailing the specific activities to occur during the two-year transition period. Monitoring of air quality continues throughout the border (see below). In Ciudad Juarez, air monitoring systems for ozone, carbon monoxide, and coarse particulates (PM10) are now linked with a web-based data system maintained by the Texas Commission on Environmental Quality, which gives citizens access to real time air quality monitoring data throughout the Paso del Norte binational air basin.

- A monitoring project using SODAR technology provides continuous wind measurements and aids in PM source apportionment work in Arizona. The terrain in these areas and its effect on wind patterns determine patterns of pollution transport. These instruments will improve the understanding of PM concentrations and will direct future emission control strategies.
- A Binational Air Quality Study for the Western Arizona-Sonora Border Region study has begun with the installation of monitoring sites in Yuma, Somerton, and San Luis, Arizona, and on the Fort Yuma and West Cocopah Indian Reservations. With support from Mexican environmental officials in Sonora and Baja California, meteorological measurements are being collected.
- Air monitoring continues in the Ambos Nogales and Douglas-Agua Prieta areas. The City of Agua Prieta received NADBank certification for a citywide (31 km) paving project that relied on the Arizona Department of Environmental Quality's evaluation of the impacts of the paving and other technical support.
- EPA and the National Park Service funded the Big Bend Regional Aerosol and Visibility Observation (BRAVO) Study project initially conducted in 1999 followed by an intense data analysis and modeling in 2000-2004 to address the problem of increasing haze at Big Bend National Park. This project helps to quantify the impacts of major sources in the region and source types in both the U.S. and Mexico on Big Bend haze, including Carbon I/II power plants in Mexico, eastern Texas, eastern U.S. and all of Mexico.

Goal 3: Reduce Land Contamination

Accomplishments for 2004 – 2005

- Selected three tire piles for clean-up and initiated clean-up at all of these piles. To date, 280,000 waste tires have been removed and sent for use as alternative fuel.
- Performed significant clean-up of a major hazardous waste contaminated site (Metal y Derivados). 1,960 tons of high risk drums, sacks and soils are in the process of being removed under current phase. The Metales site is now stabilized and secured. 4,900,000 pesos were devoted to this clean-up. A Metales y Derivados work group is now meeting regularly to address the four phases of the clean-up process.
- Completed a tracking evaluation report to comply with Objective 2 on hazardous waste transboundary tracking under Goal 3 on reducing land contamination. SEMARNAT initiated SIRREP Plus, an information system which will greatly improve hazardous waste tracking on the Mexican side. The U.S. EPA issued a new tracking manifest regulation which includes provisions to improve transboundary tracking.
- Established key capacity building priorities in a Binational Action Plan on waste management and prevention technical assistance to comply with Objective 1 on capacity building under Goal 3. The Waste Policy Forum, the four regional Waste Task Forces and the public identified the following four capacity building priorities: tire pile prevention; siting more hazardous waste management facilities in Mexico; specific initiatives to address key waste streams and cross border tracking improvements; and improving solid waste management and recycling.
- Developed core contaminated site clean-up and revitalization principles in a Binational Policy to comply with Objective 4 on hazardous waste sites under Goal 3.
- EPA Region 6 held a Brownfields Workshop in October 2004 which provided grant-training opportunities for Mexican partners and stimulated binational efforts in brownfields redevelopment along the border.
- Received approval of a landfill construction project for Naco, Sonora which was certified by the Border Environment Cooperation Commission and funding was approved by the North American Development Bank.
- Provided a \$50,000 grant to the Tohono O’odham Tribal Nation to conduct an assessment of open dumping and accumulation of trash caused by the volume of human traffic migrating through tribal lands.
- Developed an inventory of resources relevant to tire pile clean-up, such as tire shredders, along the border.
- Initiated a used oil recycling project in Nogales, Sonora which includes improving collection and recycling of used oil from small auto repair shops and the updating of a database of approximately 200 small businesses that generate used oil.

- Held a preliminary, high-level meeting between U.S. hazardous waste management companies and senior EPA waste officials to initiate discussions on assisting Mexico in siting a hazardous waste management facility.
- Established a Green Business Pilot Program for the automotive industry in Tijuana. The program will reduce hazardous waste through technical transfer on pollution prevention and cost savings incentives.
- Held an information exchange organized by the Sonora-Arizona Waste Task Force on how to best establish programs on solid waste management, recycling and outreach.

