

**Minutes of the Air Quality Task Force Meeting
Mexicali / Imperial
Thursday, November 8th, 2018
UABC, Mexicali**

Co-chairs: Belen Leon; Margarito Quintero

I. Attendance:

Alberto Mejia, entrepreneur ; **Ivan Martínez**, entrepreneur; **Gabriela Ruiz Reyes**, OBSERBC; **Fernando Flores**, OBSERBC; **Oscar Romo**, Environmental Protection Management; **Margarito Quintero**, Secretariat of Environmental Protection; **Belen Leon**, Imperial County Air Pollution Control District; **Emanuel Castillo**, School of Engineering and Chemical Science at UABC Tijuana campus; **Ray Askins**, environmentalist; **Michael Schore**, School of Engineering at UABC; **Michael Green**, Imperial County Air Pollution Control District; **Judith Ley**, School of Social Research at UABC; **Rebecca Corella**, Official Document Translator in English and French; **Leticia Ramirez**, School of Engineering at UABC; **Jeremy Bauer**, USEPA, San Diego office; **Adriana Arias**, School of Architecture and Design at UABC; **Arturo Jiménez Trejo**, SEDAGRO; **Oswaldo Leyva**, School of Architecture and Design at UABC

II. Welcome and Initial Comments

Margarito Quintero welcomed and thanked everyone in attendance. He informed that starting at this meeting; **Belen Leon** would take **Reyes Romero's** place as co-chair for this task force.

Belen Leon thanked everyone for being at the meeting, and she said she really appreciates the honor of taking this sit. She informed **Reyes Romero** was out in another meeting, but she said he would have been at the meeting as well otherwise.

III. Revision of Minutes from Prior Meeting

Margarito Quintero said the minutes had been sent to them in advance for their review and that he hoped they had taken the time to do so. Then, he said now it was the time to share any comments or suggestions regarding the minutes.

Belen Leon mentioned that the name of Meozotis **Torres** from the city of Mexicali had been omitted and that this would be corrected.

Margarito Quintero made a few other observations, which were noted for their correction as well.

IV. Presentations / Questions and Answers

US / México Border Environmental Exploration Assessment Improvement; Emanuel Castillo Quiñones, School of Engineering and Chemical Science at UABC, Tijuana Campus

Ray Askins mentioned that they collect information at RETC, but that there is no enforcement. However, he asked if he could have a copy of his presentation because he could see the amount of work put into this project.

Emanuel Castillo said that they were aware of that problem, and he said he would make a copy of his work available to him.

Michael Schore asked if they have any information with regards to foreign gas stations in México. He said he would like to know if the gasoline they offer contains better additives and if it is actually better than what PEMEX offers.

Emanuel Castillo he did not have proof to assure that. However, he said he honestly did not think so. He added that the data obtained for their project had been only from PEMEX gas stations because these data were obtained before there were foreign gas stations in México. He concluded saying they should probably consider these data in the near future

Michael Schore asked where these foreign gas stations gasoline really comes from. He asked if it also comes from PEMEX.

Emanuel Castillo said that it is extra-officially said that it actually comes from PEMEX, but with foreign Brand additives added to it, but that he does not have any way of proving this information, either.

Margarito Quintero said he knew that at Costa Azul they are building a gasoline storage center for foreign companies, which already have gas stations established in Baja California. However, he said this had only recently started so it would take some time this type of gasoline to be available in the region.

Belen Leon mentioned that CalEnviroScreen is a program in the US that has been really big in one of the projects that they are implementing in the Imperial Valley. She mentioned that this tool can be updated and asked how often they were going to be doing updates on the Mexico side.

Emanuel Castillo said he did not have that information with him at that time. He also said the person who could make that information available for them would be **Dr. Quintana**.

Ray Askins mentioned that he has observed that the vapor recovery system in new installed gas stations is removed after a few months thus causing more pollution in the air shed and he asked if they had observed that.

Emanuel Castillo said he had not made that observation and that it would be interesting to include vehicle fleet emissions data since this information has not been included on this project

Margarito Quintero said that the fact that there are foreign companies now managing gas station in Mexico, does not mean that the technology they have in their country is implemented here.

