

Minutes
 52nd Meeting of the
 Joint Advisory Committee for the Improvement of Air Quality in the
 Cd. Juárez, Chihuahua / El Paso, Texas / Doña Ana County, New México Air Basin
 Gadsden Independent School District Board Room
 Santa Teresa, New México
 October 27, 2011

1. Welcome and Introductions

Bill Luthans (BL), USEPA Region 6, and Ana Maria Contreras Vigil (AMC), SEMARNAT, welcomed all to the 52nd meeting of the JAC. A quorum was established.

JAC Members Present	
U.S.	México
Bill Luthans – EPA	Ana Maria Contreras – SEMARNAT
Lorinda Gardner – TCEQ	** Sergio Zepeda- PROFEPA
*Dave Dubois Alt for. Michael Baca – NMED	Araceli Salazar – COESPRIS
Mariana Chew – Doña Ana County	Silvia Castro-Gob.Edo de Chih.
Miguel Parra – City of El Paso	Daniel Terrazas, DNA
**John Quinn - Freeport Mc-MoRan	Quim. Pilar Leal
Elaine Barron, M.D.	**Enrique Suarez – SADEC
** Alberto Correa, PhD	Dra. Alba Corral – UACJ
Vacant – Private Sector NGO	Baltazar Granillo – CANACINTRA
Wen-Whai Li, Ph.D., P.E., UTEP	Alberto Ramírez – CCSD
George Pinal, El Paso MPO	*N. Lopez, Alt for. M. en C. Rosario Diaz – IMIP
* Alternate	** Not Present

2. Presentation and approval of current agenda and minutes.
 The Agenda was approved. Minutes were approved with no revisions.
3. Message from the Co-Chairs
 The Co-chairs discussed upcoming initiatives on both sides of the Border. BL indicated the 2008 8-hr ozone standard would remain unmodified. This standard is set at 75ppb during an 8-hr averaging period. Ana Maria indicated Mexico is working toward finalizing the national emission inventory.
4. Public Participation –.no public comments were provided.
5. JAC Discussion on Public Comments No JAC member comments were stated.
6. Air Quality Report

Victor Valenzuela (VV) presented an air quality summary from 1 Jan – 25 Oct., 2011. VV presented the regional air quality monitoring sites identifying which sites tend to consistently present elevated

contaminant levels. No CO exceedances were observed in El Paso or Juarez. In the U.S., the CO standard is violated at 9.5 parts per million (ppm) during an 8-hr averaging period. Mexico's standard is set at 11 ppm / 8-hr averaging period. No O₃ (either 1-hr or 8-hr) exceedances were observed in El Paso or Juarez. The 8-hr O₃ standard was finalized on September 1, 2011 by a Presidential directive which rescinded a proposed revision of the O₃ standard between 60 ppb – 70 ppb during an 8-hr averaging period. The final 75 ppb 8-hr O₃ standard was not exceeded during the 2011.

All of the PM₁₀ TEOM monitors reported exceedances during 2011, and all exceedances occurred during high wind events. Exceedances coincided with elevated PM₁₀ readings from the regional TEOMS monitors. Hydrogen sulfide (H₂S) concentrations continued a downward trend in the number of exceedance days and total number of exceedances.

Daniel Terrazas (DT) reported on the Juarez CAMS and PM₁₀ monitoring network. He indicated elevated PM₁₀ concentrations at the newest PM₁₀ sampler located at Niñez Mexicana. DT also reported problems associated with the Juarez CAMS stating that there was a relationship between lost data and a contractor hired by the City of EP to operate the stations. AMC recommended the JAC form a committee to discuss this issue.

7. Presentations

A) State of Chihuahua Climate Action Program

Silvia Castro, Environmental Director for the State of Chihuahua reported the following: The Chihuahua State Program on Climatic Action (PEAC by its Spanish acronym) is an instrument to support and strengthen current planning and development of public policies associated with climate change (CC) at the state and national level.

The PEAC establishes measures which may reduce vulnerability of natural ecosystems due to atmospheric emissions caused by human activity. This includes measures to reduce GHG emissions and / or capture of these types of emissions. It contributes to decentralization of process analysis, designing activities & actions, and promotes policies related to CC. The PEAC will induce cooperation within institutions at all levels and in all areas of public administration, academia, private sector and civil society to support policies and actions related to CC.

The PEAC will take advantage of local information resources and ability to develop know-how at the local level as well as strengthen knowledge on local methodologies or culture related to battling climate change. This helps improve the public perception regarding impacts, vulnerability, and adaptation to CC.

