

Minutes

Twelfth Meeting of the
Joint Advisory Committee on Air Quality Improvement for the
Cd. Juárez, Chihuahua / El Paso, Texas / Doña Ana County, New Mexico Air Basin
Corbett Conference Center - New Mexico State University - Las Cruces, New Mexico
2 September, 1999

Welcome and Introductions

Las Cruces Mayor Ruben Smith welcomed all to this meeting of the JAC. He stressed the importance of developing partnerships between elected officials and the private sector. He stated that both must work hand in hand since without cooperation we will not be able to do anything to improve environmental quality in this region.

Bill Luthans (BL) and Dr. Victor Hugo Paramo (VHP) also welcomed all to this meeting. VHP introduced Chihuahua State Congressman [NAME] Arriola.

JAC Members Present:

Mexico

Dr. Victor Hugo Paramo - INE
Quim. Pilar Leal, PROFEPA
Dra. Andrea Gavalera, Secretariate of Health
Ing. Cesar Nuñez, State of Chihuahua
Biol. Alma Figueroa - Cd. Juarez Ecology Department
Quim. Adrian Vazquez - UACJ
Ing. Rene Franco - MEM

United States

Bill Luthans - EPA
Cecilia Williams, State of New Mexico Environment Department
George Avalos - Doña Ana County, New Mexico
Archie Clouse - TNRCC
Jesus Reynoso - El Paso City-County Health and Environmental District
Carlos Rincon- Environmental Defense Fund
Tom Martin - Asarco
Wen-Whai Li - UT-El Paso
Bob Currey - SCERP - Southwest Center for Environmental Research and Policy

Quorum Exists

Presentation and approval of current agenda.

The agenda was accepted.

Approval of the minutes of the 27 May meeting

The minutes were approved.

Announcements - New Members

Bill Luthans (BL) introduced 2 new members Bill Currey & Wen-Whai li. Also recognized that we

have a nomination process that can be long and drawn out given the Justice Dept. security checks that nominees must undergo. The JAC is limited in members, but fortunately we're not limited in the manner in which we can all participate. Carlos Rincon recognized Quim Pilar Leal as the new Delegada for PROFEPA.

Oxygenated Fuels In Juarez.

The Joint Advisory Committee and the Air Work Group sent a letter to PEMEX responding to PEMEX request for information regarding the supply, cost, and source of oxygenate for fuel that could be distributed for retail sale in Juarez. Biol. Guadalupe de la Luz Gonzalez, INE, indicated that Dr. Adrian Fernandez, General Director for Environmental Information-INE, sent a letter to PEMEX which asked PEMEX if it would like a work session with the JAC Oxyfuels Technical Commission. We're currently awaiting a reply from PEMEX and expect the meeting to take place in Juarez. This meeting could also be held as an extraordinary meeting of the JAC to discuss issues that could be covered regarding the distribution of oxyfuels in Juarez and achieve this goal of the JAC as stated in the Strategic Plan. Carlos Rincon (CR) stated that he would like to assure that the Oxyfuels Technical Commission members are present at this meeting.

WGA Border Congestion Workshops

The Western Governors' Association hosted a workshop in San Antonio, Texas on April 28 - 29 to discuss the causes of and solutions to the problem of congestion at ports of entry along the U.S.-Mexico border due to a concern about the effects of border congestion on both air quality and commerce. A formal report will be issued soon. At the 5/27 JAC meeting it was agreed to keep the group informed of events resulting from the workshop. An update can be found at the following website: <http://www.westgov.org/wga/publicat/press/PR-WKSP.HTM>. CR stated that the documents will be presented at an upcoming meeting in San Francisco, CA.

Update on U.S. Air Quality Index (AQI)

Matthew Witosky, EPA Reg. 6, indicated that the Environmental Protection Agency has issued a new Air Quality Index that provides critical information about precautions individuals with sensitive health conditions (particularly children with asthma) should take on days when air pollution poses threats to public health. He provided information on value ranges used to define the AQI. The groups sensitive to the various criteria pollutants include: Ozone-asthma, PM2.5-respiratory problems as well as heart disease impacting the elderly and children, PM-10-Respiratory Disease, CO-heart disease, SO2-asthma in sensitive groups.