Rebecca Corella congratulated **Emanuel Castillo** for his excellent research and presentation

Margarito Quintero mentioned that through a working plan in order to mitigate PM 2.5 pollution, the California Air Resources Board will be in charge of making an emissions inventory for Baja California. He said it would be interesting for them to get to know this project that **Emanuel Castillo** and his team are undertaking so that the information and data from this project could be integrated to this inventory. He also asked why Ciudad Morelos had not been included on this study even though it is located at the border.

Emanuel Castillo said he did not know exactly who had been in charge of defining the selection criteria to decide which borders communities would participate on this project.

Margarito Quintero asked why the dispersion modeling was only taking from south to north and not in both directions. He said that doing it from north to south would have allowed them to see the pollution influence on the Mexican side.

Emanuel Castillo explained that this tool is designed to observe the risk the residents in the south of California are exposed to.

Oscar Romo asked if the data base used for this study included the record for the north to south episodes and if so, if it could be shared.

Emanuel Castillo said he did not have the data base himself, but that he could ask **Miguel Zavala** or **Dr. Luisa Molina** from the Molina Center to share it with the group.

Arturo Jiménez Trejo said that he agreed with **Margarito Quintero** and **Oscar Romo** as far as including other border cities such as Algodones, Cuervos or Ciudad Morelos. He added that the strongest incidences on agricultural burning at the valley happen from June 15th to August 31st, and he said he thinks it would be important to do a dispersion modeling at these zones during these periods of time to add to the data of this study.

Belen Leon informed that the CalEnviro Screen in the US side is downloadable and available for everybody as well as user friendly so anybody can do their own analysis on it and get that north to south information needed.

V. Border 2020 Projects and Updates; Jeremy Bauer / USEPA

Jeremy Bauer mentioned that in September there had been a task force meeting between Tijuana and San Diego held in Tijuana. He informed they would be posting those meeting summaries and presentations shortly on their website. He also mentioned they had done a project at the San Ysidro Port of Entry a couple years ago with the San Diego County Air Pollution Control District, which included monitoring for PM as well as the meteorological data including wind direction and that from data they could do an analysis. He added that through CARB they had also funded a project to measure PM at 2 sites in Mexicali, and they also had a monitor in Calexico and that he thinks that looking at both data sets, they could probably do some analysis looking at both wind directions. He also mentioned they are funding a community monitoring project in Tijuana through Border 2020. He commented that the federal governments of Canada, the United States, and Mexico had come to an agreement in principle on the free trade agreement and that once it is finalized; they would be paying attention as to what the implications of this would be for their federal programs including the Border 2020 Program.

VI. Updates from Federal, State, and Local Governments

Oscar Romo informed that the Secretariat of Public Safety has now new regulations for open burning and that under these regulations, and that those who break these regulations could even be presented in front of a court judge. He also mentioned that during the first 2 months of work under these regulations, the Secretariat of Public Safety reported to have issued 517 fines in the city of Mexicali. He added that they are currently working on a collaboration agreement with the California Air Resources Board in order to get some low cost air monitors to create an air monitoring network in Mexicali, which will be able to generate and enhance PM 2.5 data. He stated they hoped that by the month of December they would have the first 25 monitors installed in Mexicali, and that this information would be available online as soon as possible. He explained these were reference monitors, and their purpose is to correlate information with the one collected from the regulatory monitors. Thus, some of these reference monitors would be located on the same sites as the regulatory ones

Belen Leon informed that through their Border 2020 Program, they are doing their *Ambientalizate* campaign again this year and that by the following week she would have the videos for it online and she would be sending the link to everybody so they could see them and if possible display them somewhere else.

Margarito Quintero informed that at the same time as this meeting, the Environmental Fair organized by the Secretariat of Environmental Protection was taking place and that it would end at 5 PM so he extended an invitation for everybody to take the opportunity to go. He also mentioned that they had been working together with the California Air Resources Board, Imperial Valley and the municipality of Mexicali in order to make this shared air shed a cleaner one and that for this purpose, they were putting together a working plan, which he hoped to be finished by

the following Friday, once the California Air Resources Board had received feedback on it. He said this document could be shared with those who were interested on reviewing it so that they have the opportunity to know in more detail what the different initiatives to improve air quality in both cities through this program would be. He explained that the idea was for this document to be presented to the Air Resources Board in Sacramento for its approval and implementation by December 13th.

