

**U.S.-Mexico Border 2012 Waste Policy Forum Meeting
January 19, 2005 - Public Meeting**

Camino Real Hotel
Av. Paseo de los Héroes
10305 Zona Río
22320 Tijuana, B.C. México

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BACKGROUND

The US-Mexico Border 2012 Program is the third iteration of the implementation of the bi-national Agreement on Cooperation for the Protection and Improvement of the Environment and Transboundary Problems, also known as the La Paz Agreement.

The waste offices of the US Environmental Protection Agency (EPA), led by Matt Hale, and of the Mexican Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT), led by Daniel Chacon, collaborated to put together a meeting where-by the Waste Task Forces explained and discussed steps taken and goals for the future. Public comment was taken on the issues relevant to them.

The ten year Border 2012 Program is organized into regional work groups and task forces, border-wide work groups, and media-specific policy forums that foster environmental cooperation along the border. This is the first meeting dedicated solely to the Waste Policy Forum (WPF).

MEETING OBJECTIVES

- Discuss four issues that have been identified as priorities: institutional and infrastructure capacity, transboundary hazardous waste tracking, scrap tires, and site revitalization.
- Highlight the work of the four regional task forces.
- Build working relationships among WPF members, partners, and participating stakeholders.
- Discuss and improve upon the planning and coordination of Border 2012.

ORGANIZATION & STRUCTURE OF MEETING

On January 19, 2005, the Waste Policy Forum held a public meeting in Tijuana, Mexico. The public meeting was splint into four sessions: Building institutional and infrastructure capacity, Tracking transboundary hazardous waste movements, Scrap tires, and Site revitalization. During each session, all four regional task forces highlighted their recent progresses and plans for the future. This was followed by discussion of the forum members. The public then had an opportunity to make comments or ask questions of the forum. Finally the WPF co-chairs, Matt Hale and Daniel Chacon concluded with the next steps that should be carried out to advance the progress of that issue.

Waste Policy Forum members and partners were seated at the table (Border 2012 national and regional co-chairs, border office officials, and other WPF members). The table was open at one end facing the audience which consisted of the public (academics, non-governmental organization (NGO) representatives, industry representatives, and general citizens) and non-forum local government officials.

OPENING REMARKS

WPF Coordinator Rick Picardi of the EPA's Office of Solid Waste welcomed the attendees to the forum, explaining the Border 2012 plan in general and the specific goal (No. 3) and objectives that address land contamination and waste issues. He then explained the organization of the meeting, and introduced the four sessions and the regional task forces. Remarks by the WPF Co-chairs were then made. Both Mr. Chacon and Mr. Hale emphasized the importance of working together to address border-wide waste issues. Mr. Hale stressed the importance of working on general objectives with measurable goals and the need to clarify the specific responsibilities of each country and the waste task forces within the goals of the plan. Mr. Chacon highlighted the problems that mismanaged waste poses to the border population, including the problem of the pollution of the area's limited watersheds.

SESSION I: BUILDING INSTITUTIONAL AND INFRASTRUCTURAL CAPACITY

New Mexico-Texas-Chihuahua Task Force

Jorge Castillo of the Texas Commission on Environmental Quality and Rene Franco Ruiz of Franco & Associates presented information for this task force. They identified access to landfills, medical waste, and beneficial use of landfill gas as vital topics to their region, and explained the partnerships they have created or wish to create to address these issues.

A large part of the problem of mismanagement of hazardous waste is the distance between waste generators and disposal and treatment facilities and landfills. The cost of transportation is too expensive for communities to correctly dispose of their waste. The task force has thus been working on a Juarez project that would create transfer waste handling centers throughout the city. Many local government officials in the region have also expressed interest in addressing medical waste issues, so the task force has been working with the NGO "Hospitals for a Healthy Environment" to create educational presentations to hospitals in the region. In addition, the task force has been working with a Juarez cement kiln to look at the feasibility of using tires or landfill gas to create energy.

Other general waste management issues of importance that Mr. Castillo and Mr. Franco identified were scrap tires, recyclables, bio-solids, agricultural waste, liquid waste, and scrap vehicles. The task force hopes to work with US and Mexican localities and maquiladoras to create integrated waste management plans to address all these issues.

