

**Minutes**  
22<sup>nd</sup> Meeting of the  
Joint Advisory Committee for the Improvement of Air Quality in the  
Cd. Juárez, Chihuahua / El Paso, Texas / Doña Ana County, New Mexico Air Basin  
UTEP College of Health Sciences - El Paso, Texas  
20 June, 2002

**Welcome and Introductions**

Ing. Sergio Sanchez (SS) and Bill Luthans (BL) welcomed all to this meeting of the JAC.

JAC Members Present:

Mexico

Ing. Sergio Sanchez - Co-Chair, SEMARNAT

Quim. Pilar Leal, PROFEPA

Ing. Cesar Nuñez, State of Chihuahua Ecology Department

Pamela Franco Ruiz - Cd. Juarez Ecology Department

Quim. Adrian Vazquez - UACJ

Ing Francisco Alfaro, Alternate for Dr. Enrique Suarez, FEMAP

Ing. Gilberto Velazquez, Alternate for Ing. Gabriela Vale, CCSD

United States

Mr. Bill Luthans, Co-Chair, Environmental Protection Agency

Mr. Ralph Gruebel, State of New Mexico Environment Department

Mr. Arch Clouse - TNRCC

Dr. Carlos Rincon- Environmental Defense

Wen-Whai Li, PhD - UT-El Paso

Mr. Bob Currey

Mr. Mark Rodriguez, El Paso Electric

Mr. Jesus Reynoso, EPCCHED

A Quorum Exists

**Presentation and approval of current agenda.**

The order of the agenda was adjusted and approved.

**Approval of the minutes of the March JAC meeting**

Bob Currey recommended deferring approval of the minutes until the following meeting given they were emailed about 1 week before this JAC meeting.

**Announcements**

Carlos Rincon reported that 5 months ago the JAC was recognized by the BECC for efforts improving air quality. At the award ceremony in Mexico City attended by Greg Cooke, EPA Region 6 Administrator, Alma Figueroa, then director of Cd. Juarez Ecology Dept, CR, the BECC offered its first Environmental Merit Award to the JAC as a symbol of appreciation. Carlos provided each JAC member with an English and Spanish version of the Environmental

Merit Award. Sergio Sanchez commented that he looks forward to future endeavors on the JAC as we continue working together to improve air quality.

### **5) Old Business, Consent Agenda and Written Updates**

1) Carlos Rincon recommended that the JAC support a recommendation or resolution which not only provides for a dedicated mass transit commuter lane on the international bridges, but also calls for an expedited inspection process for travelers using a dedicated mass transit commuter lane. He will write the resolution. No UPDATE

2) Rene Franco recommended we support the Mass Transit Initiatives developed by Cd. Juarez which calls for dedicated Mass Transit Lanes and Trunking systems. Rene will write this resolution / recommendation. No UPDATE

3) Gerardo Tarin recommended that an elevated level of effort needed to take place in order to get the Cd. Juarez Continuous Ambient Monitoring Network back to normal since several monitors malfunctioned back in June, 2001. A PRESENTATION IS PROVIDED TODAY

4) Bob Currey recommended we form a Technical Commission to discuss what we need to do to update and improve the air quality monitoring network in the entire Paso del Norte Air Basin. NO UPDATE

5) Ralph Gruebel asked that we place the evaluation of low-wind PM10 exceedances on the Strategic Plan Priority list and consider methods of funding and monitoring transboundary air pollution between the New Mexico - Chihuahua International boundary. NO UPDATE.

6. The Delegation from Mexico will review the JAC resolution on the proposed request by the TNRCC to EPA for redesignation of El Paso as an area in attainment of the NAAQS. A RESOLUTION WILL BE DISCUSSED TODAY.

### **A. Air Quality Report**

Victor Valenzuela presented the Air Quality report for the 1<sup>st</sup> quarter 2002. El Paso and Juarez had no CO exceedances during the reporting period. Juarez still has only 1 functional CO monitor operating in the city's east side at SEC. El Paso reported no PM10 exceedances during the reporting period. Juarez had 7 PM10 exceedances during Q1-2002. Of those exceedances 5 were in the Unhealthy for Sensitive Groups AQI, 1 was in the Unhealthy AQI, and 1 was in the Very Unhealthy AQI. The Very Unhealthy PM10 concentration was 378  $\mu\text{g}/\text{m}^3$  for a 24-hr. average.

