Environmental Health Workgroup Annual Meeting
March 16-17, 2006

## A. General Information:

*Organized by:* Environmental Health Workgroup
*Meeting location:* Four Points Sheraton, Brownsville, Texas, United States
*Agenda:* See Appendix A
*Participants:* See Appendix B

## B. Meeting Objectives:

- Provide status of ongoing programs
- Reach consensus of a limited number of priority areas for 2007 and beyond
- Develop "next steps" plans for each priority
- Assess and provide recommendations related to the Border 2012 operating structure- improving binational communications at all levels

## C. Meeting summary

*Thursday March 16, 2006*

### Welcome/Introductions

The day began by an opening welcome message by Commissioner Sally Arroyo from the City of Brownsville. Participants were also welcomed by Environmental Health Workgroup (EHWG) co-chairs Dr. Hal Zenick, Dr. Matiana Ramirez (Representing Rocio Alatorre Eden-Wynter), and Dr. Howard Frumkin. The group proceeded to introductions by each attendee.

### Environmental Health Workgroup Priorities

Dr. Frumkin introduced himself as the new co-chair for the US Department of Health and Human Services, replacing Admiral Richard Walling. He gave a brief explanation of the organization of the Department of Health and Human Services, and the role of the Centers for Disease Control and Prevention (CDC). From this perspective, he identified the following issues of possible consideration for the EHWG:

- Looking at environmental health from an urban perspective in each sister city pair
- Further interest in capacity building, particularly with regards to trained health professionals
- Involvement of the private sector in health discussions
- Environmental Justice
- Exploring cumulative hazards, including quality of life as a health measure

- Gaining greater community input and further reporting/accountability to the public
- Relying on sound evidence-based science to develop research, targeting research to address practical problems
- Creating sustainability in environmental and health programs

Dr. Ramirez spoke on behalf of COFEPRIS/SALUD and gave a brief overview of that organizational structure. She emphasized the importance of working with epidemiologists to develop sound scientific research, particularly with the development of indicators. From the COFEPRIS perspective, she identified the following issues as being important:

- Continuing air quality work in areas that already have established projects
- Developing indicator projects specifically targeted to water, including both drinking water and surface/contact water
- Looking at indicators of efficiency
- Providing further training for public health workers

Dr. Zenick addressed the group on behalf of the EPA, and identified the similarities between the co-chairs' areas of interest. He spoke on the EPA's interest in the CDC approach of looking at health issues through a healthy place-based perspective (i.e. healthy homes, healthy schools, etc). Dr. Zenick welcomed the representatives from the US-Mexico Border Health Commission, and invited them to have further participation in the EHWG.

Dr. Zenick outlined the planned agenda and meeting objectives, and spoke about the ability of the EHWG to "chart its own course" in the future years (i.e. identify and focus on new areas of concern). He reminded the group of the role of the regional Environmental Health Task Forces and stressed the importance of Border 2012's "bottom up" approach.

Rebecca Daniels and Dr. Matiana Ramirez gave update presentations on the work of the EHWG over the last year (see "EHWG update 1" and "EHWG update 2" presentations). A discussion followed about the needs and focus areas of environmental education across the border. It was suggested that environmental education needs to be addressed at a border-wide scale, but implemented at the regional or local level. Two types of environmental education were identified as needing further work: 1) research on methodology, implementation, materials, and 2) implementation of environmental education projects. Another discussion followed about the necessity of environmental education containing a measurement component. There was a position stated that constantly evaluating education projects would use up most of the limited resources for each project. It was agreed that evaluations should be done for projects that are representative of other similar projects. Another issue raised was about the need to further coordinate environmental education projects.