Texas-Coahuila-Nuevo Leon-Tamaulipas Task Force

Hector Chavez of the Eagle Pass, TX city government and Martin Bremer of the Instituto Tecnológico de Estudios Superiores de Monterrey presented information for this task force. Mr. Chavez explained that increases in tipping fees have presented a growing problem with the ability of small communities to deal with waste management. The construction of new landfills has been stymied by the "NIMBY" (Not in my Backyard) syndrome. These two factors have increased illegal dumping in the area which creates

increased pollution for the region's most important watershed, the Rio Grande. He emphasized the need for communities to work together with the federal government to address these issues. Mr. Chavez spoke about the importance of increasing collaboration with other relevant federal agencies, citing the U.S. Department of Transportation (DOT) as an example. The task force is working with DOT to eliminate 200,000 tires by using them as crumb rubber for asphalt in highways.

Dr. Bremer emphasized the importance of long-term projects as well as short-term projects, for example, carrying out inventories of hazardous waste sites of generation and disposal and then identifying waste management issues. Another example of a long-term project would be carrying out studies to compare the cost and benefits for solutions for scrap tire use. Dr. Bremer also explained a recent undertaking to educate the public about scrap tires called "New Life for Old Tires."

Arizona-Sonora Task Force

Emily Pimentel of the EPA Region 9, Edna Mendoza (representing Ed Ranger) of the Arizona Department of Environmental Quality, and Ernesto Munro Palacio of Procuraduria Federal de Protection al Ambiente (PROFEPA) presented information for this task force. All three co-chairs explained the problem of urban waste mismanagement on both sides of the border due to the floating border population that dumps waste garbage on sidewalks before moving to a new area. This is also a problem in National Park Areas on the border. Illegal dumping due to migrants is an increasing problem for Arizona because California's tightened border control has led to an influx of illegal immigrants crossing the neighboring, less densely populated Arizona border. Ms. Mendoza said that the waste force has been working with Sonora communities and the NGO "Tucson Clean & Beautiful" to address this problem.

Ms. Pimentel also identified several projects being undertaken to create better waste management. One project is fast track certification for new landfills because some landfills in the area are near capacity. The task force has been successful at leveraging international funds for new landfills. However, there remains a problem of the mismanagement of existing landfills. Region 6 has also been able to supply the area with funds to develop Environmental Management Systems. In addition, Ms. Mendoza said that used oil and household hazardous waste collection solutions are being investigated with Border 2012 funding. Finally Mr. Palacio, Ms. Pimentel, and Ms. Mendoza discussed other important waste topics for the region including e-waste, scrap tires, and solid waste management in Indian lands.

California-Baja California Task Force

Saul Martin del Campo of the Ecologia de Baja California (B.C.) and Emily Pimentel of the EPA Region 6 presented information for this task force. Mr. Martin del Campo emphasized scrap tires as a very important issue that requires the attention of both countries. He pointed out that most tires that end up in Mexico originated in the United States. He acknowledged the US\$300,000 (2 mil pesos) of EPA funding given to the region to address the disposal of wastes. He also commented that the US has good controls on waste recycling and hopes that Mexican officials can coordinate with US

officials to receive information from them. Other hot topics for the region Mr. Martin del Campo identified include scrap vehicles, recyclables, e-waste, and waste discharge to sewers (ex. Paint shops)

Ms. Pimentel further emphasized the need for collaboration citing that cement kilns in Mexico may be illegally accepting spent solvents from the US and also expressed the desire to work on used oil and e-waste issues in the future. She explained a joint EPA/state official technical assistance training program to build capacity in the border region and increase public understanding of waste management regulations and laws.

Discussion & Public Comment Highlights

- Ms. Pimentel reminded the forum that although recycling efforts are important, landfill capacity could also be improved by removing some items from the waste stream (composables, electronics).
- Mr. Chacon explained a new hazardous waste law in Mexico to develop hazardous management and handling of waste flows at the state level. He noted that if a law is made too rigorous it will not be useful. Laws need to be more cost-effective to increase compliance.
- Mr. Chacon also discussed the need to recycle lead from used batteries to create new batteries as Mexico is a big producer of batteries. He commented that there are no Mexican regulations for handlers of used batteries and that Mexico need controls similar to the US Universal Waste rule.
- Mr. Martin del Campo stated there is a problem with livestock waste accumulation and that the Mexicans need to become familiar with how to control residues, especially from riverbeds.
- A representative from SEMARNAT-Sonora stated that Section 10 of the new Mexican law required that municipal governments develop programs for waste management in conjunction with social groups.