### **B. Cd. Juarez Air Quality Monitoring Network**

Gerardo Tarin presented an update on the status of the Cd. Juarez Monitoring network and its possible integration into the Texas LEADs network. GT has presented this item on an earlier meeting and continues to reiterate the lack of forward movement regarding repair of the ambient monitors which have not functioned for almost an entire year. He is developing a letter requesting that the JAC help Cd. Juarez Ecology Dept. obtain funds to purchase new ozone and CO monitors. He would like to direct that letter to the appropriate authorities at EPA and / or SEMARNAT who could help him obtain the equipment. With the lack of data available for Cd.

Juarez we cannot help present reports to determine if the programs taking place in Juarez to improve air quality are working.

### **C. CMAQ Report**

The possible redesignation of El Paso as an area in attainment of the NAAQS includes financial implications regarding funds available for transportation improvement initiatives. Ricardo Dominguez, El Paso MPO reported that the CMAQ. Transportation Policy Board adopts and approves projects for the El Paso area. Most funded projects are split 80%-20% between federal and local participants respectively. The sole purpose of CMAQ funds is to improve air quality in El Paso. We cannot add roadway capacity and we need to improve air quality by reducing roadway congestion. The TPB discusses a reoccurring theme regarding redesignation. On 1 side there are agencies that can't lose funds so they do not favor redesignation. On the other side there are those agencies who aren't worried about losing funds and look forward to redesignation.

On July 26 there will be a report prepared for the TPB, and individuals on the TBP aren't changing positions. CMAQ funds are programed to help EP come into attainment, and CMAQ is 1 finger in a many fingered hand. We've also noted there are some MPO's that have been declared near nonattainment. When those MPO's are designated nonattainment the pie may get smaller. We should continue w/ the efforts that have gotten us in this position. How much funds are we talking about. We're keeping \$4-5 million and may lose \$3-\$4 million /year. We're going to lose funds anyway if those near nonattainment areas go into nonattainment. There are some people who can't be convinced that attainment is good for El Paso. Jerry Wolfe from TNRCC gave a presentation to the MPO in plain English. Those who think we're losing money believe the city is still dirty and don't believe the results. Those positions won't change. We want to move forward to get funds needed to address growth while improving air quality.

### **D) JAC Resolution on Redesignation**

A JAC Technical Commission on the proposed redesignation of El Paso as an area in attainment of the NAAQS drafted a resolution stating the opinion of the JAC on this issue. The resolution passed and will be mailed to TNRCC Comm. Ralph Marquez.

### **E) El Paso Section 179B Demonstration**

Section 179B of the Federal Clean Air Act Amendments of 1990 has several implications in regards Air Quality Planning in the El Paso Airshed. What is the theory behind Sec. 179B? What are the implications on air quality planning? . What data has been collected to conduct a Sec. 179B Modeling Demonstration? What data is missing for development of an adequate Modeling Demonstration? What Federal initiatives in both the US and Mexico will help improve the model?

Brian Foster from TNRCC presented this report. The Federal Clean Air Act Amendments of 1990 contain a new section on International Border Areas known as Section 179B which contains special provisions for nonattainment areas that are affected by emissions emanating from outside the United States. Under 179B, the EPA would approve a SIP for a nonattainment area if the State establishes that implementation of the plan would achieve timely attainment of

the NAAQS but for emissions emanating from across an international border. 179B protects a nonattainment city from being penalized for failing to meet the NAAQS by the required deadline due to additional emissions from across the border that the city has no control over. The area must implement control strategies to avoid additional federal sanctions. Sanctions would affect the entire geographic area

Texas has developed three 179B plans for El Paso. Attainment demonstrations were submitted to the EPA for El Paso's three noncompliant criteria pollutants: The PM-10 SIP was submitted in November 1991; the ozone SIP was submitted in September 1994; and the CO SIP was submitted in September 1995. Only PM-10 has been officially approved by EPA. El Paso has the nation's only approved 179B plan.