Ratings and color symbols are defined as follows: Good - Green, Moderate - Yellow, Unhealthy for Sensitive Groups - Orange, Unhealthy - Red, Very Unhealthy - Purple, Hazardous - Maroon.

Information on the AQI can be found at: <http://www.epa.gov:80/ttncaaa1/t1/replaced/aqirule.pdf>

Updates

Air Quality Reports

Joe Rodriguez (JR) presented a consolidated report for the 2nd quarter of 1999. Distribution of 1-hr ozone data for this quarter indicate we didn't have any levels in the unhealthy range on

the US side. Ozone levels were for the most part in the good range in EP and Doña Ana County. Average ozone was 67ppb during this period. We almost had an exceedance on 6/25; we exceeded the 8 hr ozone average on 5/27/99. Comment on data. Are the low ozone concentrations due to meteorology? Luis Carlos Salmeron, DGE-Juarez, indicated that we've benefitted from favorable met conditions regarding ozone concentrations; perhaps for the next meeting we can bring met data to see how much met conditions correlate w/ ozone formation.

Gerardo Tarin presented PM10 data for Cd. Juarez. He noted several PM10 exceedances caused by high wind events. A windrose for 4/18, a high PM day, indicated the wind was from the east. Jz only had one ozone exceedance (.113ppm) on 6/25. (The Mexican 1-hr ozone standard is .110ppm)

Fabian Macias provided PM2.5 data for Doña Ana County and announced that NMED data can be found at www.nmenv.state.nm.us which provides non-quality assured pollutant concentrations for the most recent 24 hr period ending at 3pm. Future plans include providing continuous & non-continuous PM10 & 2.5 data from regional monitoring sites. PM2.5 data indicate 3 exceedances of the standard which also occurred with the PM10 exceedances and are documented as high wind events.

Update on Dedicated Commuter Lane (DCL)

Carlos Rincon stated the DCL is slated to open on Sept. 7, 1999. There has been a good response from people registering for the required documentation and equipment. Anyone who crosses 3 times per week has a good reason to obtain the DCL vehicle permit. The cost of crossing over the pay bridges quickly adds up. Over 3500 people have registered to cross using the DCL which is located at the Stanton St. bridge. CR recommended we send a letter of congratulations from the JAC to US Customs and all the agencies and groups responsible for making this JAC Strategic Plan Priority Project a reality. CR will draft the letter & get the signatures. VHP asked if the DCL is a solution of vehicular congestion in the border region and are there other projects developed to address this issue. CR responded that at the WGA meetings there were discussions on commercial vehicles crossing the bridges; this is not addressed by the DCL, but the group that developed the DCL in El Paso-Juarez is working on this type of effort at the other int'l bridges.

MTBE as an Oxygenate

An EPA Blue Ribbon Panel (BRP) recently released a report citing the gasoline oxygenate MTBE (methyl tertiary butyl ether) as a possible risk to drinking water supplies should it leak from underground petroleum storage tanks into the local aquifers. The BRP recommendations confirmed EPA's belief that the use of MTBE in gasoline should be significantly reduced as quickly as possible without sacrificing the gains we've made in achieving cleaner air. This announcement can be found at www.epa.gov, press releases for July 26 & 27, 1999. Bill Luthans stated that MTBE presents a unique threat to ground water due to its persistence and mobility. MTBE is showing up in the groundwater at 10-15 % of water supplies CA, a state which is rapidly phasing out the use of MTBE. Oxyfuels have delivered substantial air quality benefits. He stressed that EPA did not impose or suggest a ban. EPA has a mandate to achieve clean air and clean water, but clean air should not come at the expense of clean water. There are alternatives to MTBE, and we should be moving toward those alternatives to reduce the threat to ground water. States recognize there are infrastructure issues and other costs associated with modifying fueling facilities to support the alternatives therefore there has been

no ban on the use of MTBE. Use of MTBE is left to local determination and local suppliers. The BRP ribbon recommended increased use of ethanol and less reliance on MTBE.

