



**Southern Regional Office (SRO)  
400 W. Congress, Suite 433, Tucson, AZ 85701**

**DRAFT Minutes of the  
Broadway-Pantano Water Quality Assurance Revolving Fund (WQARF) Site  
Community Advisory Board (CAB) Meeting – 41<sup>st</sup> meeting**

April 9, 2008, 6:30 - 8:30 p.m.  
Eastside City Hall, Room A  
7575 E. Speedway Blvd.  
Tucson, Arizona

CAB Members Present: Cheri Bludau, Judy Burns, Carla Casler, James Garrett, Mike Mahan, Janet Marcus, Aubrey McMullen, Bill Petroustson, Jean Sabo, Michael Smith

CAB Members Absent: Mark Brusseau, Dolores Fife, Jackie Olson, Wanda Ryckman

ADEQ Southern Regional Office Staff Present: Gretchen Wagenseller, Project Manager; William Ellett, Superfund Programs Unit Manager; Eileen Palese, Community Involvement Coordinator

Invited Guest: Rodney Glassman, Ward 2 Councilmember

Members of the Public Present: Joe Huerstel, Jeffrey Drumm, Richard Hoppe, Ralph Marra

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The meeting began at 6:35 p.m.

**1. Call to Order/Introductions**

Co-chair Judy Burns conducted introductions of CAB members and public participants.

Rodney Glassman, City of Tucson Ward 2 Councilmember, introduced himself to the CAB. He said his staff aide for environmental issues is Katie Bolger. He outlined several areas his office is working on to improve the community and water conservation efforts. He invited the CAB members to sign up for email updates, called the "Ward 2 Weekly," by contacting his office.

**2. Approval of Minutes for 1/9/08 CAB Meeting**

Bill Petroustson moved to approve the minutes from the January 9, 2008, CAB meeting. Janet Marcus seconded the motion. During the discussion, Bill Petroustson said that on page 2, 5<sup>th</sup> paragraph questioned the three wells that were installed. He asked if the intermediate well was 15 to 75 feet below the water table. Gretchen Wagenseller explained that the minutes should be corrected to read "50 to 75 feet." Eileen Palese said she will make the correction. The CAB voted; all were in favor, none opposed.

**3. Nomination and Vote to Elect CAB Co-Chairs for the Next Term**

James Garrett and Judy Burns both agreed to continue as co-chairs. Janet Marcus moved to nominate both as CAB co-chairs for the next term. Cheri Bludau seconded the motion. Carla Casler expressed her appreciation for the great job they do. The CAB voted; all were in favor, none opposed.

**4. Presentation: WQARF Funding Projections plus Q&A – William Ellett, Superfund Programs Unit Manager, SRO**

William Ellett, Superfund Programs Unit Manager, introduced himself. He said that Mike Fulton previously held the position but is now Deputy Director, Waste Programs Division, at ADEQ. He said he wanted to address two topics. First, the state budget priorities, and second, what progress has been made on soil gas standards.

He said that in fiscal year '08, the total WQARF budget for site work is \$15 million. Of that, a little over 10% has gone to the Broadway-Pantano site. With 35 WQARF sites in the state, Broadway-Pantano has received a good portion of the funding. He said since 1999, the WQARF program has spent \$85 million, with \$8.5 million going to the Broadway-Pantano site. The only other WQARF sites in Arizona that have spent this much are sites that have complete remedies installed and are nearing a Record of Decision. He said ADEQ still does not know what the budget will be for next year because of the current economic conditions. He said the WQARF program is expecting at least a \$5 million cut; he did not believe it would be a permanent cut. He said as of this date, the Governor proposed a \$1 million cut; the Legislature proposed a \$5 million cut. Budgets for the next few years are not looking good, so future budget cuts are anticipated. He outlined some of the budget priorities statewide where drinking water sources are threatened directly. He said the work performed at the Broadway-Pantano site has to fit with the priorities of the whole state.

On the topic of soil vapor at the site, he said there is a draft soil vapor sampling guidance document going through ADEQ internal view at this time. He said he hopes this will set the record straight on how ADEQ prefers to collect soil gas vapors. He said he anticipates this guidance will be used for site specific risk assessments to help evaluate potential indoor air risks. He said ADEQ is no longer waiting for EPA to come out with standards.

Michael Smith asked if there is any solid data to know what number to use for soil gas monitoring. William Ellett said we may come up with a methodology, but it won't be a set of numbers because there are so many variables. He said there are established cancer slope factors that are based on toxicological studies, and with those factors and exposure assumptions, you can calculate 30 years of risk.

Mike Mahan asked how the WQARF priorities are determined. William Ellett said that it is determined by ADEQ management. Cheri Bludau asked about future funding for the site and if this site is considered a priority. William Ellett said that the site is a concern because of a possible threat to the central well field. He said not all of the contamination is under control; however, ADEQ is fairly certain the Western Containment System (WCS) is preventing further migration of the plume. He said they are in the process of finalizing the Groundwater Remedial Investigation

(RI) report, and ADEQ is working on the final groundwater remedy. He said the concern about this site has not changed.

Jean Sabo asked if ADEQ is advising that development not take place on landfills until a soil vapor criteria is set for the safety of structures in these areas. William Ellett said no; ADEQ will work with developers through a Prospective Purchaser Agreement, and there are protective ordinances in place through the City of Tucson Landfill Ordinance. Bill Petrouson asked if ADEQ is coming up with an indoor air sampling procedure. William Ellett clarified that ADEQ is at the point of standardizing the methodology for collecting soil gas samples, not develop a procedure for indoor air sampling. These data would be used for conducting risk assessments for indoor air intrusion.

