

88th Meeting of the Joint Advisory Committee for the Improvement of Air Quality in the
Ciudad Juárez, Chihuahua / El Paso, Texas / Doña Ana County, New Mexico Air Basin
MINUTES

1. Attendance

Hybrid Meeting: February 20, 2024	
Opening Remarks: Mayor of Ciudad Juarez- Cruz Perez Cuellar	
JAC Members Attending (*Alternate ** Not Present)	
U.S.	México
Guy Donaldson, US EPA	Daniel López Vicuña, SEMARNAT
	*Lili González, PROFEPA
Armando Paz, NMED	**COESPRIS
Danielle Gilliam, NMED	Francisco Gomez, SDUE de Chihuahua
Michelle Miano, NMED	
Jason Sarate, City of El Paso	Brenda Nava, CANACINTRA Juárez
Larry Olsen, Citizen (virtual)	Lic. Cesar Diaz, Dirección de Ecología de Ciudad Juárez
Alberto Correa, Capítulo Paso del Norte	**Ing. Alberto Nicolas López, IMIP
**Dave Dubois, NMSU	Rene Franco, Franco y Asociados
**Wen-Whai Li, Ph.D., P.E., UTEP	Dra. Alba Yadira Corral, UACJ
Claudia Valles, El Paso MPO	*Fernando Ortiz, NADB
Carlos A Rincón, US EPA - Liaison	Biól. Gerardo Tarín, SEMARNAT- Liaison
**John Quinn, FMI	

Sign-in sheet attached at end.

2. Welcoming Remarks and Message from Mayor of Ciudad Juarez Cruz Perez Cuellar, Guy Donaldson EPA, and Daniel Lopez Vicuna SEMARNAT.

- a. Co-chair Guy Donaldson’s opening remarks.
- b. Co-chair Daniel Lopez Vicuna opening remarks.

The agenda includes reports from the previous year and presentations on the status of environmental programs, such as the vehicle verification program in Ciudad Juárez. The group, which focuses on air quality in the Paso del Norte region, also discusses the current state of air quality and ongoing efforts to improve it. Dr. Alberto Correa is honored for his leadership, and the EPA's new standard for particulate matter underscores the importance of the committee's work.

3. Agenda items

- a. Agenda approved by members, Minutes from last meeting approved by members.
- b. Previous Minutes approved by members of the committee.
- c. Public Comments

- i. Familias Unidas- concerns about environmental hazards and racial discrimination in the community, particularly regarding the impact on children's health. She urges the use of the \$700 million federal dollars from the bipartisan infrastructure funding to address these issues as intended. Express their concerns about the Maquila Industry and the negative impact of diesel truck pollution on their health
- ii. Gilberto Santiago Flores Orozco from a cooperative in Ciudad Juárez discusses their social project to reforest the city, which is crucial for addressing the climate change issue and its related micro-particulate problems. The cooperative, which operates legally, is seeking support from both private entities and the government to execute the project.

4. Presentation: Paso del Norte Air Quality Report | February 20, 2024
Dr. Carlos Rincon, US-EPA

- a. Binational Air Quality Fund- Invites viewers to contribute to the fund and discusses the importance of trustworthy air quality data. The report covers the current air monitoring network, which has been in place since the first meeting of the advisory committee in 1996.
- b. TCEQ, NMED, Cd Juarez data
- c. Jan to December 2023 Data; Including preliminary design values.
- d. Notes exceptional events or extreme wind events, which can affect the air quality readings. When such high values are recorded, the City and County of El Paso, with the help of NMD and DQC, will submit evidence to EPA to prove that the high pm10 levels are not due to industrial activities but rather to extreme events.

5. Presentation: Ciudad Juarez Report on Vehicle Emissions Inspection Program, Lic. Cesar Rene Diaz, Ciudad Juárez

Strategy aimed at reducing vehicle emissions in Ciudad Juárez, Mexico. The objective is to ensure 100% participation of vehicles in the verification program, given the significant increase in the city's vehicle fleet over the past 30 years. The speaker mentions that many of these vehicles, despite being designed with the latest antipollution technologies, have their catalytic converters removed or conditions altered, leading to increased emissions. The goal is to have authorized units verify vehicles directly, with 36 centers and mobile units offering this service. Initiated in 2013, and it now consists of 20 agents, some of whom use vehicles and motorcycles to enforce the regulations. Collaborating with transport leaders and the maquiladora industry to ensure proper vehicle verification. Despite the progress, the percentage of compliant vehicles is still low, but with collective effort, the objectives of the first presentation can be achieved.

