

July 17, 2019
The Unified Community Advisory Board Meeting
Final Meeting Minutes
5:45 – 8:00 p.m.

The following list of attendees is annotated, where possible, to indicate any affiliations.

Mary F Bruckmeier, UCAB	John Kim, AECOM
Janice Crist, UCAB	Richany Tekesa Lopez
Yolanda Herrera, Community Co-chair	Theresa Throssell, Community Member
Christine Krikliwy, UCAB	Jeff Biggs, Tucson Water
Marti Lindsey, UCAB	Marie Light, Pima County DEQ
Donald Matthieu, UCAB	Varlerie Herman, Tucson Water
Margie Mortimer, UCAB	Ludyrina C MaAiner
Henry Vega Sr., UCAB	Kathy Richard
William Ellett, UCAB	Eva Ramirez
George Warner, Restoration Project Manager, Air Force Plant 44	Marina Martinez
Chris Perkovac, Hargis & Assoc.	Elsa Figueroa
Eric Roudebush, TAA	Bertha Rivera
Eder Delgadillo, TAA	Daniel Sullivan, U of A
Steve Arrquist, COT	Harrison Schmitt, U of A
Rob Mandrav, ARCADIS	Chad Lapora, Tucson Water
Susan Burtnett, ARCADIS	Pilor Rodriguez Romero
Glen Haeger, Carollo	Gabriela Flores, Pima County Health Dept
Shelley Rice, Aptim	Roberto S. Jaramillo, Community/Los Aguas
Ben Richmond, UA	Tim Thomure, Tucson Water
Steve Farley, Mayor Candidate	Albert Hawks, Tucson Water
David Yogi, EPA	L. P. Martinez
Eva Carrillo Dong, Community	Kathryn Martinez
Brian Stonebrink, ADEQ	Elsa Meza
Bruce Engelbert, SKEO	Alejandrina Chaires
David Bell, AFCEC	Mary Aycock, USEPA
Mary A Granillo	Debra Bergm, Sunnyside
Jesus M Granillo	Rosie Cleary, Las Aguas
Melissa Mauzy, WARD 6	Stella Vidal, Las Aguas
Daniel Marquez, UA	Ron Dominguez, Las Aguas
Nyasha Thomas, U of A	Geraldine Gonzales, Sunnyside
Anica Jose, U of A	George Maseeh, Carollo Engineers
Xavera Stevens, UA	Jen Williams, AECOM
Fred Tillman, USGS	Jim Austin
Julie Hamilton, Wood/COT	Haekyung Kim
Laura Smith, Wood/COT	Cecilia Vindiola
Richard M Byrd, COT/EGSD	Tim Thomure, Tucson Water
Thomas Doriski, FPM	

WELCOME/INTRODUCTIONS/GROUND RULES/HOUSEKEEPING

Ms. Herrera requested cell phones be turned off or put on vibrate; it was also requested that attendees not use their cell phones to record the meeting or take photographs of the volunteer Unified Community Advisory Board members, everything that occurs in the meeting is transcribed verbatim which everyone who requested will receive a copy of. It is very important to please remember to sign in and provide all pertinent information if you would like to receive the Unified Community Advisory Board mailer. If you have a question for one of the presenters, please remember to state your name and affiliation so that you can be identified in the minutes. Please keep your questions to a minimum and only as they pertain to that presentation; please remember to be respectful and do not use foul language. For anyone wishing to make a statement, please wait until the end of the meeting during the Call to Audience. Carol Maluf is excused from attendance of tonight's meeting.

Thank you to Tucson Water for providing dinner for all attendees

Ms. Herrera requested that the contractor recording the meeting notify the board when he needs to change disks so that everything can get captured in the recordings.

In order to keep the meeting running on time, if you have questions for the presenters, please fill out a card and your question will be answered at the end of the presentation. If your question is not answered, the presenter will be in touch with you later to address the question. If you fill out a question card, please hold it up so that it can be picked up and given to the presenter to address it by end of the presentation.

Attendee introductions were made.

Yolanda Herrera: Bill Jeffers has been moved to hospice in Phoenix due to breathing issues, he is asking for prayers. I will send his address via email to Unified Community Advisory Board members and the government agencies if they want to send a card.

