

Border 2020 Newsletter Region 9

California, Baja California, Arizona and Sonora Fall 2015



www.epa.gov/border2020

This newsletter provides a summary of activities that took place from October to December 2015.

General Updates

EPA Contributes to Success of 6th Annual Imperial Valley Environmental Health Leadership Summit. Approximately 300 community members and representatives from federal, state, local, and tribal agencies participated in the 6th Annual Imperial Valley Environmental Health Leadership Summit. Matthew Tejada, Director of the EPA Office of Environmental Justice, represented EPA in a panel discussion on how government agencies can make a visible difference in communities through environmental justice. Mr. Tejada spoke of the importance of partnerships across levels of government and organizations to help cultivate healthy and sustainable neighborhood solutions. The panel also included leaders from the California Department of Toxic Substances Control (DTSC), Physicians for Social Responsibility, and CalEPA. The Summit took place at Brawley Union High School in Imperial Valley, an EPA "Making a Visible Difference" community. Summit topics also covered



asthma, climate change, the Salton Sea, pesticides, and citizen science. Francisco Donez of EPA Region 9 co-led a workshop on diesel pollution health impacts and emissions reduction programs. Between sessions, Mr. Donez also staffed an outreach booth to share related information and materials to summit participants. EPA also contributed contractor support for multimedia, workshop supplies, summary and evaluation, and implementation logistics. Priyanka Pathak of the EPA Region 9 Air Division and Jeremy Bauer of the EPA San Diego Border Office participated in planning calls and served as moderators during the summit. Contact Priyanka Pathak (Pathak.Priyanka@epa.gov).

Good Neighbor Environmental Board (GBEB) Transmits Advice Letter to White House. The Good Neighbor Environmental Board (GNEB) submitted a letter to President Obama on December 11, 2015 recommending actions by federal agencies to address vulnerability to climate change along the U.S.-Mexico

Border and resiliency of affected communities. The letter and its recommendations were grouped into five key topic areas: (1) water, (2) health and vector-borne disease, (3) transportation and air, (4) energy, and (5) emergency response and community resilience. Transmittal of the letter followed a face-to-face meeting convened September 17-18 in San Diego, California and a teleconference on November 30, 2015. Samuel Coleman, Deputy Regional Administrator of EPA Region 6, represents the Agency on the GNEB. Jeremy Bauer of the San Diego Border Office and Tomás Torres, Director of EPA Region 9 Water Division, also participated in the face-to-face meeting. The Board is currently developing its annual report which is also focused on climate change resiliency in the U.S.-Mexico border region. See GNEB website for more information. Contact Ann-Marie Gantner (Gantner.Ann-Marie@epa.gov).



Goal Updates

Goal 1 - Reduce Air Pollution

Mexico held its first meeting on November 25, 2015 to plan for the development of a Pro-Aires for the city of Nogales, Sonora. A Pro-Aires is a strategy to reduce air pollution based on a detailed analysis of the local emissions sources, meteorology, air quality, potential pollution controls and other considerations. The project is funded in part through EPA's border grant program (Region 9). In attendance were SEMARNAT officials from Mexico City, CEDES (Sonora's State environmental agency), and other state and local officials. ADEQ is assisting by providing air quality data from its particulate matter (PM) monitor in Nogales, Arizona, as well as from the monitor ADEQ is operating in Sonora, also under a grant from EPA. Emission reductions in Nogales, Sonora should benefit Arizona because Nogales, Arizona recently demonstrated that it would have attained the federal health-based national ambient air quality standard for coarse PM "but for" transport of pollution from Mexico. The Pro-Aires project is scheduled to be completed in December 2016. Contact Dave Fege (fege.dave@epa.gov).

Goal 2 – Improve Access to Clean and Safe Water

Pretreatment Toolkit Nearing Completion. A pretreatment toolkit designed to help small communities in southern Arizona develop and implement pretreatment programs is nearing completion. Phase 2 of the toolkit



includes review of sewer use ordinances and emergency response plans for the cities of Douglas and Willcox, AZ and Holtville, CA, as well as the development of permit templates, inspection protocols, and monitoring plans. A 50 percent review meeting to discuss Phase 2 deliverables was held in Douglas on December 16. A 90% review meeting was scheduled for January 2016. Phase I was completed in July, and consists of documents and templates designed to assist small communities develop and implement a pretreatment program focused on Fats, Oils, and Grease (FOG). A binational workshop to introduce the toolkit is tentatively planned for April 2016 in Douglas, AZ. Development of the toolkit is funded through the EPA infrastructure program. Contact Roger Kohn (kohn.roger@epa.gov).

Mexicali Infrastructure Diagnostic. A study to evaluate Mexicali's wastewater infrastructure is completing procurement. The study, which was scheduled to begin in January 2016, received broad support from the members of the New River Binational Technical Committee who reviewed and provided input into the scope of work. The six-month study is being funded by EPA's Border Water Infrastructure Program and implemented by the North American Development Bank. The study will identify and prioritize infrastructure repairs that, when implemented, will reduce untreated wastewater flows into the New River and Salton Sea. Contact Doug Liden (liden.doug@epa.gov).