What was included in the 179B submissions to EPA? The attainment demonstrations were submitted to EPA as State Implementation Plans (SIP). A SIP is an assessment of ambient air quality monitoring data and a collection of emissions inventory data for point, mobile and area sources. The demonstration involves development of technical items including air dispersion and/or photochemical models showing contributions from Mexico and development of control strategies for U.S. sources

As a result of SIP development El Paso has adopted control strategies for PM-10, such as controlling fugitive emissions, road paving, and avoidance of traffic on alleyways. For control of carbon monoxide (CO) oxygenated fuels are distributed during wintertime and vehicle inspection and maintenance programs have been developed. For control of ozone industrial permits for major sources are required, a vehicle inspection and maintenance program has been developed, gasoline vapor recovery systems (Stage I and II) are in place, and less evaporative gasoline is distributed during the summertime months.

Results of the 179B Demonstration indicate all three modeling demonstrations have shown that El Paso could attain the PM-10, ozone and carbon monoxide standards with the selected control strategies by the required deadline if only United States emissions are considered. However, El Paso will not be penalized for failing to meet the standards if it cannot control the emissions not generated in El Paso. Brian concluded by indicating the following: El Paso has a pollution problem; Texas has developed a plan to address problem; Texas has implemented control strategies; 179B protects El Paso from penalties; Texas recognizes improvements in Juarez; 179B does not put blame on New Mexico, Juarez or anywhere else; air pollution is a shared basin-wide problem and requires a shared solution; and further progress is based on further cooperation.

#### **F) Section 179B Demonstration**

Matthew Witosky elaborated on Brian's presentation. 179B approval is based on SIP recommendations. Except for missing emissions inventory data from Juarez the SIP recommendations meet all control requirements or strategies. If we take all emissions from El Paso, EP County, add New Mexico emissions, and don't add emissions from Juarez since we don't have that data, and we add to the model, what do we get? Based on data from El Paso and New Mexico those emissions generated in El Paso would not generate concentrations that surpass the standard. Why hasn't EPA approved the CO and O<sub>3</sub> demonstrations? Because we

don't have emissions inventory data for Jz, and modeling without adequate information may cause one to make determinations for control strategies that may or may not affect public health, and all this will be based on insufficient information.

The EPA, TNRCC, and Mexican governmental authorities have agreed to conduct the required work improve our knowledge of emissions throughout the airshed. In Houston if you exclude data for Harris County you don't have an O<sub>3</sub> problem. Regarding a binational air shed we needed some base data for EPA to make preliminary determinations on air quality concentrations and emissions. If El Paso meets the NAAQS. EPA in regards jurisdictional authority could not obtain Mexico data. If a U.S. State doesn't provide data we will use all means to obtain the needed data.

EPA wasn't comfortable w/ earlier demonstrations due to local topography and available data. There was some windblown dust coming in to the region, but PM<sub>10</sub>, not being a photochemical pollutant, was easier to approve. CO is also easier to model because the major source is vehicle emissions. In 1998 EPA spent over 6 figures to deploy special purpose monitors to determine the nature of air quality in the region. Data is still inconclusive due to a lack of an emissions inventory on the Mexican side.

On the JAC Strategic Plan we include strengthening the local vehicle inspection maintenance programs, require oxy fuels in Juarez, and update and improve the basin-wide emissions inventory. CAMx model was used to show attainment for CO. Given priorities of an I/M program, regional oxyfuels program, and EI development modeling shows the reduction of CO and O<sub>3</sub> emissions. The dates used for O<sub>3</sub> modeling are Aug. 11-13, 1996. We had a high O<sub>3</sub> event during this period. Dec. 18, 1997 use used for wintertime CO modeling. Summarizing, we need better EI data that is as disaggregated as possible to narrow our focus of sources.