Minutes from April, July and October 2018 and April 2019 Meetings by Yolanda Herrera

Margie Mortimer: Madam Chair, may I make a motion that we not accept the minutes until after chairman has had the opportunity to finish reviewing them.

Yolanda Herrera: The reason for this is that I'm the only one that has all the history of all the changes that were made. I would also like to ask Robert Jaramillo to meet with me because I believe you had some questions in the April meeting that did not get captured in the minutes

Margie Mortimer: I second the motion to table approving the minutes.

The motion was approved and passed to table approval of April 2018, July 2018, October 2018, and April 2019 minutes until further review is completed.

EPA Update by Mary Aycock

Mary Aycock: Ms. Aycock, the Remedial Project Manager from Region 9 EPA, introduced herself and thanked the audience for attending. If you learn something tonight or if you think it was useful, let us know and all let your neighbors know; everyone is welcome to these meetings.

The EPA, as you know, meets with the different responsible parties during the whole week that we're out here; we met with the Air Force who is getting ready to release a Proposed Plan in September, which will be further addressed by Mr. Kim. They'll be addressing what's going on at the site as well as the improvements. Ms. Aycock introduced David Yogi, who is EPA head of the Community Involvement Group and Viola Cooper, who is EPA Community Involvement Coordinator. Mr. Yogi is representing EPA in place of Ms. Cooper who couldn't be here tonight. Thank you to Mr. Yogi who has attended several meetings and has been successful in getting everyone updated. Ms. Aycock also introduced Shelly Rice who works for APTIM and supports the EPA's community involvement. Ms. Rice will be actively participating in the UCAB meetings and taking suggestions on how things could be improved as well as helping with the minutes.

Shelley Rice: Ms. Rice gave an update on the Information Repository at the Valencia Library; some new signage has been added and everything is organized along with information on how to use the repository. The EPA phone number is listed, if you get there and have questions please call. We'd like to know what you can't find or what you need help with. Secondly, the community involvement plan is moving along, with interviews still being done through the end of the year. We hope to have a plan out at the beginning of next year, if you're interested in being interviewed please get your contact information to myself or Mr. Yogi.

Yolanda Herrera: Air Force Plant 44 was kind enough to prepare acronyms and abbreviations for members of the audience, we are asking all the presenters to speak in user friendly terms, but if they do go into the acronyms, we can quickly see what that particular word means.

Marti Lindsey: There's also a cheat sheet with definitions and not just what the initials mean.

Yolanda Herrera: I would like to remind the audience not to interrupt the presenter, let him complete his full presentation. Please fill out a card, raise your card for someone to pick up and then the questions will be addressed at the end of the presentation. If we don't have a chance to get to your question, please make sure that your contact information is also on the card so that the presenter can reach out to you later.

Question from Robert Jaramillo: What if you just have a comment to make?

Yolanda Herrera: Comments can be made at the end of the meeting during "call to the audience".

Air Force Plant 44 Performance Based Contract Update by John Kim

John Kim: Mr. Kim, from AECOM, gave information regarding the Proposed Plan for Air Force Plant 44 Site OT012 as well as an update on the Southwest Performance Based Remediation contract and In-Situ work that is being done for Air Force Plant 44. This particular Proposed Plan is to enhance the clean-up process that is already underway at Air Force Plant 44; the document that is designed to identify all of the different clean-up approaches that the Air Force evaluated and which are selected as the best proposed clean-up action based on that evaluation. The information is submitted to the public and more importantly to seek comments from the public. There is a comment period and once the Air Force gets the comments, depending on its significance, the comment could potentially change the clean-up remedy.

There were four different remedial technologies that were evaluated using 9 different criteria. Alternative three scored the highest at 2.8. The preferred remedial alternative is continued operations and optimization, which involves improvements to the existing pump and treat system as well as the Advanced Oxidation Plant system.

Mary Aycock: *It might be a good idea to tell the audience where that water goes once it's been treated, because it is not drinking water.*

John Kim: That's correct, it gets re-injected into groundwater at AFP 44. It is not used for any drinking whatsoever.

