87th 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: October 19, 2023	
JAC Members Attending (*Alternate ** Not Present)	
U.S.	México
Guy Donaldson, US EPA	Daniel López Vicuña, SEMARNAT
**David Ramirez, TCEQ	*Lili González, PROFEPA
Armando Paz, NMED	**COESPRIS
City of Las Cruces	Francisco Gomez, SDUE de Chihuahua
Jason Sarate, City of El Paso	Brenda Nava, CANACINTRA Juárez
*John Moore, Freeport-McMoRan Copper and Gold	Lic. Cesar Diaz, Dirección de Ecología de Ciudad Juárez
Larry Olsen, Citizen	**Ing. Alberto Nicolas López, IMIP
Alberto Correa, Capítulo Paso del Norte	Rene Franco, Franco y Asociados
**Dave Dubois, NMSU	Dra. Alba Yadira Corral, UACJ
**Wen-Whai Li, Ph.D., P.E., UTEP	*Fernando Ortiz, NADB
Claudia Valles, El Paso MPO	
Carlos A Rincón, US EPA - Liaison	Biól. Gerardo Tarín, SEMARNAT- Liaison
Eugenia (Gina) Posada, TCEQ - Guest	
John Quinn, FMI	

Zoom Audience members:

Gabriel Ibarra-Mejia, Jaime Contreras, Jason Sarate, Kathryn Becker, Cesar Diaz, Lilia Gonzalez, Luis Diaz, Margaret Earnest, Marta Jordan, MeleroAX, Melizza Zambrano, Patricia Sullivan, Oswaldo Diaz, Margarita Gibler, Alba Corral, Claudia Valles, Cristina Morales, Daniel Partida, Carolina Valdes, Dzoara Tejeda, Esmeralda Cervantes, Fernando Ortiz,, Brenda Nava, Francisco Gomez

2. Welcoming Remarks and Message from Guy Donaldson EPA, Marco Grajeda NM Border Authority, and Daniel Lopez Vicuna SEMARNAT.

- a. Co-chair Guy Donaldson's opening remarks. The U.S court has reversed El Paso nonattainment and EPA is reviewing the Court's decision to determine the appropriate next steps.
- b. Co-chair Daniel Lopez Vicuna opening remarks. Support from Carlos Rincon (EPA) to travel to meeting.
- c. NM: Marco Grajeda: Discussion on work being done to reduce traffic congestion by being efficient, and increasing competitiveness with the benefit to improve air quality here in the region, adding new road ways etc.
 - i. Deputy Secretary of NMED Danielle Gilliam remarks
 - ii. Michelle Miano director of NMED: Climate pollution reduction grant received to start implementing planning phase to submit a priority climate action plan due March 1, 2024. Working with NM energy and natural resources department. Looking toward phase 2 which is

implementation grant due by April 1, 2024. Will address ambitious measures which can reach up to 500 million dollars, reducing criteria pollutants, and greenhouse gas reduction and community benefits. Looking to pursue innovative policies and programs that can be replicable across multiple jurisdictions with a particular interest along the border region. Planning phase 1 can inform what will be done as part of implementation in phase 2.

3. Agenda items

- a. Agenda approved by members, Minutes from last meeting approved by members.
- 4. Presentation: Air Quality Report, Dr. Carlos Rincon, USEPA
 - a. TCEQ, NMED, Cd Juarez data
 - b. Jan to September data, preliminary and subject to change.
 - c. Next presentation will have annual design value.

5. Recognition of Gina Posada with Plaque

- a. Recognition of her work on the border and the work on JAC meetings
- b. Statements from Eddie Moderow, Guy Donaldson, and Daniel Lopez Vicuna
- 6. Presentation: <u>Comparative Analysis of QA/QC procedures of major air monitoring networks in the U.S. and Mexico</u>, Jaime Contreras
 - a. Preliminary results of Compare USA & Mexico air monitoring networks management.
 - b. Developed a questionnaire based on US-EPA air monitoring Technical System Audit (TSA)
 - c. objectives:
 - i. To draw clear comparisons, highlighting similarities and differences, while illustrating intention and purpose when the programs diverge.
 - ii. To provide recommendations for the agencies in focus to "harmonize" their monitoring approach.
 - iii. The recommendations should aim at improving comparability of the air quality data in terms of reliability & defensibility.
 - d. Methodology: Questionnaires and evaluation protocols
 - i. Administration, planning Technical, QA/QC, Data analysis and validation.
 - ii. Color code responses, ID numbers for each agency network, disseminated to all agencies to see comparison with other agencies.
 - e. Results: regulatory operational, quality management, network management, field operations, met operations, lab operations, data management

f. Conclusions

- i. The observable reasons for significant differences are: Mexican regulatory norms are not fully developed. Mexico QA/QC norms point to USEPA regulations, but fulfillment is not required, nor verified.
- ii. In the US is mandatory to have an EPA approved QAPP from the start of any air monitoring program
- iii. In the US audits are network & data quality improvements tools, there are not negative outcomes.
- iv. The Mexican federal oversight is limited in most cases.
- v. This impacts QA internal policies on each Mexico agency and their data quality.
- vi. It generates confusion & freedom of interpretation of norms and regs requirements.
- vii. The lack of complete & regular oversight fosters situations of data incomparability. The Mexican limited resources curtails advancements in all areas.
- g. Discussion: Valuable findings
 - i. The standards, rules and reg similarly aim to protect public health. Both countries recognize EPA guidance for network management Mexico complements QA practices using EPA guidance Staff strives towards meeting understood objectives Staff performs monitoring duties according