Goal 4: Environmental Health Workgroup (EHWG)

Accomplishments for 2004 - 2005

- Program partners participated in Binational Border Health Week, which brought together more than 29 Federal partner agencies and programs, and 310 community organizations. The events of the week reached more than 65,000 individuals in fourteen sister cities.
- To improve environmental health conditions, the Border 2012 Environmental Health Work Group formed a partnership with the U.S. Mexico Border Health Commission. The partnership will help target resources to the most pressing environmental health issues by improving collaboration among environmental and health agencies at all levels of government in both countries.
- Three projects were completed: the “Safe Drinking Water Demonstration Project for South Texas;” for pesticides, “Project Clean Environment for Healthy Kids II;” and, the “El Paso Children’s Respiratory Health Study.”
- The “*Pesticide Poisoning Prevention Training to Children along the Texas-Mexico Border*” Program has established the U.S. Geological Service Environmental Health Website for the Rio Grande, which provides environmental data and health data from both sides of the border.
- In collaboration with the Border Indicators Taskforce, the EHWG created a strategy document to develop indicators of health and environmental well being.
- With the Pan American Health Organization, the EHWG issued a Request for Proposals for environmental health indicators pilot projects, and identified two for funding.

Goal 5: Emergency Preparedness and Response Border-Wide Workgroup Report

Accomplishments for 2004-2005

- 13 Binational Emergency Response Plans have been signed. Two plans are nearing completion. The Plan between Imperial County, CA and Mexicali, Baja California has been approved in concept and will be signed this summer
- Designed and conducted four hazardous material exercises and several bilingual workshops on a variety of preparedness, disaster management and emergency response topics such as railcar safety, the Incident Command System, hospital mass casualty decontamination, radiation detection, weapons of mass destruction, and exercise design.
- Conducted risk assessments - A hazardous materials commodity flow study (CFS) was conducted for the city of El Paso, Texas
- Conducted 3 waste tire pile site assessments and fire prevention planning in the Mexicali area.
- Provided scholarships for 28 border emergency responders to attend the week long Hazardous Material Continuing Challenge training and symposium in Sacramento, CA.
- Established binational steering committee, design concept and work plan for a Border Emergency Management Academy in Tijuana. The Governor of the State of Baja California has already provided funding for the training center. Students will be emergency responders from the public and private sectors. Course curriculum will standardize emergency response protocol.
- Developed and widely distributed English/Spanish Field Guides for Emergency Response Communication.
- Updated the Del Rio, TX and Ciudad Acuna, Coahuila emergency response plan.

Goal 6: Improve Environmental Performance through Compliance, Enforcement, Pollution Prevention, and Promotion of Environmental Stewardship

Accomplishments for 2004 - 2005

- The number of companies registered in Mexico's Programa Nacional de Auditoria Ambiental grew to 877, an increase of more than 50% over 2003.
- A binational public-private partnership will result in 20 AZ/Sonora businesses and municipalities certifying that they have implemented environmental management systems (EMSs) by December 2005. An EMS improves performance and reduces pollution.
- PROFEPA's studies on high-risk pollution sources allows them to prioritize inspections and focus on programs to prevent accidental releases of chemicals.
- The Arizona-Sonora Waste and Enforcement Task Force conducted a multi-agency, binational hazardous waste enforcement sampling exercise in the Nogales, Arizona and Nogales, Sonora port of entry as a means of halting illegal transboundary movements of hazardous waste.
- Preventing pollution is key to protecting public health and the environment. On November 3, 2004, a binational pollution prevention seminar was held in Tucson, Arizona, with presentations from industry representatives from both Arizona and Sonora, and a site visit to a local manufacturing facility.
- Since 1992, under the Texas Commission on Environmental Quality's Pollution Prevention Initiative, the Maquila Program cumulatively has: reduced hazardous waste generation by about 21,000 tons; reduced non-hazardous waste generation by more than 117,000 tons; reduced volatile organic compound emissions by more than 95,000 pounds; reduced CO₂ emissions by about 900,000 pounds; conserved approximately 523 million gallons of water; conserved more than 481 million Kilowatt hours of electricity; and saved partner U.S. facilities nearly \$89 million in avoided material and disposal costs.
- On May 14-15, 2004, The Mexican Center for Environmental Law (CEMDA), with funding from the U.S. Department of State and participation of the U.S. Environmental Protection Agency, Department of Justice and Fish and Wildlife Service, Texas and Arizona environmental programs, Commission for Environmental Cooperation, NGOs, PROFEPA and others, trained Aduana and U.S. Customs inspectors and other government participants to help them recognize environmental violations regarding trans-border shipments of hazardous wastes, ozone depleting substances, and endangered species.
- The web-based Border Compliance Assistance Center continues to provide useful information to Mexican and U.S. companies transporting maquiladora hazardous wastes into the U.S., helping them understand and comply with their regulatory obligations. Use of the Center has increased by 412% over FY03, the Center's inaugural year.