We are purposing that the Public Comment period start September 1, 2019 and last for 30 days. During this time, we want to have a public meeting on September 18, 2019 where I will give a more detailed presentation of the contamination clean-up process and remedy. A poster session will also be included in this meeting.

Question from Mary Aycock: *How will the Proposed Plan be made available to the public on September 1st?*

John Kim: The Proposed Plan will be posted on the Air Force website and it will be in the Valencia Public Library, which is the Air Force's administrative record repository. There will also be Fact Sheets made available to the public, and notices will be published in the newspaper in both English and Spanish.

Question from Mary Aycock: *Will the library have multiple copies or copies that people can check out?*

John Kim: I don't think they'll be able to check it out and we normally only have one copy, but we'll try to provide a few more copies. There will be a stack of Fact Sheets that the public will have access to.

Question from Marti Lindsey: *What kind of posters will you have?*

John Kim: They'll be various posters in stands. The idea is to entertain questions and comments, because we want input from the public.

Question #1: *Site 02 continues to be remediated, while Site 03 is remediated is that true?*

John Kim: Site 02 has had some injections done there, there is some residual remediation going on. The contamination is only in the upper zone upper unit because no well was drilled in the lower unit. We want to spend the money where it can be best utilized and from the Air Force standpoint, Site 03 would be the area to focus the attack.

Question #2: What are you injecting?

John Kim: For Site 05 and Site 02, we inject an amendment that is essentially vegetable oil and what we're doing there is a bio remedial reaction that enhances the bugs that are in the groundwater to eat the TCE and the Chromium plume at that site. We also injected a supplement that makes the bugs stronger and more aggressive. For Site 03, we injected methane gas, air and Nitrogen, which promotes a co-metabolic reaction that treats the TCE and 1, 4-Dioxane.

Question #3: Where does the water get re-injected to?

John Kim: The treated water gets re-injected within the Air Force Plant 44 boundary according to the areas highlighted on the presentation slides.

Question from Mary Aycock: The idea is that the blue pipes are bringing dirty water out of the ground, it's getting cleaned up and the blue pipes are re-injecting clean water back into the aquifer that exists there today, is that correct?

John Kim: Yes, that is correct.

Question #4: If this contamination leaks, how are you treating the leaky wells that are back in the ground?

John Kim: Fortunately, we haven't had any wells leaking at this point. We do occasionally have laterally piping that will leak, we monitor how much water should be coming in each day and we'll know if there is a leak by different flow monitors or different pressures.

Question #5: Does the Proposed Plan include additional groundwater monitoring wells at the north end of Air Force Plant 44, especially in the upper zone, lower zone at Los Reales Road?

John Kim: At this stage, we're not looking at installing anymore wells.

David Yogi: Thank you everyone for using the comment cards, this is a new system we're trying out and I think that worked well. We're going to try and get through as many questions as we can after each presentation. If we don't get to your question due to time constraints, please write your name and contact information (preferably an email address) and we'll follow up with you after the meeting.

Tucson Water Update, by Chad Lapora

Chad Lapora: Mr. Lapora gave an update on the quarterly report for The Tucson Airport Remediation plant, north of Los Reales Road.

During the 2nd quarter of 2019 (April, May and June) at the Advanced Oxidation Plant, the average combine flow of the north and south well fields for TCE concentration coming into the

plant was greater than the drinking water standard so it required treatment. The average 1,4-Dioxane concentration was 0.85 parts per billion and was treated to non-detect. We also measure both chemicals as they leave the Advanced Oxidation Plant and both TCE and 1,4-Dioxane are normally at non-detect.

Regarding meter readings, what comes out of the wells directly mirrors what is coming out of the plant. There was previously some thought that water could be escaping the pipes and going out into the environment, so there are meters on every one of the nine wells, so that we can meter the water leaving the well.

Tucson Water is treating PFOA/PFOS to 18 parts per trillion significantly lower than the EPA health advisory of 70 parts per trillion. We treat the water coming into the plant with carbon, which removes the PFOA/PFOS. Tucson Water does a lot of sampling every week of water leaving the Plant to make sure PFOA/PFOS is not cleaned out by the activated carbon.