**Accomplishments and Priorities of Border 2012 Partners**

*Air Policy Forum- Sarah Sowell*
See "Air Policy Forum" presentation

In her presentation, Sarah Sowell identified the following areas where coordination was needed between the Air Policy Forum and the EHWG:

- Finding ways to link emission reduction efforts to human exposure reduction to health impacts. This might occur through greater health surveillance and data, or by finding ways to connect health impacts to infrastructure projects
- Greater coordination and dissemination of data on air pollution and health effects
- Coordinating projects that the Air Policy Forum is conducting to see if there are possible health measurements

Sarah Sowell answered questions from meeting participants and a discussion followed about possible coordination. The Air Policy Forum is not concerned with indoor air quality, although the EPA has several programs that are (but not specifically on the border). The group agreed that more coordination was needed between air quality and health issues, although specific methods were not addressed. One possible suggestion was for state and federal governments to work closer with academia, specifically so that scientific information can be conveyed to policy makers. This information would need to be presented in a targeted manner with language and context that is understandable to non-scientists. Scientists should consider what the main message that should be conveyed is.

*Water Policy Forum- Carlos Rincon*
See "Water Policy Forum" presentation

Following the presentation by Carlos Rincon, there was a discussion about whether there were ways to better coordinate water and health efforts. Several participants identified that this was a very difficult task due to the nature of funding there projects. Most of the projects are coordinated the International Boundary and Water Commission (IBWC) and the Border Environment Cooperation Commission (BECC), and health has a minimal focus. There was discussion that further coordination and consultation could come from other groups such as the Border Governors Association or the reports of the US-Mexico Border Health Commission.

*Border Indicators Task Force- Iris Jimenez*
See "Border Indicators Taskforce" presentation

In her presentation, Iris Jimenez identified the following priorities for improving the indicators that are under development:

- Identification of more comparable data sources
- Propose better communication of indicators (graphics, data interpretation and descriptions)
- Further communication between health entities and the Border Indicators Task Force

Following the presentation, Iris and the attendees discussed several other challenges to developing indicators. Data reporting in the United States and Mexico does not follow a similar format, leading to incomplete or incomparable health data sets. For infectious disease reporting, there is a system in place, but there is a strong under-reporting, leading to the need for better surveillance systems. No solutions were provided for addressing these issues.

*Health Resources and Services Administration- Angel Brana*
See "HRSA" presentation

*US-Mexico Border Health Commission- Dr. Lawrence Kline and Dr. Dora Elia*
See "USMBHC" presentation

Dr. Lawrence Kline identified two environmental health priorities that the US-Mexico Border Health Commission has targeted in their Healthy Border 2010 plan:

- Improve household access to sewage disposal
- Reduce hospital admissions for acute pesticide poisoning

He provided an update on the staffing of the Commission, as well as the identification of new Commission members. Dr. Kline further explained that the Commission has created an outcome measurement portion to their Request for Applications process, which will help with indicator efforts.

*United States Geological Survey- Zachary Wilson*
See "USGS" presentation

Following his presentation, Zachary Wilson fielded questions from participants. The purpose of the project is to binationally integrate existing geospatial data in order to provide a framework for analysis of environmental health issues. The current GIS mapping project has real-time water quality and stream-flow data. There is limited health data for the project. A suggestion was raised that the project incorporates boundaries of tribal lands, and another about finding ways to help users interpret the data. USGS is working on finding tribal land boundaries, and the project website at http://borderhealth.cr.usgs.gov provides users with documentation of integration methodologies and information for help in interpreting environmental contaminant values.

**Regional Environmental Health Taskforce Presentations**

*Arizona-Sonora- Edith Frias*
See "Arizona-Sonora" presentation

Edith Frias began her presentation by explaining that this taskforce focuses mainly on children's environmental health issues. The main project that is underway now is an "integrated pest management" program that focuses on pest control applications to reduce exposure to children in schools. This is a joint program with the state of Arizona, and

there is future interest in partnering further with Sonora. A certification program has been created for pest control companies who are able to reduce the risk of exposure to children by reducing application and using best-practices. A similar certification program is being started in Sonora. Communication of information on pesticide exposure is being disseminated through a news media campaign, and is also being targeted towards parents. An additional area of concern in this region is the inference that exposure to pesticides may cause asthma. This work will tie in with air quality/asthma work, but will include pesticides as a possible exposure.