Border Indicators Taskforce (BITF)

Accomplishments for 2004 - 2005

- A strategy was prepared to provide all Border 2012 stakeholders and entities with a foundation for the identification, development, and use of a binational set of indicators for the Border 2012 program. The strategy document identifies a conceptual framework, defines terminology and criteria, and outlines the indicator selection, development and implementation process.
- A preliminary binational set of indicators, representative of Program priority areas and actions implemented by the various workgroups, was developed, distributed and posted on the Program's website for feedback. A revised version was presented at the 2005 National Coordinators Meeting and is currently being refined with the active participants of the Border 2012 coordinating bodies for further feedback.

Borderwide Communications Taskforce (BCTF)

Accomplishments for 2004-2005

- A Communications Strategy was developed as a guideline for timely and efficient internal and external communications, which are essential to the success of the program. The strategy is being reviewed by program partners.
- The BCTF took responsibility for managing the content of the official Border 2012 websites. SEMARNAT's website in Spanish was set up. EPA's website was redesigned and policies and procedures were developed for content management. Both websites are frequently updated.
- A program directory was developed, distributed, and posted on the Border 2012 website. The directory lists program partners with contact information to facilitate communication.
- A basic information kit was started with the goal of standardizing program messages and for distribution at meetings across the border region. The kit contains a program fact sheet, a program overview sheet, overview video, and the program's directory, all of which are posted on the Border 2012 website.

Environmental Education

Accomplishments for 2004 - 2005

- The California Environmental Protection Agency partnered with the Baja California Directorate of Ecology, SEMARNAT, and Mexico's Secretariat for Education and developed a California/Baja California Border Environmental Education curriculum for K-6 to be used by educators in classrooms on both sides of the border.
- *Water Science for School* is a program where the U.S. Geological Survey (USGS) along with EPA collaborated to provide a Spanish translation of an outstanding informational website (<http://water.usgs.gov/droplet> or <http://water.usgs.gov/gotita/>). The Web site offers information on many aspects of water, along with pictures, data, maps, and an interactive center where children and adults can give opinions and test your water knowledge. *Puppet Education Show* was created by EPA Region 6 to educate children on environmental matters in a manner that they can easily relate to since it is a bilingual, educational, informative, interactive and humorous puppet show. *Tres Amigos...Al Rescate Video* is a useful resource for communities hoping to educate kids about environmental risks found at home. This video won the prestigious CINDY Bronze award in the International Education non-broadcast category, Early Childhood Education.
- On October of 2003, SEMARNAT and Texas partners developed the Binational Environmental Education Plan, Training for Sustainable Development, and Educational Communication for the Eastern Border between Mexico and Texas. This plan was developed to meet the goals and objectives of Border 2012 and is currently being implemented. July 2004, SEMARNAT developed and implemented a Workshop on financing projects under the Border 2012 Program for mayors of Mexican municipalities along the Nuevo León border. The Municipality of Nuevo Laredo developed and implemented several "Education for Sustainable Development" activities. These activities are to promote environmental awareness, community participation, and environmental management and compliance, environmental culture, environmental compliance and environmental management with participation of more than 9,000 residents. The goal is to have environmental compliance by the micro and small industries.
- On November 2004, in support to the Border 2012 Program, SEMARNAT Tamaulipas organized the Environmental Education Exchange Forum in order to incorporate the Border 2012 environmental agenda to the curricula of Mexico's northeast Border States.