Next Steps

Mr. Hale stated that the binational action plan on capacity building should be completed, that coordination between US agencies should be increased, and that close communication between the regional task forces should be maintained so that the task forces can learn from the successes and failures of each other.

Mr. Chacon said that the task forces should continue spreading knowledge to misinformed communities to remove myths held by the general public.

SESSION II: TRACKING TRANSBOUNDARY HAZARDOUS WASTE MOVEMENTS

Sistema de Rastreo de Residuos Peligrosos Presentation

Alfonso Flores of SEMARNAT presented information on the Mexican electronic waste tracking system. Sistema de Rastreo de Residuos Peligrosos (SIRREP) is an electronic system that tracks the transport of maquiladora hazardous waste across the border in both

directions. The system aims to ensure that hazardous materials which enter Mexico for processing are returned to the native country. Data is entered into the system in Mexico City and access is available only there. Mr. Flores then went on to explain a new system being developed called SIRREP Plus.

SIRREP Plus will meet the requirements under the Basel Convention to improve and update tracking systems. It will be an advantage over the old system because access will be available everywhere as opposed to only at one location. In addition, anyone will be able to access the system. SIRREP Plus will include information such as the type and quantity of waste generated by each firm and the type and quantity of waste transported in each shipment. SIRREP Plus will increase compliance by requiring importers and exporters to apply for a National Registration Number so that the government can authorize who can handle and transport hazardous waste. The system will also allow PROFEPA to work closer with SEMARNAT and for e-files to be sent automatically to the embassy. SIRREP Plus is currently in the validation phase; once it is implemented paper forms will no longer be accepted.

US Hazardous Waste Tracking Systems

Rick Picardi of the EPA Office of Solid Waste presented information on the current hazardous waste tracking systems: the Waste International Tracking System (WITS) and the Region 6 Border Compliance Assistance Database. WITS is a database which contains export notice data and is managed by the EPA's compliance officer. The compliance office will expand the database to include manifest data if there is available funding.

The Region 6 online database collects data from the manifests of imports and waste returns to the US and is managed by the Border Assistance Compliance Center. This is a pilot project. If it is successful in improving compliance at the border, database collection will continue.

Mr. Picardi also discussed a proposed e-manifest system. The proposed system would allow companies to electronically enter their Resource Conservation and Recovery Act (RCRA) hazardous waste manifest data into a national database. EPA has recently received approval to charge a fee for the use of the electronic database. However, development of such a system is not definite at this time.

Next Steps

Mr. Hale stated that the next steps to improve tracking would be to sign the current proposed paper-based manifest system in the US, and to look into the best way to improve tracking between Mexican and the US.

Mr. Chacon emphasized that it is a priority to have e-government between the three countries of North America in order to improve information about the tracking of waste. He also mentioned that before SIRREP Plus goes into use, the electronic signature of the system must be legally approved in Mexico.

SESSION III: SCRAP TIRES

SEMARNAT

Adriana Oropeza of the Environmental Regulation section of SEMARNAT presented some of the difficulties tire recycling has posed and a project SEMARNAT undertook to reduce the number of tires in a tire pile. The first problem is that not all tires are arranged in a pile; there are many scattered throughout cities, which increases collection cost. Getting these tires to a grinding company can also be expensive as there are only two in the country. Tire grinding itself is another expense; the more finely ground tires are easier to recycle but are also more expensive to grind. Using tires in cement kilns is another problem. Although using tires as fuel contains less sulfur than other fuels used in cement kilns, there remains many myths about the danger of burning tires and as such some NGOs remain adamantly opposed to tire use as a fuel for any reason. Finally, despite testimony from cement kilns that they could use 20 million tires/year, no more than half a million/year has been used by the cement kilns.

SEMARNAT completed a pilot project to transport tires to cement kilns from a Mexicali tire pile. The tire pile consisted of 332,416 tires and 91,000 tires have currently been removed at a cost of 4.44 pesos per small tire and 20.57 pesos per large tire for a total of around 45,000 pesos.

California-Baja California Task Force

Saul Martin del Campo of the Ecologia de Baja California (B.C.) and Emily Pimentel of the EPA Region 6 presented information for this task force. Ms. Pimentel and Mr. Martin del Campo want to look into developing markets other than cement kilns for tire piles. Ms. Pimentel said she had approached the North American Development Bank for funding to build a tire grinder in Mexicali, but she does not have good information on what the cost of this would be. In addition to dealing with current tire piles, Mr. Martin del Campo wants to prevent new tire piles from forming by with stricter law enforcement to stop the illegal importation of tires.