#### **H. Cd. Juarez Pro-Aire Program**

The Cd. Juarez Pro-Aire Program for the year 1999-2002 identified several projects that could be developed to improve air quality. A new program is underway for 2002-2005. A workplan has been developed w/ SEMARNAT to address projects not completed in the 1999-2002 plan and contemplated for the 2002-2005 period. Development of a good program requires collaboration with all interested parties. Sergio Sanchez asked if proposals made regarding control strategies could be developed throughout the airshed such as the I/M program and oxyfuels. What are the actual programs that have been developed and those that are proposed for the upcoming Pro-Aire. The mobile program is an important aspect of Pro-Aire, but it cannot handle all the weight of the Juarez air quality program. We can't just have laws that state you have certain requirements and leave it at that. Government needs to enforce the laws. Pamela Franco indicated the I/M program in Juarez has low results due to lack of program enforcement. The I/M program is active, but in 2002 we can reinforce this program and can double our outreach to the community. Pilar Leal indicated the I/M program has needed support from the US side and many vehicles don't have a catalytic converter. Who pays for installation of a converter if money isn't available. NOM-041 establishes emissions limits for vehicles, and the latest version has been under development as a national Plan which includes Jz. Additionally, emission limits must be achieved and this requires a change in thinking which requires collaboration on both sides of the border.

## **I. El Paso / Juarez Mass Transportation Initiatives**

Congestion on El Paso and Juarez roadways requires careful planning when developing mass transit routes in a binational context. Initiatives to reduce congestion on the international bridges by promoting mass transit and improving the economies of both cities are picking up speed with plans for Dedicated Mass Transit lanes on the International Bridges. Salvador Gonzalez presented research conducted by El Paso MPO and IMIP to develop models for transportation planning. Several technical issues that are considered include the initial characterization of patterns, alternative routes, and expedited crossings over the international bridges.

1) The first issue is initial characterization of travel patterns which is internal to the region: 90% of trips done by locals. For El Paso, a survey was conducted on the bridges. Questions asked include: purpose of the trip; why people cross the bridge. Some variables collected for the purpose of the trip are: NH-non-home NHI non-home immigration;. HBW, home-base work go from their home to work in the US; HBS, home-base school; HBShop shopping . Pedestrian crossings by bus; BW, bus walk take bus then walk; BB take bus and go to destination on a bus; WW, walk to bridge and walk across; AW, arrive in car and walk over, AA, arrive in car and cross over in a car. Data reported is based on information from 1999. This model is sensitive to date/time issues.

Using Mobile 5 and Mobile5 Juarez data was collected to report vehicle emissions in metric tons. EPA plans included research on the Personalized Rapid Transit (PRT) and semi-massive mass transit like heavy duty buses. Routes for mass transit are located near central zones in Jz and provide for established destinations that were important like UTEP, Bassett Center, Cielo Vista Mall, PRONAF and the 3 major bridges - Stanton, Santa Fe, and BOTA. The first route connects El Paso to Juarez, the 2<sup>nd</sup> route includes PRONAF to downtown which is the tourist route down 16 de Septiembre. With an effective Park and Ride system people can go to the PRONAF and take route to center and UTEP. 3<sup>rd</sup> route connects the Central Bus Station to Bassett Center traversing Juan Gabriel. People make their purchases in downtown, students attend school, and go to Thomason Hospital for medical attention.

Steps involved in model development : survey geocoding, analysis, network/transit route development, trip generation, trip distribution, mode choice, transit assignment, air quality impact assessment, and costs. Other issues to consider are how to expedite the crossing, improve the immigration process; establish a dedicated lane for mass transit, and implement HOV lanes on the bridges. On improving pedestrian processing capacity, people can have frequent crossing cards.

Regarding binational discussions at a higher level to develop an international transit system, the Mayors of the region agreed on providing and improving service. At the 1<sup>st</sup> technical meeting SEDESOL, IMIP, Sun Metro, MPO, and Mayors of both communities are talking w/ US Customs to expedite crossings.