Tucson Water conducted a Vapor Intrusion Study due to community concerns that there might be vapor intrusion coming from the Remediation Plant. Tucson Water coordinated with three schools, one of them being CE Rose Middle School, in the Tucson Unified School District. The other two schools were Elvira Elementary School and Challenger Middle School in the Sunnyside Unified School District. All schools were sampled in February 2019; 49 samples between the three schools were taken. At CE Rose there was no detection of TCE, 1,4-Dioxane, trans-1,1 DCE or trans-1,2 DCE. At Elvira there was one detect of TCE below the screening level, but no detects of 1,4-Dioxane 1,1 DCE or trans-1,2 DCE. At Challenger there was no detect of TCE, 1,4-Dioxane 1,1 DCE and trans-1,2 DCE. Thus, there no vapor intrusion hazards identified through the monitoring.

Question from Mary Aycock: In reference to the slide the three big bars are the water that's being pumped and treated and the small bar is what it is after it comes out?

Chard Lapora: That is correct.

Question from Mary Aycock: How much did the whole process of vapor intrusion sampling cost?

Chad Lapora: The numbers that I received regarding this sampling was \$70,000.

Mary Aycock: The city stepped up and volunteered to do this because of concerns from the public. I think the City of Tucson should be commended for being pro-active.

Question #1: What is the lifespan of Carbon?

Chad Lapora: That is dependent on the amount of water that flows through the Granular Activated Carbon vessels and the concentration. At this point, that carbon was installed in December of 2018 through February of 2019, which is why it's important to test that Carbon every week so that we have a good idea. It's dependent on operational factors.

Question #2: If the five wells on the southside were capped, where are the PFOA substances coming from?

Chad Lapora: The PFOA substances are coming from the north well field. We have detection of PFOA substances in the north well field and that's what's going into the Advanced Oxidation Plant.

Question #3: Why are there only eight samplings at Challenger and 13 at the other schools?

Richard Bird: We initially laid out a grid pattern around all three schools to try and get an adequate coverage out on the field in close proximity to buildings and we also did the indoor air quality. When we were drilling over the rodeo break, it was raining, snowing and sleeting and everything else, when we got over to Challenger the locations, we couldn't get down into the drainage ditches because the mud was so slippery. Several of those locations that we had chosen, we were not able to get the samples and that's why Challenger has a few less than the other schools.

Question #4: For the update Tucson Airport Remediation Plant plume photos, you always compare from 1987 to 2017, were they in 2019?

Chad Lapora: We're probably due for a new map.

Mary Aycock: We should have 2018 data coming up soon.

Question #5: Were the photos that you showed 2018 and 2019?

Chad Lapora: These photos are reflecting 2017

Question #6: What follow-up will be done with the direction at Elvira, obviously paint and other things are at other school and yet not detected? Will there be any research as to where it might be coming from?

Chad Lapora: At this point, Tucson Water was looking at constituents associated with this Tucson International Airport Authority Superfund site. The results of the vapor intrusion were sent to the school districts for further evaluation on their part.

Question #7: I worked for an oil company for 27 years, when we replaced pipe it was considered hazardous waste. Once contaminated it stays contaminated whether it was with oil, gas or water. What was done with the pipe?

Glen Hoeger: The pipes will be disposed of as normal construction debris when we're done with them.

Question #8: Why only drilling five feet and not any deeper when collecting vapor samples as the schools?

Richard Bird: When we started to look into doing a vapor intrusion study, we looked towards the Arizona Department of Environmental Quality and EPA standards for running vapor intrusion studies. The standard practice is to run and collect samples in the shallow subsurface anywhere from five to ten feet.

Mary Aycock: That's correct, thank you.

Question #9: Does that mean the five south side wells are higher in PFOA substances?

Chad Lapora: Yes, the five south side wells are higher in PFOA substances.

Question #10: Why are the wells on the south side capped?

Chad Lapora: The five wells on the south side aren't capped, we're not currently operating them because of PFOA substances.

Mary Aycock: One is being put back into service this week, I believe.