*California-Baja California- Maura Mack*
See "California-Baja California" presentation

This regional environmental taskforce has been developing a document on the environmental health priorities in the California and Baja California border region, although it is still under review and has not been released. However, the priorities presented in this presentation were based on what was recommended in this document. The general priority areas are

- Air quality
- Lead exposure
- Pesticides exposure
- Water quality

Other areas of concern include monitoring and surveillance, capacity building and outreach to communities.

For air quality, there is a focus on the high levels of particulate matter, particularly within Imperial County. There is an upcoming project for removing water from one site, which will leave large areas of water beds uncovered, and contribute significantly to particulate matter in the air. These increased levels of air pollutants suggest that further studies are needed related to air quality and health.

Lead exposure is another important issue in this region. Primarily the exposure is from lead in candy or ceramic cooking pots. To combat the exposure, more education and communication about the risks is necessary, to both families and health care providers. With regard to pesticides, health surveillance and monitoring were raised as one of the most important issues. Furthermore, capacity building for physicians and educational outreach to farmers will aid in reducing exposures.

Gastrointestinal health outcomes related to exposure to contaminated water is another important issue in this region. The issue of urban sprawl and healthy communities might be a substantial environmental health issue for California-Baja California, but is not an immediate concern.

*Texas-New Mexico-Chihuahua- Enrique Suarez*
See "3-state" presentation

Enrique Suarez's presentation focused on the need for greater capacity building within the various regional taskforces. He cited a lack of consistent participation from the health sector, and a lack of an integrated vision. There is a need to train promatoras in this region, and a need to move towards a community registry of syndromic diagnoses for diseases related to the environment. Their previous project on the Binational Tracking Network of Environmentally Related Diseases is still underway. Continuation of the project involves household surveys in Juarez, and a preliminary focus on water. A problem that the project faces, which is similar to other projects across the border, is the lack of standardization of health data.

Thomas Ruiz, from the three-state region, presented a series of additional priorities:

- More environmental health in colonias, specifically with regards to household assessments and targeted education.
- Further research in the colonias on the role of industry in affecting environmental quality, and subsequent health outcomes.
- Air quality, with a focus on transportation as a transboundary source.
- Liquid waste from septic tanks that may contaminate groundwater and private wells
- Water quality of water that is transported through trucks, when infrastructure is not available for water distribution
- Pesticide exposure and education that is targeted at children
- Risk communication
- Landfills and trash as hazardous waste
- Food handling issues

*Texas-Coahuila-Nuevo Leon- Tamaulipas- Waldo Lopez*
See "4-state" presentation

Waldo Lopez addressed several issues that are prevalent in the four-state region. There was a particular focus on capacity building and training physicians in the signs and symptoms of acute or chronic environmental health effects, especially with regards to pesticides. Health care access and issues of environmental justice was another main focus.

In previous years, priorities included pesticide exposure, gastrointestinal disease prevention, binational programs and data exchange. Priorities for the upcoming year include looking at cumulative risk, environmental justice, science and research with an evidence-based approach and capacity building.

The Four-State Regional Workgroup has recently restructured to better address community-specific issues. Under this new model, the mayors of each sister city pair are the new co-chairs of each taskforce. There are three taskforces that were developed: Gulf Task Force, Falcon Task Force, and the Amistad Task Force. The people who had participated in the previous Environmental Health Task Force will now serve as technical advisors on environmental health issues for each task force. With this new

reorganization, there is an increased need to address issues of leadership and vision within the environmental health focus of each task force.

*Tribal Nations- Paula Stigler*
See "Tribal Nations" presentation

Paula Stigler gave a brief overview of tribal nations across the border region, including some information on tribal governance. She addressed how environmental issues are handled in a tribal context.

For air quality issues, she identified primarily stationary sources as being of concern (unpaved roads, agricultural impacts, open burning, etc) as well as off-reservation sources from transport. She also explained the problem of a lack of air quality monitoring on tribal lands. There is a lack of water and wastewater infrastructure on many tribal lands, especially Mexico indigenous communities, as well as issues of water quality and quantity. The illegal dumping of trash and a lack of sustainable solid waste management plans has become a large solid waste problem. In addition to these issues, there is much need for capacity building within the tribal nations.