Chuy Reynoso presented data on the benefits of oxyfuels. While there is no MTBE mandate there is a mandate for oxyfuels to contain 2% oxygenate. As a result El Paso has experienced fewer CO exceedances during the past years. At its inception, when the oxyfuels program was voluntary, most suppliers opted for ethanol. Each year except the last all suppliers provided ethanol. During the 1998-1999 season 1 supplier provided 26% of the oxygenate as MTBE for El Paso. We also saw TAME (tertiary amyl methyl ether) being used. ChR also announced that the 1 provider of MTBE will not supply it this season. The new pipeline that could provide product as early as Jan. 2000 will not provide MTBE. Perhaps PEMEX may be using MTBE in Jz this winter season. However, he recommends that once we enter any type of negotiation or discussion w/ PEMEX on the use of oxygenates in the Juarez oxyfuels program, the JAC should recommend that no MTBE be used in this region. Ground water is crucial and we're running out of it so its important to protect it.

The argument in favor of MTBE over ethanol is based on economics. It is easier to ship 2.7 % oxygenate via pipeline than thru special shipping containers. One reason we're successful at lowering CO emissions is that EPCCHED has a strict enforcement program. In the first season oxyfuels were mandated we had 72 violations. On Oct 1 of each year EPCCHED obtains gasoline samples to assure compliance w/ the program. The majority of testing takes place in Oct. As the season goes on there are no violations, but in March a string of inspections takes place to assure that fuel switching is not occurring before the season ends.

CR added that in Mexico, PEMEX, IMP (Mexican Petroleum Institute) and national car dealers association are recommending a nationwide oxyfuels program, but sentiment favors MTBE over ethanol as an oxygenate. If we meet w/ PEMEX regarding the distribution of oxyfuels in Juarez we can make a case for ethanol with the proper technical information.

BL emphasized a couple of points regarding a clean fuels program: 1) stay out of the business of mandating to manufacturers how to formulate their gas & 2) leave it to the market on how they will meet this request. Currently, a performance standard includes protecting the groundwater. There are separate issues w/ distribution of oxyfuels. If drinking water supplies are threatened we should engage in a strategy that doesn't include MTBE but be concerned about short term results. We may have a difficult time promoting a ban when the administration has suggested phasing out MTBE. As an official one needs to be careful about the type of document presented to PEMEX.

VHP added that changes in the oxyfuels programs are weighed with consideration toward the environment, but the economic situation in a developing country should also be considered. He asked ChR if there has been any indication that the groundwater has been contaminated. ChR responded that as of today he doesn't have data on ground water contamination from MTBE however the PSB recently finalized a drinking water report for this region that does not mention MTBE. EP has an option for using reformulated gasoline this summer, but reform gas has MTBE so it may be seen in EP once again. Once the use of MTBE increases it may be difficult to reduce its use.

Adrian Vazquez added that we must consider the current meteorological situation given rainfall,

current technology, and advances in the migration through soil of hydrocarbons from leaking underground storage tanks (LUSTs) and the extent of the contamination. There should be a study to determine if we have a vulnerable aquifer how we should clean it or prevent its deterioration.

Update on Vehicle Importation

The JAC and the Air Work Group acknowledged in previous meetings that vehicles imported from the United States into Mexico present a problem for urban air pollution in Paso del Norte. The JAC Strategic Plan includes the study of this issue as a mobile source priority. The JAC Technical Commission on Vehicle Importation has met several times and provided the following report. Alma Leticia Figueroa indicated that the JAC Vehicle Importation Technical Commission does not propose to stop vehicle importation. Most important it wants to assure that regulations regarding the importation of vehicles into Mexico are followed.

Municipal Regulations can fine car lot dealers from 100-1000 minimum wages. Also Article 20 of the Chihuahua Transit Law requires that vehicles have an emissions test prior to obtaining their registration sticker. SECOFI also has a law which all car dealers need to comply w/ which is NOM. 140 & 151 regarding vehicle emission limits. ALF also commented that an International SEP on behalf of a US company would pay for the removal from the streets of high emitting vehicles. The ISEP proposes to remove 400 1986 or later high emitting vehicles by paying \$500 for those vehicles; while the dollar amount is high there are many more high emitters in Jz and perhaps a little less could be paid to remove more vehicles.

Archie Clouse discussed Chapter 114 which is a set of Texas rules dealing w/ mobile sources that addresses State Inspection Stations, anti-tampering, Inspection/Maintenance and the Sale of Motor Vehicles. These rules require that all vehicles in the State of TX have a valid inspection sticker and in El Paso as well as 3 other TX cities pass an emissions test. Little that can be done on the US side to prohibit the export of vehicles. This is an issue that needs to be addressed on the MX side otherwise you'd need a nationwide rule that addresses the export of vehicles to MX.