- a. 2008 document signed by officials to coordinate between the government and the municipality to implement necessary actions for the establishment and operation of a vehicle emission verification system in Juárez, tariffs set by income law.
- b. Radio program called "Plataforma Informativa" on 99.1 FM that broadcasts for two hours every morning from 7 to 9 am. This program covers political issues and interviews, and it has a significant audience.

6. Presentation: Chihuahua 2023 Report on the National PROAIRE and SEMARNAT's response, M.E.S. Melissa Zambrano Sotelo and Francisco Gomez Licon, SDUE

Provides an update on the actions taken through the air quality management program in Chihuahua state. The program aims to address the needs of states for preventive and corrective measures regarding air quality and health protection, aligning with the legal framework. The program

consists of six strategies, including reducing emissions from area sources, mobile sources, and fixed sources, protecting health, communication and education, and institutional strengthening. Notable advances in 2023 include monitoring actions in the three atmospheric basins of Chihuahua, Cuautemoc, and Juárez, and a national follow-up workshop on the implementation of the Proaire 2022 plan. Additionally, the program sent the verification matrix to SEMARNAT in early 2022. Regarding the first strategy of reducing emissions from area sources, efforts have been made to regulate or strengthen commercial and service establishments in the principal municipalities, specifically Chihuahua.

Municipal Ecology and Climate Change Committee has a registry of establishments emitting atmospheric pollutants, and they had reinforced their inspection program, known as "Los guardianes ecológicos." The major environmental issue discussed was the burning of cornstalks in Cuautemoc, with a convention signed between the state's Secretaría de Desarrollo Rural and the municipality to reduce such burnings. The third issue addressed was the regulation of emissions from brick factories in Ciudad Juárez. The community education program for brick factory workers was also mentioned, along with efforts to relocate factories to specific zones to minimize emissions. Census was conducted by the Chihuahua Secretaría de Dirección de Ecología to identify 24 operating brick factories in the city. The strategy also included efforts to diagnose priority areas for emission reduction, such as addressing soil erosion and monitoring and maintaining permits for residential and commercial development.

7. Presentation: Air quality monitoring and educational / outreach project in Ciudad Juarez, Mtra. Yasmin Hernandez and Adrian Peña Lopez , UACJ

- a. The project, funded by the 2025 Border Fund, began in August 2022 but the measurements and analysis were carried out during 2023. The project's objectives include conducting air quality monitoring using a low-cost team and equipment, making the information accessible to the public, and educating young people to become leaders and share the information with their communities. The project focused on monitoring air quality using a low-cost team and equipment from the CAC brand, which measures PMs, ozone, nitrogen oxides, temperature, and humidity simultaneously. The monitoring station was installed in the Don Bosco Oratorio.
- b. Workshops for adolescents on environmental issues were held, with a significant increase in their awareness after the sessions. The importance of the information presented during the workshops was emphasized, and plans to replicate similar activities were mentioned. Approximately 90 students benefited from the program

8. Remarks by Commissioner Bobby Janecka from TCEQ

- a. He applauds Juarez's progress in tackling air quality issues, underlines the challenges of implementing NAAQS and PM2.5 limits, and stresses the significance of binational collaboration and the Binational Air Quality Fund for regional air quality concerns.

9. Presentation: International Border Crossing Emissions, Dr. Salvador Gonzalez-Ayala, EPMPO

- a. The project aimed to understand how traffic congestion in the area affects global emissions, specifically focusing on nitrogen oxides and volatile organic compounds. The speaker expresses that the most significant problem is vehicular congestion and the lack of information on how international crossings contribute to global emissions in the Juárez-El Paso region. The project received funding from the Texas Commission on Environmental Quality (TCEQ) and involved the Texas Transportation Institute (TTI) in developing a tool

to estimate border emissions through micro- and macro-simulation. The speaker thanks the TTI scientists for their expertise and technical capacity in completing this complex task. The second phase of the IBC Emissions project aimed to obtain information from surveys of most border crossings in the area and use the developed tools for micro- and macro-simulation of traffic and emissions

10. Presentation: Bridge of the Americas - Air Quality and Dispersion Modeling Study., Dr. Mayra Chavez, UTEP

- a. The speaker discusses a 2022 traffic study at the Bridge of the Americas, which aimed to measure PM levels in nearby communities and assess emission impacts. The study involved 34 days of sampling, PM monitoring at local schools, and air dispersion modeling to gauge traffic effects at the bridge. Predicted emissions were compared to actual monitor readings, and modeled scenarios using volume sources. The study found a strong correlation between observed PM_{2.5}, ozone, and NO₂ concentrations at two stations 6 meters apart, and between actual emissions at the bridge and CAMS 41, 400m away. The speaker also discusses how wind direction and speed affect PM_{2.5} concentrations, with higher levels when the wind comes from the southwest. As the queue length at the bridge decreases, concentrations stabilize, and any queue length beyond 100 m results in the same concentration estimate. The speaker emphasizes that these are estimates based on traffic emission rates and presents a heat map of estimated pollutant dispersion. The study found that traffic causes 7.2% of the emissions at Station A, with NO₂ levels 52 times higher at the bridge than at CAMS 41.