Based on the input from the all the Environmental Health Taskforces, a list of overall priority areas was developed. See Appendix C

*Friday March 17, 2006*

**Summary of Matrix**

A matrix was prepared (See Appendix D) as a means of focusing the priority areas. General discussion was held about the matrix, and minor changes were made to rows and definitions.

A suggestion was raised to move away from traditional media-based areas and move into a place-based conceptual approach. In this capacity, the columns might be replaced with "healthy communities," "healthy schools," "healthy homes," "healthy transportation," and "healthy workplaces." This stimulated much discussion. Those in favor of this approach cited its location-specific flexibility, and that it allows greater communication and coordination with the citizens of a community. Those opposed said that it would be too hard to make an immediate switch to this approach when work at the public/local level is still focusing on traditional media-based areas. The Border 2012 plan is written on media-based areas, and this would hinder program communication.

The conclusion to this discussion was that the matrix would be left as modified, and the place-based concept would be considered for a future approach. This might be a new "vision" of the EHWG.

**Next steps**

Dr. Frumkin led a discussion about how to proceed. Having defined the matrix, it would be necessary to determine which of the five focus areas the workgroup would address. It was determined that the EHWG would support a limited number of working groups on these media-specific topics.

It was decided that one additional working group would be created to look at issues relating to communication and the place-based framework/approach. This group could examine potential methods for communication/mobilization around issues of environmental public health, and assess the place-based approach. Further discussion was held regarding the scope of this additional group. After much discussion, this group was refined to focus primarily on communication, particularly a re-evaluation of inclusive methods at the community level. The group will consider the place-based method as an option, as opposed to traditional report-outs on media-based areas. One resource for the group might be the Pan-American Health Organization's model of safe homes and communities. This working group would work jointly with the Border Communications Taskforce (under Border 2012), as well as the regional workgroups and taskforces.

**Work plan**

To determine which working groups would be developed, a multi-vote was held on the topics of air, water, lead, waste and pesticides. Air and water tied for first place, with waste and pesticides falling shortly behind. Lead received very few votes.

It was determined that three media-specific groups would be formed: air, water and pesticides. Names were collected for those people who were interested in working with solid waste issues, and those names would be forwarded on to the Waste Policy Forum. A sign-up sheet circulated for the air, water and pesticides groups. From this, the co-chairs of each group were determined:

- Air- Sally Edwards and Bob Currey
- Water- Carlos Rincon and Matiana Ramirez
- Pesticides- Maura Mack and Norman Calero

Iris Jimenez volunteered to coordinate the communications group from within the Border Communications Taskforce.

The role and plan of action for these working groups was discussed. These groups would look at each row within the matrix, for their specific topic area, to determine which areas are most critical to address. Once identified, the groups will determine where time and resources need to be directed. Each group should work with their respective policy forum, specifically since they have the expertise in environmental issues, and these groups have the expertise in health issues. Groups should also partner with state and local groups. It was recommended that the groups only focus on the health portion. The Border Environment Cooperation Commission expressed interest in the water projects, and will possibly have a representative on the water working group.

To address the issue of healthy communities and a place-based approach, the co-chairs decided to raise this issue with the US-Mexico Border Health Commission. Based on the Pan-American Health Organization's (PAHO) previous work and expertise in this area, the co-chairs and the Commission will coordinate with PAHO.

**Brief discussion on communication**

Prior to the end of the meeting, a brief discussion followed on issues surrounding communication. With regards to the regional taskforces, there were several topics raised. The taskforces lack stability due to variable commitment and participation from taskforce members. There is no logistical support provided from the federal government, and issues such as travel to meetings, conference phone lines, and translation services are unmet. There appears to be limited communication between environmental health taskforces, between environmental health and air/water/etc taskforces, and between taskforces and the regional workgroups. The taskforces need some capacity building within themselves.