B) El Paso Rider 8 Project Summary

Wen-Whai Li, P.E. PhD and George Pinal, El Paso Metropolitan Planning Organization, presented the current Rider 8 project taking place for El Paso. Rider 8 grew from the 74th Texas legislative session which authorized and budgeted funds to help areas in Texas attain the NAAQS. El Paso was added to the Rider 8 program during the 81st Legislative Session. TCEQ allocates Rider 8 funds to projects most useful in complying with State Implementation Plan (SIP) developed for nonattainment areas. The areas receiving funds submit work plans for TCEQ approval describing the work they will complete with these funds. UTEP and EPMPO recently submitted to TCEQ a Conceptual Model. A CM reports several items:

- Ozone trends in the Paso del Norte region;
- Occurrence of ozone exceedances and episode analyses,
- Ozone concentrations and meteorological parameters;
- Trends of ozone precursors:
- Reviews the emissions inventory and potential EI improvements
- Photochemical modeling in the PdN region

Among the ambient parameters described for ozone are the following:

- Daily maximum 1-hour average: The highest of the 24 hourly averages for a day
- Daily maximum 8-hour average: The highest of the 24 possible running 8-hour averages computed for a day, recorded at the beginning of the hour

- Design value at a site: The average over a three-consecutive-year period of the fourth highest daily maximum 8-hour average recorded at a site
- Ozone attainment by the design value for an area: An area is said to be in attainment if the design value at any monitor within an area over each year does not exceed the 75 ppb ozone NAAQS

Some ambient ratios which help describe an airshed's ability to generate ozone are the VOC:NOx ratio

- If the ratio is >15 then the airshed is NOx-limited
- If the ratio is >5 & <15 then the airshed is considered "transitional"
- If the ratio is <5 then the airshed is considered VOC-Limited.
- Dr. Li reported the summertime ratio would make El Paso NOx-limited.

Future Tasks with the Rider 8 project include:

- Identify emission improvements: this involves reviewing the emissions inventory for information that could improve the current database. Area sources are usually targeted for improvement.
- Develop a work plan for emission monitoring: This involves identifying locations to deploy ozone monitors.
- Conduct additional ozone monitoring: Once a site has been identified UTEP and MPO will deploy ozone monitors to those sites.
- Performed ozone modeling: This involves conducting photochemical modeling using the Comprehensive Air Quality Model with Extensions (CAMx).
- Evaluate mitigation measures for ozone reduction: Sensitivity Analysis will be conducted with CAMx to determine control strategies that can be implemented in case El Paso is designated nonattainment at some future date.
- Dissemination of information and community participation: This involves developing a stakeholder group and a project website.

Summary

- Air quality in the PdN has improved during the past 10 years.
- The Rider 8 team identified two ozone episodes for modeling.
- Surface and upper air meteorology affects regional ozone. Ozone is transported into the region from distant areas.
- Additional background ozone monitoring is required.
- Ozone in PdN is NOx-limited.
- Transport ozone and precursors from the west and east affect regional ozone.

C) New Mexico State University & NM Department of Health Respiratory Health Study

The study, entitled "Land-based Sources of Air Quality Contaminants in the Binational Border Region of Southwestern New Mexico, Northwestern Chihuahua and West Texas" is in year 3 of a 4 year project.

Studies completed include:

- Studies completed
 - Inventory of monitoring stations for climate and air quality – The database is constantly updated as more stations are defined.
- Quality of data and metadata is an issue

Major cities where monitoring is undertaken include: Alamogordo, Las Cruces, Sunland Park, Deming, Silver, and Lordsburg.

An enhanced monitoring network includes

- Satellite sites for ozone and meteorology
- Test of micro-site started this summer
- 5-minute ozone using 2B instruments
- Integrated aerosol samples on 47mm Teflon filters

Status of a NMDOH is also conducting a study includes

- Inventory of landforms, soils, hydrology, vegetation, all types of land use
- Created new land-use databases around satellite stations

Studies in progress this year include

- Assessment of climatological & meteorological phenomena
- Inventory & characterization of sources of emissions
- Assessment of air quality from past and ongoing monitoring
- Studies of fungal spore dispersion from CAFOs
- Pollen measurements and dispersion study
- Distribution of air quality related chronic & infectious diseases

A report should be drafted during the year and presented toward the end of year 4 of the project.

D) Border 2020 Program

Carlos Rincon discussed the role of the JAC in the upcoming Border 2020 program. The activities of the JAC would not substantially change. Earlier in 2011 JAC members met to discuss areas of interest for the JAC and a workplan. Areas of interest include global warming and climate change action plans to be promoted by Mexico, development of emission inventories for continued photochemical modeling and compliance purposes, continued dust control programs through road paving and street sweeping, and expansion of the current air quality monitoring network in all 3 jurisdictions.

9. Observations and Comments from the Public – No comments were provided.

10. Highlights and consensus items of the meeting.

- .A committee would be formed to discuss the status and try to fix data capture problems from the Juarez air quality monitoring network.
- The JAC would consider participating in the stakeholder group associated with the Rider 8 program.

11. Next meeting Jan 26, 2012 in El Paso, TX.

12. Adjourn