Holtville, California Wastewater Treatment Plant Upgrade Progresses. New facilities including the headworks, secondary clarifiers (photo), and septage receiving station are under construction at the existing 0.85 MGD treatment plant site. The plant is being ungraded to meet discharge requirements for ammonia and other pollutants and is expected to be completed by the end of 2016. The \$14M project is jointly funded with \$6.9M from the EPA Border Environment Infrastructure Fund (BEIF) and \$7.1M from a State of California Clean Water Act State Revolving Fund (SRF) loan and grant. Contact Su Cox (cox.susan@epa.gov).



Goal 3 - Promoting Materials and Waste Management and Clean Sites



Eco-Parque Food Composting Demonstration. The Tijuana academic institution COLEF is working under a new Border 2020 grant to develop protocols for collecting food scraps from homes and composting the organics. As a first step, COLEF has worked with EPA's Office of Quality Assurance to prepare an approved Quality Assurance Project Plan (QAPP) for the activities that will require field and laboratory samples and measurements. COLEF will begin field and lab activities in early 2016 following approval of the QAPP. Contact Emily Pimentel (pimentel.emily@epa.gov).

Ocean-Friendly Practices to Reduce Trash. The Tijuana-based non-profit, Proyecto Fronterizo de Educación



Ambiental (PFEA) is working under a Border 2020 grant to reduce trash, especially Styrofoam single-use containers, along Tijuana's beach areas. To date, they have made progress on the campaign logo, the identification of 117 restaurants in the *Playas*, or beach areas, of Tijuana, completed 25 of 50 anticipated surveys, completed four focus group interviews to assess interest and needs, began training of four volunteers, and met with various stakeholders including the local restaurant association CANIRAC. Next steps include an outreach campaign leveraging EPA's "Trash free waters" campaign. Contact Emily Pimentel.

Inter-American Development Bank Funds e-Waste Program in Mexicali. The Autonomous University of Baja California has been working on a "Baseline Study and Market Analysis for the Recycling of Used Electronic Products in Mexicali, Baja California" that will be used to inform future strategies to develop local e-waste recycling markets. Planning efforts are also underway to host experts from Massachusetts Institute of Technology and the Catholic University of Peru in early 2016, under the three year e-waste program administered by BECC for the Inter-American Development Bank (IDB), in collaboration with EPA's Border 2020. The IDB's program objectives are to increase market opportunities for the repair and recycling of electronics in Mexico, while meeting Border 2020 objectives to safely and efficiently manage e-waste in accordance with best management practices. Contact Emily Pimentel.



EPA Funds Trash Cleanup and Mitigation of Nogales Site. A binational Source Characterization of the Nogales Wash and trash cleanup in the Ambos Nogales area concluded last December under an EPA contract with Booz Allen Hamilton (BAH) with a budget of \$61,000. An additional cleanup site was subsequently selected drawing on ADEQ's leadership, local stakeholder input, field visits, and Standard Operating Procedure developed to identify and rank sites for cleanups. The top ranked site, located near the Nogales, AZ public works building, was prioritized due to the amount of debris abutted next to a city sewer line that connects to the International Outfall

Interceptor (IOI). INNOVA Engineering, BAH's heavy equipment contractor, removed 29 tons of trash during the December 13-15, 2015 cleanup while also temporarily mitigating risks to the IOI discovered during the source characterization project. The primary waste materials identified during clean-up efforts included clothing, plastics, rubber hosing, car parts (wheels, doors, interior components), concrete, vegetation, construction and demolition materials, and metal (cans, rebar, structural steel). Contact Emily Pimentel.

Local Community and Institutions Unite to Cleanup Mexicali Canal. The Sonoran Institute (SI), working under a \$65,000 BECC grant, completed grant activities resulting in a total cleanup of 2038 m³ of trash, including plastic and tires. The project leveraged community support from 64 members associated with four newly formed groups. The Sonoran Institute's "Mexicali Fluye" campaign has successfully used social-media, as well as radio, televison and newspapers to inform over 100,000 citizens and galvanize action in the greater Mexicali area. Efforts to maintain the 29 trees planted as part of the landscaping for the Eco-Kiosk drainage corridor are still ongoing. Under a new Border 2020 grant, the Sonoran Institute be will leveraging the momentum from this project to rehabilitate five additional drains and ensure long-term maintenance of these areas. Contact Emily Pimentel.



Goal 4 – Emergency Preparedness and Response

Arizona-Sonora Emergency Prevention, Preparedness and Response Task Force Convenes to Assess Recent Successes and Future Priorities. Approximately 100 people participated in the Task Force meeting held on December 4 in Nogales, Sonora. Participants were updated on various issues including Sister City Plan updates, hazmat exercises and upcoming events and training. The group assessed successes and lessons learned from 2015 and discussed priorities for 2016. Priorities in 2016 include completing Sister City plan updates, resolving cross-border liability issues, providing training in San Luis Rio Colorado and Agua Prieta, and continuing joint exercises and equipment exchange. Contact Bill Jones (jones.bill@epa.gov).