Chad Lapora: Yes, that's correct.

2019 Private Well Monitoring Results by Marie Light

Ms. Light, Principal Hydrologist with Pima County Environmental Quality gave a summary of results on the monitoring program of private well sampling. The presentation map shows the sampling program in place today. Our sampling program began in 2002 we had four residential wells that we were monitoring; two residents declined to have their wells sampled. There are some wells that are no longer sampled because they have become non-functional or they've been abandoned. The TCE concentrations range between non-detect and 1.8 parts per billion, which is below the maximum contaminant level.

Question from Mary Aycock: How do you notify the participants when their water samples are completed?

Marie Light: When we get the analytical results, we put a letter together that says these are our results and we tabulate the information by telling them what the concentrations are and what the maximum contaminant level is.

Mary Aycock: I just want to make sure that people understand that these are wells drilled in people's yards. They're not connected in any way to the city's water pipes.

Marie Light: That is correct.

In regard to future activities, we've already sent the letter to the residences and we've been sending out the information to the federal, state and local agencies. Our recommendation is to continue with this monitoring program at all the active wells and continue submitting the monitoring reports to agencies.

Question from Margie Mortimer: When you monitor on a regular basis, is that monthly, weekly?

Marie Light: That would mean monitoring them once a year, in February.

Question #1: What was the process for offering private wells being checked?

Marie Light: In the early 2000s Pima County Department of environmental Quality did a survey of all the private wells in the area. They sent letters to each one of the well owners and asked them if they would like to participate.

Question #2: *Pima County Department of Environmental Quality should include PFOA substances sampling next time. All the private wells within the Tucson International Airport Authority should be sampled for PFOA substances analysis.*

Marie Light: That sampling is going on in a couple of places, but that is something that would need to be worked out with EPA.

Question #3: *Have the wells been properly abandoned per Arizona Department of Environmental Quality standards?*

Marie Light: No, they have not. When the well doesn't provide the service anymore, investing the money to abandon the well is typically not available so the wells are not an abandoned per Arizona Department of Environmental Quality requirements.

Mary Aycock: But basically, what you're saying is you can't force a person to close their wells in accordance with those regulations?

Marie Light: That is a state responsibility to require that.

Mary Aycock: Thank you for the work that you do Ms. Light and good presentation.

Voices Unheard Oral History Project by Denise Moreno-Ramirez

Ms. Moreno-Ramirez gave an update on the Voices Unheard Environmental Oral History Project. There are 11 interviews here in Tucson, 11 in Dewy-Humboldt and 10 semi-structured here and 10 semi-structured in Dewy-Humboldt. All the oral history interviews have been completed and processed and is done. Copies are being provided to those interviewed.

Mary Aycock: You are reaching out to people on your own right, through email and personally?

Denise Moreno: I reached out to people that don't typically attend this meeting, but afterwards find me and we can talk about it.

Henry Vega: It'll be an extension to educate our community and also for the people that have been in or community that they can voice their experience and opinions on the real broad subject that we're working on here for the UCAB. Ms. Moreno, I commend you.

Christine Krikliwy: Ms. Krikliwy gave an update on the survey results. We thank you for taking the survey, you bring 48 years of experience; we would also like to recruit some younger people. 90% of all respondents agreed that the time and location was ok. 85% of all respondents agreed that the UCAB meetings have useful presentations; however, there were many written comments about making presentations shorter and easier to understand. Especially reducing the number of complicated and hard to read PowerPoints. Also, there's a need for more questions

from the community. We intend to address these issues. Nearly half of the community respondents said that the UCAB could do a better job of keeping the neighborhood and community involved and that is they would like us to attend the different sessions that they have in the communities. We'd like you to know that UCAB intends to give this a higher priority in the coming year. Several community members talked about health issues. We are looking into this. I'd like to conclude that this is a Superfund site that oversees clean-up, there are not monies currently allocated for health issue, but we will do further research into this. We invite you to join the UCAB; new members are the lifeblood of every organization. They bring new ideas, unique talents, cultural heritage, beliefs and values. And they increase personal power and foster growth. It is important to involve individuals who are affected by the problem, you bring a shared outlook. Our environmental objectives are to safeguard the environment for future generations and to be a responsible neighbor. So, I would ask you to please be involved, join UCAB and keep this experience alive.