11. Presentation: Global Warming And Sustainability El Paso Del Norte Basin
Dr. Alberto M. Correa, Global Network MX

- a. The speaker discusses the current state of climate change and its impact on cities, particularly those with seaports or located near rivers. The Paris Agreement set a limit of 1.5 degrees Celsius for temperature rise, but the warming has already reached 1.2 degrees Celsius, which is alarming. The progress towards mitigating climate change is slow, and the UN Climate Change Conference in Dubai showed that human civilization's response has been insufficient. The speaker also mentions the health risks associated with increased PM 2.5 concentrations, which are linked to pulmonary disorders. The population is not conscious enough about these risks and continues to pollute. The organization proposes actions such as creating short educational video clips, setting up a worldwide contest for the best clips, and implementing a profound reforestation program to stop the spreading of PM 2.5 particles and reduce the risk of pulmonary cancer.

12. Subcommittee Reports:

- a. Binational Air Quality Technical Commission
 - i. Eddie Moderow from the TCEQ speaks about the Binational Air Quality Fund, which has seen significant contributions since its creation in 2021. He highlights the success of the public-private partnership and mentions a recent visit from INECC, where they reviewed stations and made observations. The collaboration between the organizations was successful, and they look forward to receiving a summary of the work done by the biologist Rodolfo Iniestra.
 - ii. Cesar Rene Diaz- Improvements were made to the contract with Universidad Autónoma de Ciudad Juárez for air quality monitoring, allowing for a two-year term and full-time

service providers. A new air quality control center was established, and regular follow-up meetings were held every 15 days.

b. Configuration of Binational Emissions Inventory Team

- i. Lic. César René Díaz discusses the intention of the subcommittee to propose the linking of ecological fees to vehicle registration payments to the State government. This idea was previously attempted in 1997 but was unilaterally canceled by the State Secretariat of Finance. The subcommittee aims to bring together the relevant authorities from all three levels of government to make this proposal and publish a resolution in the official newspaper. Danielle Gilliam, the cabinet secretary for the New Mexico Environment Department, expresses her support for the collaborative effort and announces New Mexico's upcoming contribution to the binational air quality fund and the Climate Production Reduction Grant initiatives.
- ii. Deputy Director Gilliam discusses two updates. The first update pertains to New Mexico's recent legislative session, where HB 41 was passed, setting a clean transportation fuel standard for fuel importers and producers in the state. New Mexico aims to be the first state outside of the West Coast to adopt such a program, and the next step is to create the rules for implementation. The second update concerns the Climate Pollution Reduction Grant, where New Mexico is submitting its phase one priority climate action plan next Friday. The top three measures in the plan are transportation-focused, including a clean fuel corridor along Interstate 40, clean truck incentives, and California-modeled Advanced Clean Cars rules. New Mexico is also anticipating local municipalities to apply for funding for a community mobility project.

13. Public Comments

- a. Luis Benítez, a Villarreal lawyer, expresses concerns about the environmental degradation during the 88th meeting and suggests taking radical action. He proposes organizing legally to seek a federal judge's help to manage 100 million dollars from the municipality's civil society fund for a green project on 80 hectares. The project aims to have 70% green space and 30% concrete, with the same budget as the municipality's previous park project. The lawyer also criticizes the municipality's plan to plant trees without a water source and proposes using the municipality's resources for irrigation without connecting to the general water supply.
- b. María Antonia Ríos Martínez, a representative of two environmental organizations, Chamizal Conciencia Ciudadana and Frente Verde, discusses the environmental degradation and the need for reforestation and water control. She mentions that the drying of the Rio Bravo, which affects the United States, requires authorities to allow water to be released from dams. Ríos Martínez also shares her initiative, Frente Verde, which aims to promote ecological balance through reforestation and water management, in line with the World Health Organization's guidelines

14. Adjourn Meeting:

a. Closing Comments

- i. Daniel Lopez Vicuna and Guy Donaldson discuss the importance of addressing air pollution concerns raised by the public, particularly in relation to vehicle emissions and

border crossings. They acknowledge the challenges of implementing vehicle testing programs and the need for continued collaboration between various government levels and organizations to secure funding and effectively address the issue. The speakers also emphasize the significance of educating and engaging students and the broader population to support these efforts. Speakers express gratitude for the successful implementation and growth of the air monitoring network in Juarez.

b. Next meeting June 27, 2024 in El Paso, Texas.

Sign in Sheet

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