## **G. El Paso Summertime Fuels Program**

A special formulation of gasoline is distributed in El Paso during the Summer in order to reduce

the evaporation rate. Chuy Reynoso reported that the Summertime Low-RVP gasoline program starts June 1 and runs to Sept. 16. As a practice we collect samples from all dispensing facilities for our enforcement program. Out of 1034 samples collected we had 26 stations that had high RVP gasoline, we'll have 20 stations that are issued violations of the Low-RVP program. These stations referred to TNRCC for enforcement which we typically have penalties. When we have repeat violators we issue fines. Checking w/ suppliers that provide gas to Juarez they're providing Low-RVP gasoline at 7.6 - 7.9. EP requirement is 7.0.

#### **E. Brickmakers Technical Commission Report**

Gerardo Tarin reported there currently are 2 lines of work taking place in regards the brickmakers. Continuation of investigation by NMSU-UACJ which includes Robert Marquez, Alba Corral, Dr. A. Lara, Dr. Chuck Bruce and others working on the MK and its variants. 2<sup>nd</sup> group is the termination of emissions tests at FEMAP w/ the single kiln. EPElectric wishes to construct several MK's in Juarez, yet this does not resolve the problem for the rest of the proximate 260 kilns in Juarez. We need associates to appreciate of this opportunity This is a strong effort that we shouldn't let pass us by. Mark Rodriguez added that EPElectric has a lot of homework to accomplish and is optimistic that this project, at a minimum, advances air quality improvement in the region and acts as an example that allows money to flow into Juarez for environmental improvements. Lastly, tests performed relate to a configuration at the kiln that has to be constructed if EPE is going to advance the project; that configuration is being presented to the TNRCC and due to the test being done on the configuration our approval of those results would require us to advance that configuration. Carlos Rincon added that what is being done needs to be done right and there is a benefit for the partner who is offsetting emissions. The other issue is, as this project is put in place those emissions are permanent and remain permanent. When 1 brickmaker operates his kiln the 2<sup>nd</sup> brickmaker cannot fire his bricks. And when the 2<sup>nd</sup> brickmaker fires his kiln the 1<sup>st</sup> brickmaker cannot fire his kiln. The problem can arise if one brickmaker or the other does not fill the kiln when the other is firing. Then EPE cannot take credit for this and the project becomes a technical mess. 1 owner can operate 2 domes but then he may not have the resources to fill the 2<sup>nd</sup> kiln with bricks in which case the full emissions reduction is not being achieved. The JAC has a technical commission addressing brickmakers and the JAC would like to obtain the information and Mark Rodriguez and El Paso Electric on the amount of emissions reductions are being requested. MR replied that the data is not yet available to be made available to the public nor in a format ready for presentation. Carlos added that some points of great issue is the exchange of emissions reduction credits . This is a scheme that applies in the country, but we don't know how we're going to do this and how the mechanism will be established. I don't have sufficient information to provide an opinion, but if EPElectric or the TNRCC can provide this information we can all learn from this process.

#### **D. Discussion on odors from Cd. Juarez Waste Water Treatment Facilities**

Chuy Reynoso reported that for years people have been suffering under odors emanating from the Juarez water treatment plants located near the intersection of Yarbrough and the Border Freeway in El Paso. The City of EP has informally asked agencies on our side of the border and we contacted Alma Leticia Figueroa and Juarez Mayor Gustavo Elizondo to look at what could be done. In 2001 we had some plant visits. Alma set up a system to remove sludge more quickly. Recently we had a meeting w/ Mayor Jose Reyes Ferriz and Pamela Franco and he

thanks them for their cooperation. The odor situation improved. The “Agua” process has taken the initiative to improve the problem by adding magnesium permanganate and adding UV lamps to reduce odors.

7. Observations and Comments from the Public

8. Highlights and consensus items of the meeting.

1) Gerardo Tarin will develop a resolution or letter by the technical commission and prepare the letter ASAP to obtain the air quality monitoring equipment as soon as possible. Between now and the next meeting Bill Luthans would like to see the letter developed.

2) Carlos will be working w/ the brickmakers and develop a white paper. We should have a first draft.

3) Ralph Gruebel requested we move the meetings to an earlier time.

4) An intern has been contacted to help develop the technical commission meetings.

5) Focus on moving quicker

6) Consider the one basin resolution.

9. Establishment of date for next meeting.  
September 19. Dec. 5 meeting after that.

10. Adjourn