Yolanda Herrera: The membership portion will be tabled for tonight and move on to call to audience Mr. Hefner were there any questions that did not get address?

Rene Hefner: No, all the questions we addressed.

Open Discussion/Next Meeting Agenda

Robert Jaramillo: First and foremost, I would like to thank UCAB for holding these functions quarterly, it would be nice if we had them more often, but tank you and Mary Aycock for coming down from San Francisco. I would like to extend the gratitude to the Mayor and city council and Tucson Water for providing these facilities to clean-up the water that has been contaminated for many years and has affected a lot of people. It bothers me that we have newscast from KOVA about three weeks ago with two ladies reaching out to veterans that had to do with the Camp Lejeune issue and the water issues they had from the 80s; the same time we had our issues here. There are health concerns that the marines and other service members have had, as well as their families. We've had our issue here from the 40s to what the plume looked like in 1987. For some folks to say that there was no health issues, when we experienced those health issues ourselves, not only ourselves in this room here, but our neighbors, our classmates, our teachers, the different employees that were employed here and the southern part of Tucson. There was some compensation, I wish there would have been more, because a lot of them were friend and some of them are no longer with us. We are losing family members, friends, neighbors, classmates and the list goes on. I wish there was some sort of our reach to reach our community members that have experienced some sort of illness and in some cases death in their families. It's kind of comical that you put bugs in the ground to suck up the contamination, well you what, we were those bugs. We are losing our people here on the southside whether people want to believe it or not. It's sad that it happens weekly, monthly and daily. For some government agencies not believing what is happening here, cause we say we care about our youth and rightfully so cause their our future, but in the 40s, 50s, 60s, 70s, 80s we were the youth and nobody came to us and forewarned us about what we were consuming in our schools. You talk about vapor intrusion well we had evaporative coolers back then and the water was going through there. We had the YMCA swimming pool and mission manor, we had Pueblo High School where they had a pool, we had the Air National Guard that we were swimming in as well. The Marine Corp is reaching out to their Marines. The Air Force has Airmen out there at

Arizona Air National Guard, they experience what the Marine Corp and other servicemen have experienced and nobody's reaching out to them. Those guys were out there 30-40 years and some of them are dyeing at a later age. Some of us have gotten ill and everyone that's lived out here on the southside for 60-plus years has known somebody that has been affected in one way or the other. We need help, I know there isn't any money. There were two studies that were done, one in 1987 and one in 1993 because they thought the one in 1987 was inconclusive. Well we here feel that those two studies were inconclusive to today's days. Who did they reach out to in 1987? A lot of our classmates have gone and gone elsewhere. We have to be heard and when is it going to be time for someone to reach out for these folks.

Yolanda Herrera: I just want to add that in the survey one of the things that we discussed yesterday with some of our members was reaching out to Pima County Health Department because they're the ones that you really need to reach out to.

Mary Aycock: I would also say Centers for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry and Ben who was down here, he's back. He follows the site, but if we need to get Agency for Toxic Substances and Disease Registry more actively involved, we can send a message back to Ben.

Robert Jaramillo: I would like to request for the community another study to be done, because the communication technology has grown in leaps and bounds and so has the medical technology. We have to reach out to the people that have been here and are no longer living here.

Mary Aycock: I'll mention it to Ben when I go back, he's on the same floor that I'm on and I'm going to ask him what happened with Agency for Toxic Substances and Disease Registry involvement. When the studies were done in the 80s, they didn't follow through. That's one thing that Gerry Hiatt used to tell me, he said when they started tracking people under the Agency for Toxic Substances and Disease Registry study, they should have tracked them for life. It's going to have to go back to Agency for Toxic Substances and Disease Registry and Centers for Disease Control and Prevention, but I will personally take that message back to Ben when I go back.

FOLLOW-UP ACTION ITEMS

Future Unified Community Advisory Board meetings

16 October 2019

Upon motion made and seconded, the meeting was adjourned.