Chuy Reynoso mentioned that his staff regularly inspects 50-60 car lots per year to assure those vehicles have all emissions control equipment in place. ChR has presented a proposal to the City to have the vehicle inspected prior to sale which currently is not mentioned in Chapter 114 of the Texas rules. EPCCHED works with the TX Department of Public Safety, the agency that enforces the I/M program. EPCCHED is developing a database of all carlots in the county similar to DPS. In addition DPS inspectors will train EPCCHED to identify bogus inspection stickers. Chuy reiterated that the onus is on the agencies responsible for enforcing the law within their own jurisdiction.

Cd. Juarez Air Quality Activities

Luis Carlos Salmeron (LCS) indicated that the Cd. Juarez Mayor's office has a Clean Air program called **Cielito Limpio Para Juarez** LCS has been working w/ several businesses media; the concept of this program is clear and a very Mexican at heart. Juarez also has been operating its RSD program throughout the city and has been successful working with the cities of Chihuahua and Delicias, Chihuahua. Another aspect of this program is public education for children and adults. Juarez is also having **Vehicle Diagnostic Fairs** (ferias diagnosticas). Working with CECATI-19, emissions testing equipment is set up at various locations across the city and people are invited to have their vehicle tested. Vehicle repairs are also made at the

ferias diagnosticas by CECATI mechanics as part of their training to develop vehicle maintenance workshops. In the early part of these courses mechanics at times didn't know what they were doing, charging more for unnecessary repairs and the vehicle still would not pass its test. The diagnostic fairs also were testing emissions at some of the fleet operations across the city. Also the Direccion de Seguridad Publica -Directorate of Public Safety-has established an effective Green Patrol which assures that vehicles not only have their emissions test sticker but also that high polluters are fined.

VHP asked what portion of vehicles have been inspected. LCS responded that about 20% or 70,000 vehicles have received their inspected as of this day. The City is also finding falsified stickers, and this is an indicator that the Green Patrol Program is working.

Clean Air Partnership (CAP) Ozone Action Days (OZAD) Program

Veronica Carbajal, OZAD Program Director, indicated the CAP has declared several Ozone Action Days. The program which is effective until October 1 has raised public awareness of the problems with ozone. The TNRCC has forecast 11 ozone action days, no exceedances have occurred. There was an 8hr exceedance in El Paso on 5/27 and an exceedance of the Mexican 1-hr standard (.11ppm) on 7/25 , but OZADs were not called. OZAD is a public outreach campaign that employs public/private employers. Delays in signing of contract w/ City of El Paso has resulted in a delay of a widespread advertising blitz. On OZADs, the media is funded to run commercials to raise public awareness of ozone. We have appeared on various TV shows in both the US and MX. We have also been invited by several TV stations to discuss the program at length. The EP hotline is the only one in place and with more than ½ of the calls in Spanish we need more bilingual staff. We have also established a firm level of coordination with Sun Metro. Students, teachers, nursing school staff, are also involved. Outreach will continue during the CO season. More info is available at www.bordercleanair.org. We feel that with continued support this group will do a great service to the PDN area.

Update on Used Tire Initiative for Cd. Juarez

Alma Figueroa stated that currently over 5 million tires are located at the Cd. Juarez landfill with another 2 million dispersed throughout the City. Hundreds more are imported into Juarez each month aggravating the situation. With the rapid and increasing influx of tires estimated at over 1600/week this can lead to a deterioration of air quality if they are burned by the brickmakers as well as becoming a problem at the city's landfill. A tour she participated in at 3 Pesetas Tire Disposal facility in El Paso indicated that 400,000 tires can be shredded annually and profitably. Tire shreds are used as road fill and in septic system aeration ponds. With 5 million tires in Jz at the landfill and 2M dispersed throughout the city SEMARNAP requires that there be an adequate disposition of waste and vehicle imports into Mexico, but the adequate disposition of 7 million tires will be difficult to achieve due to lack of resources to obtain tire shredding equipment.

BL suggested that this problem fits into the importation of solid waste may be a recommendation for the Solid Waste Workgroup (SWWG); perhaps the JAC can send a letter to SWWG to see if this fits into the transport of other solid wastes. This recommendation was acceptable.