External communication was raised as an issue, particularly as it relates to informing policy makers, city managers, commissioners, etc. There was a suggestion that an environmental health education toolkit could be created for those who are targeting this particular audience. This toolkit could include information regarding the Border 2012 program, environmental health efforts across the border, etc. Some of this information is available, but it is scattered in different places. This issue will be raised at the National Coordinators meeting and to the Border Communications Taskforce.

**Conclusion**

The following conclusions came out of the meeting:

- The EHWG will support three media-based working groups (air, water, pesticides) to determine which topics are most important to cover in the EHWG's priorities for 2007 and beyond.
- The co-chairs will attempt to synthesize this information and create a draft charge for each group. This information will be presented at the National Coordinators Meeting for further discussion.
- Tires and solid waste were determined to be important areas, and those who are interested will be referred to the Waste Policy Forum for coordination through that group.
- The EHWG will help support a communications workgroup group that will rely heavily on the expertise of the Border Communications Taskforce. This group will consider public health campaigns and the healthy-places concept in making recommendations for improved communication (both internal and external).
- The co-chairs will work with the Pan-American Health Organization to present the paradigm of healthy-places to the US-Mexico Border Health Commission for further consideration.

- The EHWG will work to help provide logistical support to the environmental health taskforces and to the working groups (conference phone lines, etc).

**Appendix A: Meeting agenda**

**Environmental Health Workgroup Annual Meeting**
**March 16-17, 2006**
**Four Points Sheraton, Brownsville, Texas**

Meeting objectives:

- Provide Status of Ongoing Programs
- Reach Consensus of a Limited Number of Priority Areas for 2007 and Beyond
- Develop "Next Steps" Plans for each Priority
- Assess and Provide Recommendations Related to the Border 2012 Operating Structure - Improving Binational Communications at all Levels

Thursday March 16, 2006

| | |
|---|---|
| 8:00a | Registration |
| 8:30a | Opening Introductions<br>*Honorable Edward Trevino, Jr, Mayor, City of Brownsville;*<br>*EHWG co-chairs (Dr Hal Zenick, EPA; Dr. Howard Frumkin, CDC; Rocio Alatorre, COFEPRIS)* |
| 9:00a | Accomplishments and progress toward 2005 priorities<br>EPA, *Rebecca Daniels*<br>COFEPRIS, *Matiana Ramirez* |
| 10:00a | Break |
| 10:20a | Accomplishments and priorities of Border 2012 partners<br>Air Policy Forum, *Sarah Sowell*<br>Water Policy Forum, *Gilbert Tellez*<br>Border Indicators Task Force, *Iris Jimenez*<br>Health Resources and Services Administration (HRSA), *Dr. Angel Brana*<br>US Geological Survey (USGS), *Zachary Wilson*<br>US-Mexico Border Health Commission, |
| 12:00p | Introduction of priority setting process, *EHWG co-chairs* |
| 12:15p | Lunch |

| | |
|---|---|
| 1:15p | Regional Environmental Health Taskforces and Tribal Nations presentations*, Carlos Rincon and Norman Calero (EPA)*<br>Texas-Coahuila-Nuevo León- Tamaulipas, *Hector Gonzales/Norma Mota*<br>New Mexico- Texas-Chihuahua, *Enrique Suarez*<br>Arizona-Sonora, *Edith Frias*<br>California- Baja California, *Maura Mack/Lourdes Sandoval*<br>Pala Band of Mission Indians, *Paula Stigler* |
| 3:00p | Break |
| 3:30p | Regional Environmental Health Taskforces and Tribes presentations, continued |
| 4:00p | Initial discussion on priorities of regional environmental health issues |
| 6:00p | Adjourn |

<u>Friday March 17, 2006</u>

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|---|---|
| 8:30a | Review of Day 1, overview of Day 2, *EHWG co-chairs* |
| 9:00a | Identification of environmental health priorities and next steps |
| 10:00a | Break |
| 10:15a | Identification of environmental health priorities and next steps |
| 11:15a | Discussion of bi-national communication<br>• Strengthening bi-national communications at the regional and federal level-- Implications for the Border 2012 model<br>• Improvements needed for implementation of priorities |
| 11:45a | Wrap-up, *EHWG co-chairs* |
| 12:00p | Adjourn |