Arizona- Sonora Task Force

Ramon Sampayo Ortiz, the delegado of Tamaulipas presented information for this task force. He pointed out that Mexico used to issue permits for tire importing, but no longer does. Mr. Sampayo suggested a new law which required importers to properly dispose of one old tire for every tire imported. He also pointed out that there are various tire piles that were slated to be recycled, but nothing happened due to a lack of funding.

Texas-Coahuila-Nuevo Leon-Tamaulipas Task Force

Hector Chavez of the Eagle Pass, TX city government, Robert Snowbarger of EPA Region 6 and Martin Bremer of the Instituto Tecnológico de Estudios Superiores de Monterrey presented information for this task force. Mr. Snowbarger discussed a feasibility study on the placement of a rubber facility to process waste tires. Mr. Chavez described recent problems with Texas legislature. A law that taxed \$2 on tire sales which went toward a disposal fund is no longer supported by the Texas legislature. The Texas

legislature decided that counties should do this themselves if they want to, which Mr. Chavez claimed is unrealistic. He also cited an example showing that different agencies need to talk to each other. One Texas agency was collecting tires and had to pay for the disposal of each tire. Meanwhile, the Texas DOT expressed interest in using crumb rubber for roads but ultimately decided not to because it was too expensive.

Dr. Bremer cited a demonstration project to use whole tires for erosion control. Tires were tied together in a flat plane, placed on sandy hills and covered with dirt. The hills had an 80% reduction in erosion. Although unattractive at initiation, the tires provide a microshed for seeds to implant and grow so that eventually the hills will be covered with grass. The pilot was carried out at a cost of 11.6 pesos/tire, with 75 % of this due to labor costs. Thus in addition to reducing erosion, the project created much needed jobs for the area. However there would be a high maintenance cost to upkeep the hills.

New Mexico-Texas-Chihuahua Task Force

Toni Duggan of the New Mexico Environmental Department, Jorge Castillo of the Texas Commission on Environmental Quality and Rene Franco Ruiz of Franco & Associates presented information for this task force. Ms. Duggan explained the preference for baled tires in New Mexico explaining that the cost of a tire baler (~\$50,000) was much lower than the cost of a tire shredder (~\$250,000). This lower cost makes it possible for communities to buy their own tire baler. The New Mexico DOT is also in favor of using tire bales for highway construction, but wants the EPA to provide money to develop standards to do this. Other efforts being explored in New Mexico include legislation to create a \$0.50 tax on automobile registrations for the use of scrap tire management and the clean-up of illegal dumping, proposed changes to the New Mexico tire act to create a tire manifest system, tax breaks for companies which use recycled tires, and the use of tire bales for erosion control. Mr. Castillo agreed that all of these approaches could be viable, saying that the best strategy may be using many different approaches and not focusing on only one. He also emphasized the importance of using tires in civil engineering applications.

Mr. Rene proposed two solutions: require all importers to pay upfront at the border the 10 peso/tire disposal fee that Mexico charges, and require importers to bring two tires to a cement kiln for every one tire imported.

Discussion & Public Comment Highlights

- Ms. Mendoza commented that even if a \$2 tax were imposed on the sale of new tires, the money is not held as a lump sum by the state to undertake a project, but is given out to the counties for scrap tire management.
- A member of the public suggested that a temporary employment agency could work with technical committees to use seasonal employees (such as commercial fishermen) to work on tire related projects such as the civil engineering projects previously mentioned.
- Ms. Oropeza commented that ground tires that are too large to be used for roads could be used for sidewalk construction.

Next Steps

Mr. Hale spoke that information on the location of existing tire piles should be compiled. He again commented on the importance of communication between border players as different lessons are being learned by different people. Finally he spoke of the need to seek alternative sources of funding to carry out some of the suggested solutions to the scrap tire problem.

Mr. Chacon spoke of the problem that different US states have different regulations and taxes. He said it would be useful to harmonize legislation, regulations, and taxes between the two countries and ten border states.