Report on Sustainable Development Workshop for the Urban Environment in Cd. Juarez

On July 22 & 23 a workshop was held in Cd. Juarez to discuss timely issues surrounding the

Sustainable Development of the Urban Environment. ALF stated that the workshop moderated by Eike Duffin had excellent attendance by the local community. Several environmental concerns were raised including modeling of urban growth, the city's ability to handle the influx of new inhabitants, and providing an adequate water supply

Environmental Brickkiln Projects

Several efforts have been undertaken to reduce smoke emissions from brickkilns in Juarez. In developing countries where batch-type brickmaking processes are prevalent, success in reducing emissions has worldwide implications. Two reports on activities were presented by representatives from UACJ.

KM-20 Brickmakers Project

Luis Avila, UACJ, presented a paper on his work at the KM-20 brickmakers community. The original design proposed the movement of soot/smoke thru a smoke abatement chamber. Bricks in the smoke abatement chamber act like a magnet onto which the smoke attaches. The new oven design uses two covered ovens with the objective of the hood being to prevent escape of heat from the oven and give a better firing time and temperature. Firing estimates obtained in coordination with Dr. Chuck Bruck are the following:

Item (10,000 bricks)	Conventional Oven	Modified Oven	Difference
Cost (US-approx)	\$800	\$1500	\$700
Emissions (total)	250 kg/firing	1.2 kg/firing	248.8 kg/firing
Fuel Costs (/firing)	\$1,080	\$405	\$675
Fuel consumed (kg)	4,40	1,15	3,25

Mass measurements were made using a nephelometer; a dosimeter was used to calibrate the nephelometer.

Mexico 68 Brickmaking Project

Adrian Vazquez, UACJ, provided a graphical representation of 20 simple steps to brickkiln construction. The process is very simple and easy to follow by most brickmakers who number over 400 across Juarez.

Natural Events Policy for Texas

John Gillen, TNRCC, indicated that w/o going thru normal SIP (State Implementation Plan) process one of the major components of the Natural Events Policy for Texas is a request for approval and to have a maintenance plan that includes a NEAP. In a nonattainment area this request goes thru a SIP process and becomes part of the SIP for that area.

Beecher Cameron, TNRCC, stated that 2 pieces of legislation emerged from the recent Congressional biennial meeting. SB7 and SB766. SB766 provides for a voluntary program to reduce emissions. SB7 is a mandatory rule dealing w/ grandfathered facilities. By Sept 1, 2000 general conditions of a permit require a 50% reduction of emissions & 25% reduction of SO2. Facility must operate w/ in required allowable emissions. restriction on trading only allows

trades to occur w/ in a region. Problem is there is only 1 utility in this region. In order to receive additional allowances investments would need to be made in Juarez. Those emissions reductions are allowed to be traded or banked if the reductions are enforceable.

New Initiatives

ISEPS

Bob Edwards, Chevron, discussed a SEP negotiated between TNRCC & Chevron. This is a binational effort and a recycling project which includes a SEP where Chevron will buy highly emitting vehicles. The \$200,000 agreement provides \$500 for up to 400 vehicles. The cars must be model 1986 or earlier, of this area, and arrive at the recycling facility under their own power. Seller must have valid registration, picture ID w/ local address, and have a valid title with vehicle ID/ registration numbers. With these criteria we can assure local vehicles are being recycled. The car must not have a fatal flaw that could cause a breakdown almost immediately.

Bob Currey asked "What's preventing someone from taking the money and buying another clunker?".

ERC Trading Workshop

Soumen Ghosh discussed an upcoming workshop with the topic Emissions Reductions Credits Trading. Funding for the workshop is provided by SCERP. CR added that the workshop will include various issues to include international ERC trading

Environmental Health Workgroup

Steve Niemeyer, TNRCC, stated that on Oct 19-20 the Environmental Health Workgroup will hold its meeting in El Paso.

Consensus Items:

The JAC will send a letter of congratulations to the Chamber of Commerce from both sides on behalf of its members and address this as a product of the joint efforts going on in this region.

The Border XXI Solid Waste Workgroup will be asked to look into the problem of used tires being imported into Mexico. The JAC can send a letter to the SWWG to see if this topic fits into its agenda regarding the transport of other solid wastes.

Next Meeting:
December 2

Adjourn.