



Border 2012 U.S.-Mexico Environmental Program

Reducing Land Contamination in California-Baja California

August 2008

THE PURPOSE OF THIS INFORMATION BULLETIN is to provide residents of the California-Baja California border region with news and updates on the Border 2012 U.S.-Mexico Environmental Program. This edition focuses on projects of the California-Baja California Waste and Enforcement Task Force, which is part of the California-Baja California Regional Workgroup. Activities under this workgroup strive to accomplish Border 2012's mission of protecting the environment and public health in the U.S.-Mexico border region, consistent with the principles of sustainable development. For more information on the Border 2012 Program please visit www.epa.gov/Border2012.

“This experience has given the community a sense of great satisfaction at the two countries’ commitment to the project and at having been able to integrate the two governments into our efforts to achieve a safer community. In the end, we believe that no community should be put at risk from toxic pollution because everyone has the right to health and that’s what real justice is.”

—Colectivo Chilpancingo Pro Justicia Ambiental and Environmental Health Coalition

Metales y Derivados Lead Smelter Cleanup Nears Completion and Readies for Reuse

ON JULY 8, 2008, THE STATE OF BAJA CALIFORNIA Secretary of Environmental Protection (SPA) presided over a ceremony to celebrate the agreement between SPA and “Promotora Tijuana,” both members of the Baja government, to complete the last phase of the Metales y Derivados cleanup. Promotora Tijuana was awarded \$400,000 to complete the final grading and paving at the site which has been undergoing remediation under a 2004 binational agreement. The property is approved for industrial reuse compatible with the existing zoning. Many people involved with the remedial effort over the last few years were present.

Metales y Derivados was a lead smelter in the late 1980s, but was cited by Mexico’s Federal Enforcement Agency (PROFEPA) in 1992 for environmental non-compliance and eventually closed in 1994. Based on past history and field studies, lead was determined to be the primary contaminant. Estimates of contamination varied widely but were approximated at 35,000 U.S. tons. In 2004, shortly after initiating the Border 2012 Program, Mexico created a binational partnership to implement a four-phase cleanup plan. The plan included removal of high risk wastes, assessment to determine risk pathways, remedial design, and construction. The binational workgroup included Mexico’s Secretary for Environment and Natural Resources (SEMARNAT), PROFEPA, SPA, Border Environment Cooperation Commission (BECC), U.S. Environmental Protection Agency (EPA), City of Tijuana-Otay Mesa, as well as members of the Colectivo Chilpancingo Pro Justicia Ambiental and Environmental Health Coalition (EHC).



Metales during construction phase of cleanup

Expropriation of the property by the State of Baja California was a key factor in the cleanup, allowing them to proceed despite the owners’ lack of response and funds to comply with the cleanup order. The property is now owned by the State of Baja as a result of the 2004 cleanup and land-transfer agreement between the federal and state governments.

The final cleanup cost is estimated to be nearly \$2 million, with SEMARNAT, PROFEPA and SPA contributing the largest investments. Their investments were leveraged with additional support from BECC and EPA. Early in the removal phase, EPA assisted SEMARNAT resulting in a combined removal of 2,000 U.S. tons of surface waste in 2005-2006 and removal of surface debris.

The final remedy involved removing the most concentrated waste and shipping it off-site for disposal, stabilizing the subsurface waste inside a lined containment cell on site, and capping the

cell with reinforced concrete. Many experts such as Dr. Javier Llamas of Mexico and Enrique Medina of the US assisted in the design and construction phase. Once construction began, more contamination was found. About 42,000 US tons (19,100 cubic meters) of contaminated soil was deposited in the lined containment cell.

The community has been an integral part of the technical work-group since 2004 and has worked closely with U.S. and Mexican government officials and technical experts on all aspects of the cleanup.

The Metales remedy was among the first to be completed in accordance with Mexico's 2003 General Law for the Prevention and Integrated Management of Waste and demonstrated the feasibility of safely confining lead-contaminated waste. ■

International Partners Clean Up Tire Piles, Promote Sustainable Scrap Tire Solutions

BORDER 2012 PROGRAM PARTNERS are effectively working together to create solutions to the U.S.-Mexico scrap tire problem. Tires not only create a visual blight, they contribute to disease from mosquitoes, rodents, and other known disease vectors, and pose threats of toxic fires that frequently burn for weeks or months causing severe air quality problems. Furthermore, tire pile fires generate sludges that contaminate soil and ground and surface water.

One of Border 2012's priorities has been cleaning up legacy tire piles and program partners have collaborated in cleaning up 4 million scrap tires in our border communities. In most cleanups these tires were processed as a tire-derived fuel in Mexican cement plants.

The U.S. Environmental Protection Agency (EPA) and Mexico's Secretariat for Environment and Natural Resources (SEMARNAT) have jointly worked on scrap tire cleanup for a number of years, and in 2006 developed and adopted a scrap tire pile preventative framework, the U.S.-Mexico Border Scrap Tire Integrated Management Initiative. The framework was developed in response to issues expressed by state and municipal partners that were burdened with tire issues. The ten Border States signed the Tire Initiative at the Border Governors Conference in Hollywood, California in August 2008. Outreach efforts are underway to encourage border municipalities to sign as well.

Many of the Tire Initiative's principles and actions are already being implemented. In March 2008, San Diego State University convened the Used and Waste Tire Flow in the California-Mexico Border Region conference which created dialogue on economic, social, regulatory, and other issues that contribute to the legal and illegal flow of tires and inadequate disposal or dumping. Understanding the sources of tire piles and organizing cleanup of the largest tires piles, such as Centinela and INNOR, has been a priority of the Border 2012 program. However, partners have also focused on understanding how tires end up in watersheds, such as the Tijuana River. While some is due to illegal dumping, in many cases, scrap tires end up in ravines because they are used



Tires engineered in areas prone to erosion

in construction projects that are not properly engineered in areas prone to erosion.

Preventing tire piles and other impacts of scrap tires requires a broader understanding of the issues before appropriate solutions can be proposed. Success in addressing scrap tire issues will continue to rely upon partnerships and collaboration to promote cost-effective short and long-term solutions. For more information, see www.epa.gov/usmexicoborder/fora/forum-waste.html. ■

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Websites

U.S. EPA Border 2012 Program

www.epa.gov/Border2012

California Environmental Protection Agency (Cal/EPA)

www.calepa.ca.gov

Secretariat For Environment And Natural Resources (SEMARNAT)

www.semarnat.gob.mx

Baja California Secretary for Environmental Protection (SPA)

www.bajacalifornia.gob.mx/ecologia/

Border Environment Cooperation Commission (BECC)

www.cocef.org