- to local expectations Staff recognize importance of training & tech knowledge. Agencies are receptable to evaluations, hence their acceptance to participate.
- h. Conclusions are still being discussed. Will be available in final the report. Recommendations for harmonizing monitoring efforts will be focused on the TCEQ-UACJ examination, as per project agreement.

7. Presentation: Addressing Regional Climate Action under the EPA's Climate Pollution Reduction Grant, Fernando Liaño Berjano, City of El Paso

- a. Motivation: As a result of the November 2022 voter approved bond the City of El Paso is moving forward with a comprehensive climate action plan.
- b. Background, Toolkit to use.
 - i. Funding, policy, partners, programs, plans
- c. Justice 40: 40% of benefits must go to underserved communities
- d. CPCRG Program highlights: Dual phases, planning and implementation
- e. Regional Approach includes 10 municipalities, 2 counties, 5 international ports of entry, 15 census designated places, unincorporated communities, across 5,587 square miles.
- f. Methodologies to pursue:
 - i. Develop technical deliverables (GHG emissions inventory and projections, benefit analysis)
 - ii. engaging with community to gather feedback about priorities, concerns and desired outcomes in their neighborhoods related to climate pollution
 - iii. follow up on measuring impact and benefit as well as follow through with a consistent presence within affected communities
- g. Paso del Norte Climate Fellowship
 - i. 27 fellows, 2 years, 9 teams of 3
 - ii. Students and young professionals from high school seniors to college graduates
- h. Outputs and community impact
 - i. Climate, people economy and governance
 - ii. Pollutant measurement, creation of jobs, enhanced community engagement, long-term regional collaboration
 - iii. Comments: fellowship will be a part of phase 1 Planning; agriculture included in GHG calculations, discussion with partners on how to implement these in the GHG inventory; Sunland park will not be included in metro area, line drawn at Texas state line

8. Presentation: The Rincon Award in Air Quality Excellence, Isabel Keddy-Hector, TCEQ

- a. Award Overview: The award is biannual, binational award given by the JAC with the express goal of recognizing individuals and organizations contributing to air quality excellence withing the Paso del Norte Air Basin
- b. Reason: As a Thank you to Dr. Carlos Rincon for 45 years of commitment to natural resource conservation and management along the U.S.-Mexico Border, announcing call for nominations.
- c. Award categories: reduction, innovation, outreach/education, research
- d. Nomination process: 1) nominated by individuals or committee members through form on the JAC website due by June 15th, 2024, 2) the call for applications will open and close during the first and second JAC meetings of the calendar year, 3) award will be presented to recipient during the third JAC meeting of the calendar year.

9. Announcement:

- a. Border 2025 RFP available now, and proposals due by December 4th, 2024 at 5pm MT.
- 10. Presentation: Exposure to Air Quality Deterioration in Piedras Negras and Ciudad Acuña, Coahuila, Dra. Dzoara Tejeda Honstein, Consultant
 - a. Introduction: 2 urban areas Ciudad Acuna, Piedras Negras.

b. Methodologies:

- i. Stages of Work plan: Air quality analysis, emissions inventory, personal monitoring of air quality, exposure of citizens to air pollutants, evaluation of strategies to reduce exposure and control emissions.
- c. Summary of air quality for pollutants PM₁₀, PM_{2.5}, O₃, CO, NO₂, and SO₂ at two areas across six years.
 - i. Satellite imagery of formaldehyde concentrations: increased in 2020 compared to 2021
- d. Emissions inventory: management and generation of information
 - i. Fixed or point sources. Identification cards of Annual Operation, Industrial sites.
 - ii. Area sources. Records of municipal information, information from INEGI, Ministry of Health
 - iii. Mobile sources. Vehicle Registry: Vehicle Registrations, Registers SCT Transportation, vehicular counting, vehicle counting by plate type. Vehicular Activity: Application of surveys and speeds. Conducted using MOVES model.
- e. Personal monitoring: PM₁₀, PM_{2.5}, CO, and Black Carbon.
 - i. Various routes, and morning and afternoon routes.
- f. Exposure concentration: Based on established standards by WHO
- g. Conclusions:
 - i. Air quality diagnostics. There are problems with ozone and particulate matter in Piedras Negras. In Ciudad Acuña the high concentrations are punctual and occasional.
 - ii. Emissions inventory. In both cities, the main source of emissions is motor vehicles, also of importance the area sources for their contribution to VOC and NH3 emissions. The emissions from the checkpoints are relevant because they are generated in a specific polygon within the city, in the case of Piedras Negras the emissions are much higher than in Ciudad Acuña.
 - iii. Personal monitoring of contaminants. Piedras Negras In the tours, concentrations of PM2.5 and PM10 above the chronic values recommended by the WHO and the NOMs were obtained at specific points, but the acute values are not exceeded. Regarding CO, also for some specific points, the chronic value recommended by the WHO is exceeded.
 - iv. In International Bridges 1 and 2 for PM2.5, the chronic value of the WHO and the NOM is exceeded, and in Bridge 2 in most hours the acute value of the WHO is exceeded. PM10 concentrations are above the chronic values of WHO and NOM. Ciudad Acuña on the routes, some specific values of PM10 and PM2.5 slightly exceed the chronic value recommended by the WHO, in the case of CO, they also exceed the chronic value of the WHO due to point sources. In the International Bridge, PM2.5 exceeds the chronic value recommended by the WHO and that of the NOM only during peak hours. For PM10, concentrations are above the chronic WHO value, only at peak times.
- v. Exposure dose of the population to particles smaller than 2.5 micrometers. Both on routes and on international bridges, the estimated values for the exposure dose are lower than those recommended by the WHO

11. Presentation: <u>Pro Aire: Atmospheric Contingency Program</u>, Mtra. Melissa Zambrano (Presented by Francisco Gomez), SDUE

- a. Background- Measure 14 tasks as follows: 1. Form a technical committee for the development and implementation of the PCA (ProAire Contingency Program). 2. Develop collaboration agreements between bodies for the development and application of the PCA. 3. Develop the PCA. 4. Monitor the implementation of the PCA. 5. Develop actions of dissemination and continuous communication aimed at the population about the levels of activation and post-contingency results
- b. Structure of prevention plan and response: 1. Introduction, 2. Definitions and types of contingencies.
 - 3. Classification of Contingencies. 4. Procedures to be followed in an environmental contingency

case. 5. Actions and obligations of each government agency. 6. Participation of citizens. 7. Information campaigns on environmental contingencies. 8. Penalties and fines for contempt of the preventive measures issued by environmental contingencies. 9. Periodic meetings. 10. Letter of Commitment. 11. Contact Dependents (stakeholders).

c. Objectives:

- i. Prevent and protect the population from air pollution that may affect health. Define responsibilities for each of the agencies and authorities involved, according to their competencies. Development of protocols for subsequent implementation. Application in periods of poor air quality. Define the phases of atmospheric contingencies.
- ii. Establish the basis for the declaration of the activation and deactivation of emergencies as well as contingency phases. Detail the set of actions by the participants involved in the Public Administration of the Municipality of Juárez. Work on aspects of interest in relation to health protection, by means of work of the agencies and the population in general.
- d. Stakeholder list includes government agencies at the federal, state, and city level, higher education institutions, and international relevant agencies such as TCEQ, NMED, and CCC/JAC.
- e. Closing comments: SEDUE, introducing new delegate Marco Antonio Sedillo Hernandez. Comment on Prognostics period for data: for PM_{2.5} 1 hour, for ozone 1 day before.

12. Subcommittee Report: Binational Air Quality Fund Committee Report, Jose Luis Palacios

- a. Background: Started in 2021, faced challenges and successes. Advancements in donations:
 - i. Paso Del Norte Community Foundation (PdnFoundation) (Tracy Yellen): set up webpage specifically for AQF for individual donors to make donations from credit cards, then the foundation will transfer resources to the NADBank.
 - ii. Marathon Petroleum \$75,000 to the Paso Del Norte Community Foundation
 - iii. SEMARNAT meeting with industry and maquiladora sector in Ciudad Juarez
- b. 10th Fund Committee Meeting: SEDUE Eng. Fransico Gomez presented on trust of border crossings of Chihuahua as a possible source of funding
- c. Fund authorized purchase of PM10 and PM2.5 continuous monitors along with Marathon Petroleum Foundation Donation, will be added to an ozone only station to better equip the network, as well as air zero calibration and analyzer to the nutrition clinic station.
- d. Continued operation of station and in-depth analysis of next steps after 2 years
- e. Contract for operation and maintenance has finished with UACJ, looking for next steps on how to continue operation.
- f. Annual audit with support from TCEQ: conducted by contractor Eric P. Anderson, and contractors Jaime Contreras and Armando Retama. Will deliver areas of improvement for Juarez network and how to improve areas in administration and responsibility of external audits.
- g. Analysis ongoing of representativeness of current network and plans for future network
- h. 10th meeting of Binational Fund Committee Meeting conducted on October 18th, 2023.

13. Adjourn Meeting:

a. Set time for next meeting: February 15th, 2024, in Ciudad Juarez at the Municipal Building