Margarito Quintero invited the guests from the software company to share their project with the group.

Alberto Mejia said that 2 years ago through their company and in collaboration with the Autonomous University of Baja California, they started designing a low cost environmental monitor, which was a meteorological station that also has sensors to measure PM 2.5, PM 10 y Co. He explained that these types of devices are reference devices, but that they have a lot more virtues than the regulatory devices, which also have their purpose and should not stop existing. However, he continued explaining that these low cost devices complement the work of the regulatory ones. He said their project has had a very good response from the Secretariat of Environmental Protection, the local environmental protection agency, the UABC and some local companies. Therefore, he announced that starting from the month of December; they were hoping to launch an air monitoring network starting with 20 low cost monitors and a web page on which their location would be displayed. He added they were also hoping to be able to include data from both the local and state monitors. He said this would be only a yearlong project because since their technology is a low cost technology, its life span is limited. He commented that the EPA has generated a sub-organization at their web page and their structure in order to address public initiatives and that they have the capacity to generate a reference evaluation through which they rate you and post you on their page.

Belen Leon informed that under Assembly Bill 617, Imperial County is doing two types of projects within the corridor of El Centro, Heber and Calexico; monitoring projects and emission reduction projects. She explained that for this purpose, the Imperial County Air Pollution Control District will be issuing a small laboratory on which they will have several prototypes of different types of monitors in order to see what to implement as well as what to provide to the public. Therefore, she said she was very interested on getting their contact information to possibly work with them in the future.

Michael Schore said he had heard through a radio program hosted by **Rosa Leon** about some kind of system to measure air quality named AQI, and that he would like to know if someone could explain a little bit more about this measurement program.

Belen Leon explained it was called AQI, which means Air Quality Index. She said it indicates the air quality variable index through a color coded classification. She also mentioned it measures PM 2.5, PM 10 and Ozone at certain times. She informed that this information can be accessed through the Air Now online portal.

An Attendee commented that due to safety issues in the region, air monitors are generally located in public facilities, and asked if they already had an idea as to where these 20 monitors would be located for their project.

Alberto Mejia said their plan was place them on roof tops in different locations and that they were hoping not to have any safety issues.

The same attendee asked how they were going to decide these locations.

Alberto Mejia said they would take into consideration recommendations from the public agencies, but that the sponsors would be the ones making the final decision. He mentioned that they had already installed their first monitor at **Ray Askins** residence, that they have another one in the Los Santorales area, that they were about to install another on top of the OBSERBC building, and that another one is located in front of UABC. He said these were the first 4 to be installed, and the next ones would be located next to the regulatory monitors.

The same attendee asked what the cost of the sponsorship was.

Alberto Mejia informed the cost per monitor and operation is \$500.00 dollars, and he also mentioned they are offering packages through which if a company buys 10 monitors, they are offered the possibility of installing 2 additional ones.

Jeremy Bauer mentioned that the EPA has a lab on the east coast of the United States that evaluates sensors, but more locally he said that the local air districts that regulates Los Angeles County have a lab located east of L.A. which analyzes sensors and they have a website where they have each sensor listed with information on what it costs, what it measures for and what the statistical accuracy is. He added they do a really robust analysis comparing the low cost sensors to the higher price sensor. He said that if they wanted a more local option that would be a lab they might look at.

Alberto Mejia thanked him for his recommendation, and mentioned that as part of the project, they were generating information layers on their geostatistical map with the idea of making this tool available in this case to UABC or the different agencies so that they can come to their own conclusions. He added that their project has the advantage of being able to add any required sensor according to what they want measured.

Margarito Quintero suggested having an online site in order to be able to share minutes and presentations from this task force and make it available to the public. He also mentioned that this would also be useful to have a historical follow up on all the projects done by this task force.

Belen Leon said they were already working to make this possible.

VII. Wrap Up / Date for Next Meeting

Margarito Quintero informed that the date for their next meeting would be on Thursday, February 7th, 2019 and thanked everybody for having dedicated their time to be a part of this meeting.

Meeting Adjourned