Training of First Responders in Border Region Continues. The First Responder Awareness (FRA) Course reached 143 participants in Nogales, Sonora. The training was delivered twice at the Nogales, Sonora fire department on December 3, and a second course was added on December 4 due to high demand. The course, targeted at individuals who are likely to witness or discover a hazardous substance release, discussed the appropriate way to initiate an emergency response sequence by notifying the proper authorities of the release. Contact Bill Jones.

Sister City Plan Updates. Representatives from the U.S. EPA, Arizona Department of Environmental Quality, the State of Sonora Civil Protection, Agua Prieta, Douglas, Nogales, Sonora and Santa Cruz County convened on December 4 to discuss efforts to update Sister City Plans. The goal is to have the plans updated by August 2016. The Plans are designed to facilitate coordinated preparation and response activities to emergencies occurring in the border region.

Goal 5 – Enhance Compliance Assurance and Environmental Stewardship

Industrial Discharge and Release Fact Sheet. The Colorado School of Mines has started working under a new Border 2020 grant to develop fact sheets designed to improve compliance and facilitate public access of information and understanding of the US Toxic Release Inventory (TRI) program, as well as the Mexican registry of emissions and transfer of pollutants (RETC, by its Mexican acronym). The grantee will prepare the fact sheet in English and Spanish and collaborate with Border 2020 to leverage its outreach resources. For additional information on TRI see: http://www.epa.gov/toxics-release-inventory-tri-program/tri-around-world. Contact Emily Pimentel.

Environmental Health

Preliminary Findings of Arizona-Sonora Environmental Health Assessment Note Progress in Blood Lead Levels, Continued Data Gaps. The Sonora Environmental Research Institute, Inc. (SERI), under a \$37,975 Border 2020 grant, is collecting, compiling, and analyzing trends to understand environmental health status along the border between Arizona and Sonora, Mexico. The report will identify data gaps, inform decision-making and policies, and guide future research. Preliminary findings noted an overall decrease in blood lead levels in children living in all four Arizona counties in the border region between 2005 and 2015. However, data were based on a low screening rate (around 20%) and the state has plans to increase the screening rate to 85%. The findings also noted that approximately 4 percent of children attending schools in the Arizona border region are served by a water supply with at least one Safe Drinking Water Act violation. Additional information is needed to assess those served by private wells (5 percent of the population). Work continues to evaluate information on additional areas of concern including mercury, pesticides poisoning, air quality, asthma rates, and asthma hospitalizations in the border regions of Arizona and Sonora. Dr. Aminata Kilungo, lead investigator and Director of Research and Development for SERI, presented these and other preliminary findings in January at the EPA-sponsored U.S.-Mexico Border Symposium on Protecting Children's Environmental Health. The final report is anticipated by mid-2016. Contact Jeremy Bauer (bauer. jeremy@epa.gov).

Healthy Homes Healthy Breathing Project Reaches Key Targets. The Imperial Valley Child Asthma Program's Healthy Homes Healthy Breathing Project reached several milestones last quarter. The project, funded through a technical assistance grant between EPA/BECC and the El Centro Regional Medical Center (ECRMC) is designed to improve childhood asthma outcomes by educating low income families in eight target communities in Imperial Valley, a "Making a Visible Difference" community, about managing indoor asthma triggers. The project is nearing completion. Between September 2015 and November 2015, twenty-four familes were enrolled, exceeding goals. As of November 2015, 97 home visits had been completed.



Outreach events have included community health fairs and the popular annual "Stop and Listen" Asthma Forum. Over 150 people attended the forum which took place on November 19, 2015 between the hours of 5:00 p.m. to 8:00 p.m. at the Southwest High School multi-purpose room in El Centro California. The Asthma Forum brought together researchers, community leaders, planners, government officials, environmentalists and concerned citizens to discuss the environmental and other factors that are contributing to a high rate of asthma emergency room visits and hospitalizations in Imperial County. Contact Priyanka Pathak (pathak.priyanka@epa.gov).



EPA and Partners Finalize Plans for U.S.-Mexico Border Symposium on Protecting Children's Environmental Health. As of December 2015, over 100 participants from California, Baja California, Arizona, and Sonora had registered for EPA Region 9's symposium on protecting children's environmental health in the border region. Jackie Menghrajani and Jeremy Bauer led final planning efforts into the new year, coordinating closely with partners from the Border Environment Cooperation Commission, Agency for Toxic Substances and Diseases Registry, U.S.-Mexico Border Health Commission, California Department of Public Health, Arizona Department of Environmental Quality, and Sonora Environmental Research Institute, Inc. Look for updated information about the symposium on the Border 2020 website. The Symposium took place January 27-28, 2016 in San Diego, CA. In all over, 150 participants attended. A summary of the symposium will be included in the next EPA Region 9 Border Progress Report which will summarize Border 2020 activities occurring in January, February, and March 2016. Contact Jackie

Menghrajani (menghrajani.jacquelyn@epa.gov) or Jeremy Bauer (bauer.jeremy@epa.gov).