

Minutes of the Air Quality Task Force Meeting

Mexicali/Imperial

September 12th, 2013

Calexico

Co-Chairs: Luis Alberto Ocampo; Reyes Romero

Attendance:

Reyes Romero, Imperial County Air Pollution Control District; **Meozotis Torres**, Secretariat of Environmental protection in Baja California; **Richard Ryan**, SDSU Imperial Valley Campus; **Juan Felipe Serrato Garcia**, CESP Mexicali; **Marco Antonio Reyna**, UABC Engineering Institute; **Belen Leon**, Air Pollution Control District; **Margarito Quintero**, UABC Engineering Institute; **Dave Fege**, USEPA San Diego, **Raul Tovar**, SPA, **Luis Olmedo**, Comite Civico, **Carlos Angulo**, CAL-EPA

I. Welcome and Initial Comments

Reyes Romero thanked everyone in attendance and apologized for the absence of his counterpart in Mexicali. He said he hoped for him to show up later.

II. Revision of Minutes from Prior Meeting

Reyes Romero asked to make any comments or suggestions regarding the minutes from the prior meeting. Since no one had any suggestions or comments to make, the minutes were approved.

III. Presentations; questions and answers

Economic Values Attributable to Public Health Benefits due to Air Pollution Reduction in Mexicali and Tijuana; Doctor Marco Antonio Reyna, UABC

Margarito Quintero mentioned that the values given by the International Health Organization (OMS) were not accurate because some of the environmental monitoring stations were not working appropriately. He mentioned that on the case of the El Progreso station, the station was wrongly located since it was located on an agricultural urban zone, where there is a large vehicle flow on unpaved roads which generate dust. On the other hand, he mentioned that according to a report made by experts on the matter, it had been shown that the monitor station in Mexicali was failing to identify PM 2.5 due to an error on the equipment installation, and that the data obtained last year and the year before last were very high. Finally, he asked **Marco Antonio Reyna** to take this into consideration during his presentation.

Marco Antonio Reyna mentioned that they also had manual stations as a frame of reference to compare results with the automatic ones and that the results from both were not very far from each other in comparison, and that this should also be taken into consideration.

Reyes Romero asked where he could get PM 2.5 data.

Marco Antonio Reyna said he could ask the SPA for them. He mentioned that the studies had not been done with recent data. He also said that he would explain how the exposure – response functions were used according to this data to find those economic values attributable to public health benefits.

Richard Ryan said that as far as the restricted workdays per year and the difficulty of gathering data for that, the Air Pollution Control District had a monitor in Calexico, and that he was under the understanding that EPA was going to put monitors up in Mexicali, which would give the same sort of information about 5 or 6 years ago. He asked if they actually had those monitors available.

Marco Antonio Reyna explained that the number of restricted workdays was obtained by surveys done by an American company. He also explained that the survey was done on workers and that the results were obtained based on the statistical analysis.

Dave Fege asked if he had done any estimate of what the cost would be to get those reductions on PM10 and carbon monoxide.

Marco Antonio Reyna said that he would give conclusions and recommendations at the end of his presentation, on which he would answer that question.

Ray Askins apologized for being late and said that in his opinion, what **Marco Antonio** was presenting was excellent and that it was the only way to take control of the situation in Mexicali.

Carlos Angulo asked what the source was to indicate the parameters which **Marco** was showing, and what monitoring system was being followed.

Marco Antonio Reyna said they followed monitoring systems used by the SPA and the Ecology National Institute. He added that the data had also been validated by the EPA.

Margarito Quintero said that in his opinion, and in order to explain why pollution in Tijuana is not as intense as in Mexicali even though the vehicle fleet is much larger in Tijuana, he would say that this was due to the tunnel effect that occurs with winds in Tijuana. He explained that this tunnel effect makes pollutants flow towards Las Palmas. He also mentioned that the fact that the city of Tijuana is located next to the coast also helps reduce pollutants in the air, and it transports them to its surrounding areas. He finally said that this would be an important issue to consider when interpreting the monitoring results.

Marco Antonio Reyna said that even though what Margarito mentioned was true, this would explain the falling trend on pollutants. He added that the only possible explanation to this trend was that something was being improved. He said it could be an anthropogenic phenomenon impacting these 2 pollutants.

Dave Fege said that he could not explain the difference on the CO. He mentioned that on the PM side one of the major sources has been particulate matter from unpaved roads particularly in Mexicali, but also in Tijuana. He mentioned that over the past decade, a lot of road paving has been done and this has helped reduce PM10.

Reyes Romero asked how they came to the conclusion that the carbon monoxide was going to increase.

Marco Antonio Reyna said that in order to obtain the trend, retrospective data with annual averages was used. He explained that if there were no interventions of any authorities or community members to depress carbon monoxide levels, these levels could go up to what he was showing for 2020 in the Mexicali region.

Dave Fege asked what the model was doing that it was projecting increases on the carbon monoxide up to 2020 at 10 times the highest rate of any of the historical years.

Marco Antonio Reyna explained that it was from 2010, 2011 and 2012 when they started to increase.

Dave Fege said he thought the data was up to 2020 and thanked him for his answer since it told him a little bit more.

An attendee asked what the reason was for Mexicali to show such a big variable in 2006. He also asked if they had considered the possibility that this was due to the new power plants at La Rosita in Mexicali or the Su Carne feedlot since it was around this time when they started operations.