## Appendix B: Meeting Participants

| First Name | Last Name | Association |
|---|---|---|
| Sally M | Arroyo | City of Brownsville |
| Angel | Brana | HRSA |
| Manuel | Bucardo | City of McAllen Health Dept |
| Martha | Contreras Garcia | COESPRIS-CHIH |
| Bob | Currey | CERM-UTEP |
| Rebecca | Daniels | EHWG/EPA |
| Rogelis | DeLaCruz | Tri-National Border Health |
| Sally | Edwards | PAHO |
| Dora | Elia Cortes | USMBHC |
| Helen | Folger | USGS |
| Howard | Frumkin | EHWG/CDC |
| Ramiro | Gonzales | Texas Dept. of State Health |
| Elizabeth | Heise | UT-Brownsville |
| Jose | Hinojosa | City of Brownsville |
| Iris | Jimenez | BITF/SEMARNAT |
| Lawrence | Kline | USMBHC |
| Fernanado | Leija | Frontera Ambiental Tamaulipeca A.C. |
| Waldo | Lopez | Laredo Dept of Health |
| Maura | Mack | CA/BC taskforce co-chair |
| Gary | Noonan | EHWG/CDC |
| Juilo | Oyervides Flores | Secretaria de salud de coahuila |
| Dinora | Prieto | SEMARNAT-Tamaulipas |
| Matiana | Ramirez-Aguilar | EHWG/COFEPRIS |
| Dan | Reyna | New Mexico- health |
| Carlos | Rincon | R6- border office |
| David Eliud | Rodriguez | Secretaria de salud de Nuevo Leon |
| Kassie | Rogers | Texas Dept. of State Health |
| Thomas | Ruiz | New Mexico- environment department |
| Raquel | Sabogal | EHWG/CDC |
| Aracely | Salazar | COESPRIS-Coordinacion Juarez |
| Sarah | Sowell | OAR/EPA |
| Paula | Stigler | Pala Band of Mission Indians |
| Enrique | Suarez | 3-state taskforce co-chair |
| Carmen G | Sumaya | Texas A&M |
| Raul | Terrazas Barraza | Secretaria de salud de tamaulipas |
| Zachary | Wilson | USGS |
| Hal | Zenick | EHWG/EPA |

**Appendix C: Overall Priority Areas**

Pesticides

- Programs (outreach and education) to reduce exposure
    - Children/others (non-occupational)
    - Farm workers (occupational)
- Reporting and/or surveillance

Air Quality

- Asthma and asthma triggers
- Areas in non-attainment (PM, O3, etc)
- Sources: border-crossing/diesel
- Open-air burning issues
- Toxics

Lead

- Programs to reduce exposure

Water Quality

- Biological contaminant exposure and GI health outcomes
- Toxics
- Infrastructure
- Liquid waste issues from septic tanks and in shallow groundwater (i.e. private wells)

Solid waste

- Landfills/trash as it relates to public health
- Waste tires- disposal and vectors
- Dumping solid waste

Capacity building

- Environmental education
- Technical training (sanitarians, physicians, others)
- Leadership/vision

Communication

- Risk communication
- Data sharing/information systems
- Links from science to policy

Other/multi-media

- Home and/or community risk assessments
- Environmental Justice
- Access to healthcare
- Cumulative risk

- Evidence based approaches
- Built environment/healthy communities
- Global climate change

**Appendix D: Matrix of Priority Areas**

| | Air | Water | Lead | Waste | Pesticides |
|---|---|---|---|---|---|
| Environmental Monitoring | | | | | |
| Health Surveillance | | | | | |
| Capacity Building<br>*-environmental education*<br>*-technical training*<br>*-leadership/vision* | | | | | |
| Communication<br>*-risk*<br>*-data sharing* | | | | | |
| Policy Development<br>*-environmental justice* | | | | | |