SESSION IV: SITE REVITALIZATION

California-Baja California Task Force

David Jones and Emily Pimentel both of the EPA Region 6 presented information for this task force. There was a presentation on the clean-up SEMARNAT has undertaken on the Metales site. The presenter listed the five steps necessary to clean up the site. The first two steps have been completed:

1. The site has been fenced off.
2. The surface hazardous wastes on the site and dispersion of wastes from the site have been contained. 2000 tons of wastes have thus far been taken to the US for disposal.
3. EPA and SEMARNAT plan to characterize the current conditions and risks of the site.
4. The best technological solutions will be selected
5. The residues and contaminated soils will be treated.

110 contaminated sites along the border have been documented, but a complete inventory needs to be completed. After this, four principal sites will be identified for remediation. Ms. Pimentel pointed out the need to design a protocol for financial responsibility for the future clean-up of industrial sites in.

Arizona-Sonora Task Force

Ernesto Munro Palacio of Procuraduria Federal de Protection al Ambiente (PROFEPA) presented information for this task force. Mr. Palacio spoke that a contaminated site has not yet been identified in the region for remediation, but a potential site is that of a Montezuma copper company site. Residue releases from the site threaten to pollute the watershed.

Texas-Coahuila-Nuevo Leon-Tamaulipas Task Force

Martin Bremer of the Instituto Tecnologico de Estudios Superiores de Monterrey presented information for this task force. Mr. Bremer wants the list of sites expanded to include more sites. The task force wants to develop a methodology for identifying additional contaminated sites. A distinction between sites that actually are contaminated versus those that are thought to be contaminated should be made.

New Mexico-Texas-Chihuahua Task Force

Jorge Castillo of the Texas Commission on Environmental Quality presented information for this task force. Mr. Castillo talked about the status of brownfields in El Paso. Legal restrictions prevented brownfields in El Paso from being funded. He also spoke of the importance of working with environmental justice groups, citing the example of a Juarez contaminated site. The community at this site was not involved in the clean-up process and as such questions posed by the residents were never answered.

Discussion & Public Comment Highlights

- A tribal representative expressed concern about the authorities' lack of environmental responsibility. She attested that the Rosa Rita area has been sorely neglected, resulting in the contamination of the beaches in this area. She spoke that the authorities need to deal with this now before the problem becomes too great.

Next Steps & Closing Remarks

Mr. Hale spoke that a binational policy on revitalization needs to be developed. A complete inventory of sites should be completed. He also spoke of the importance of characterizing a site before identifying reuse options. Finally, Mr. Hale thanked the forum members for their participation and the audience for their feedback on these issues.

ATTENDEES (52)

Edna A. Mendoza	Arizona Dept. of Env. Quality
Stephan Siciliano	BNA
Javier Castrejon	CAE
Jessica Castoneda	CIGA
Mario Castillo	CIGA
Jose C. Zavala	CIGA/ CANACINTRA
Hector Chavez	City of Eagle Pass, TX
Hirut Soriano Blanco	CIUDADANO

Yenervido Dyers	CIUDADANO
Tomas Balarezo	COCEF (BECC)
Maole Lourdes Lujan S	Colectivo Chilpanengo Pro-Justiciacunbiente
Matthew Cervantes	Colectivo-Chilpan Cingo
Saul Martin del Campo	Ecologia de B.C.
Ma. Magdalena Cerda	EHC
Rene Franco Ruiz	Franco Y Asociados
Gerardo Echevarra	GEN (Recolectora King Kong)
Malica Solano Borboa	GEN (Recolectora King Kong)
Pablo Guzman	GEN (Recolectora King Kong) /Vicra PASA
Martin Bremer	ITESM
Jeff Bustamante	Native American Environmental Protection Coalition
Nina Hapner	Native American Environmental Protection Coalition
Toni J. Duggan	NM Env. Dept.
Jesus Jimenez Payan	PROFEPA
Francisco Trevino Cabello	PROFEPA- NL
Ramiro Mendival R	PROFEPA-Sonora
Sandra Dibble	San Diego Union Tribune
Emilio Cedrun	SEMARNAT
Jorge Juarez	SEMARNAT
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Adriana Oropeza	SEMARNAT-SFNA
Humberto Ruiz Molina	SEMARNAT-Sonora
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Albes Gaona	US EPA/OIA
Abigail Ryder	US EPA/OSW
Matt Hale	US EPA/OSW
Rick Picardi	US EPA/OSW
Norma Duran	US EPA/R6
Robert Snowbarger	US EPA/R6
David Jones	US EPA/R9
Dave Fege	US EPA/R9-San Diego
Tomas Torres	US EPA/R9-San Diego
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