Marco Antonio Reyna said that possibility did exist, but that they could not know for sure since those places had operated on previous and following years to 2006.

Dave Fege mentioned that in his experience, when something like that happens, it is usually one of the three things. One is something weird happened with the weather. Two, you could have bad data. Or three, something in those years was happening that was not happening otherwise. He added that he did not think it was the power plants because this is PM data, not carbon monoxide data.

Carlos Angulo asked with regards to the monitoring system if the data was obtained from a total sum, and not from partial information.

Marco Antonio Reyna said that the annual averages had been obtained from the readings done at the stations. He explained that a reading average was done on each of the stations, and that it was averaged throughout the year to obtain the annual average.

Luis Olmedo asked who would pay the cost if they were to compare beneficiaries against those who do not offer any benefits.

Marco Antonio Reyna explained that these are known as externalities and they refer to those people who pollute and affect the community without being restricted. He said that his question was a very good question and that it was a question that everyone should try to find an answer to.

Margarito Quintero mentioned with regards to the Pro Aire for Mexicali that the recommended actions on this program were said to be followed up by sectors. However, he said he had not seen any more action on this regard, which in his opinion was a very important issue.

Marco Antonio Reyna said it would be recommended to identify the specific kind of control measures that could be implemented to reduce PM10 and carbon monoxide. He said that they should also be done by sectors on which the impact should be higher to reduce pollutants according to the type of source and pollutant. He mentioned that according to the 2005 Mexicali emissions inventory, area sources are the ones that contribute the most to PM10 and PM2.5, while mobile sources contribute to carbon monoxide. He also mentioned that there is a 2011-2020 Pro Aire on which 39 actions focused on reducing air pollution are proposed. He said it would be advisable to value the economic benefit that would come or not from each of these actions in order to prioritize those which would provide the biggest social benefit due to impacting the reduction of PM10 and carbon monoxide.

Carlos Angulo congratulated **Marco Antonio Reyna** on his research and presentation. However, he said to be worried about the decay and lack of equipment and operation on some of the monitoring stations in Baja California according to a document issued to him by **Marta Fonseca** from the Environmental Protection Secretariat in Baja California, who is responsible for the monitoring in Baja California. He said he was going to hand a copy of this document to **Dave Fege** so that he turn it over to **Tomas Torres** with **Marta Fonseca's** phone number to have a conference call and what could be done to solve this issue.

Marco Antonio Reyna said he would like to conclude by saying that it was evident that it is required to exercise control measures to improve air quality because of its impact on health and economy. He thanked COCEF and EPA for the support given to take on this project.

Raúl Tovar mentioned that they had recently been visited by INEC, and that they were carrying through a program to support monitoring networks. He said he hoped to obtain support and equipment from them this year. He also mentioned that they would receive support from the new federal administration not only for the monitoring network in Baja California, but also for other monitoring networks.

IV. Border 2020 Projects and Updates; Dave Fege

Dave Fege said he did not have anything to share.

Marco Antonio Reyna asked if they had any more funds for other projects.

Dave Fege said they were in the middle of evaluating Border 2020 proposals that were submitted at the end of July, not only for air quality, but also for hazardous waste issues, water quality, and other issues covered in Border 2020. He said that an announcement on the award of those proposals would be made in October or November.

V. Updates from Federal, State, and Local Governments

Reyes Romero announced that they were going to have 2 workshops in the following week. The first one on September 18th from 2 to 4 was going to be on proposing to adapt a new rule to set new limits to stationary engines; he said they were hoping to collect comments from the public to present them to the board of supervisors. He announced the second workshop would be on September 19th from 9 to 11 to adapt amendments to the rules 26 and 27. He said they were all invited to both of the workshops.

Ray Askins asked what it would take to implement a smog check program for vehicles on current use in the Imperial Valley.

Reyes Romero said it would take for the population to grow because that is what the state law reads. He explained that according to the population in the Imperial Valley, they are only required to ask for a smog check every time there is a transfer of ownership.

Dave Fege said that the smog check program tests for carbon monoxide, which is not an attainment issue in Imperial Valley. He also mentioned that every time a car changes hands in Imperial Valley, it gets smog checked. He finally mentioned that the size of the vehicle fleet in Imperial Valley is much smaller than the size of vehicle fleet in Mexicali, and that the vehicle fleet in Imperial Valley has newer cars.

Luis Olmedo congratulated Marco Antonio Reyna on his presentation. He said he wanted to extend an invitation to the Fifth Annual Imperial Valley Environmental Health Leadership Summit in Imperial Valley. He said the main topics would be salt at sea, and border air quality.

Margarito Quintero asked Raúl Tovar to inform them about the air quality monitor located in UABC because he thought it was important to know what was going to happen with this monitor.

Raúl Tovar mentioned that they needed funds and equipment to improve the stations. He said with regards to the one at UABC that it was going to be moved to the roof of the same building on which it is currently located.

VI. Wrap up; Date for the Next Meeting

Belen Leon informed that the next meeting was programmed for January 9th, but asked if they would like to schedule a meeting in November.

Dave Fege said that if there was going to be a change of administration in Mexico, there would not be a representation from Mexico in November.

Belen Leon confirmed the meeting was scheduled for January 9th in Mexicali.

Reyes Romero thanked everyone for attending the meeting and said he would be looking forward to seeing everyone again at the next meeting.

Meeting Adjourned