Michael Smith asked if ADEQ is working with the University of Arizona Superfund Basic Research Program, College of Pharmacy. He suggested that this group might be able to help ADEQ with sampling. William Ellett said they are taking some water samples from several of the WQARF sites for their studies. Michael Smith suggested they might be able to help with modeling.

The CAB asked when the budget will be known. William Ellett said it may not be until the first of July.

#### **5. Presentation: Groundwater Protection Near Site plus Q&A – Ralph Marra, Chief Hydrologist, Tucson Water**

Ralph Marra, Tucson Water, said that it has been two or three years since he last presented to the CAB. He said as the water provider, Tucson Water is an impacted party—the contamination impacts the ways water can be provided. He displayed a map, pointing out the area of the WQARF site. He explained how Colorado River water is delivered, recharged and recovered. He said Tucson Water is currently recharging 70,000 acre feet a year; about 325,000 gallons. He said this means that the wells in the central well field have not been needed as much as they have been in the past. He outlined the historic area of the central well field on the map where 60% of the water supply used to come from. He said that the water table has dropped hundreds of feet from 1940 to 2001 due to use. He said after Colorado River water was brought into the system, some of the wells in this area were shut down to reduce pumpage. The highest priority was this area where the highest water level declines have occurred--Speedway, Alvernon, Swan. Some groundwater is still pumped from this region, but has been reduced greatly. He said a slow rising of the water table is being seen and he pointed out on the map where the rises have occurred.

He addressed the volatile organic compound (VOC) plume and the reason for the difference between the ADEQ plume map and the one drawn up by the City. ADEQ's map shows areas where the contamination is greater than 5 parts per billion (ppb); the City map also shows areas of contamination from 1 to 5 ppb because Tucson Water wants to know where all of the contamination is. He said the City map shows a more coherent picture of the contamination, but more monitoring points are needed to get a better picture.

He described the operation of the Western Containment System (WCS) and the wells. He said we really don't know where the end of the plume is. He said VOCs have been found exceeding 5 ppb at well BP-21, which is beyond the extraction well. He said as the water provider, this continued

detection tells him that there is contamination that is passing through, and the WCS is not containing the VOCs. He said the WCS was not meant to be the final remedy. Tucson Water's interest is to stop the contamination; they don't want any more wells impacted. He said monitoring points should be placed beyond the containment system. He said the City put in BP-21 to try to find the end of the plume and did find contamination above 5 ppb. Tucson Water wants to know if there is contamination beyond the WCS that exceeds the drinking water standard so they can know what to do to stop it before it impacts City wells. He outlined future water supply and said if less CAP water is available in the future, Tucson Water will need to find an additional supply. He said they are looking as far as 30 years out. The CAB asked additional questions about how the plume maps are drawn and how Tucson Water samples production wells west of the site.

Jean Sabo said it should be a priority of the CAB to push for testing and containment—it is a more pressing issue, even before remediation of the rest of the site. The CAB discussed what the priorities are for ADEQ to address the issue and if funding would be available to install more wells. Michael Smith asked Ralph Marra what he was specifically recommending. He asked where he wants wells and how many are needed. Ralph Marra said he is just providing information to the CAB, but can't tell them what to do. He said well location is a technical discussion that needs to take place with ADEQ and their consultants. CAB members asked if the City was already having discussions with ADEQ about the site. He said this has been a topic of conversation in the past.

Mike Mahan said the containment system must have been modeled before construction, so that means a capture zone would have been delineated. He also said that injected water might compromise the containment capture zone for R-92, on the south portion of the plume. Some of the water that is being injected is actually feeding over to R-92 which would limit its capture zone. Ralph Marra said that may or may not be the case. Michael Mahan said he assumes that when clean water is injected into the R-90A and R-91A wells, a certain amount of water will be fed into R-92 which won't be capturing that same amount of water from the plume. Regarding water level recovery, he said some rebound in the plume would be seen because a rise would mobilize more contaminants. That recovery could be contributing to seeing a larger plume in the near future.

Jeff Drumm presented the major requirements of the City of Tucson's Landfill Ordinance with respect to development being proposed within 100 feet or 500 feet of a landfill and the protections from landfill gas getting into the proposed structures.

Gretchen Wagenseller indicated that ADEQ has performed Soil Vapor Extraction (SVE) rebound testing and will present the results at the next meeting.

The CAB decided to move agenda item 7. before agenda item 6.

#### **6. CAB Discussion of Broadway-Pantano WQARF Site Issues**

(This discussion took place after Agenda item 7 was discussed.) Judy Burns opened a discussion about site issues. Michael Mahan asked Gretchen Wagenseller if she would speak to the issues raised in Ralph Marra's presentation. She asked William Ellett to respond. He said the Western Containment System was designed by the City of Tucson. He said the small plume near BP-21 is beyond the capture zone of the system, but ADEQ does not believe contamination is presently

passing between the injection and extraction wells. CAB members asked for clarification about needing wells further to the west.

William Ellett said that the question was raised as to whether the WCS is working as designed. He said that ADEQ is fairly certain that it is. He said the system can't reach contamination that may have gone by the location of the system before it was built.

Ralph Marra said that the WCS has not been operating as it was designed. Jeffrey Drumm explained, saying the injection wells have never run at the level they were designed because the wells can't take all the water. The system has to be throttled back from 1300 gallons per minute (gpm) to only 800 or 900 gpm. He said this may be part of the problem. The system is working as designed, but does not have total containment, because it is not running at full potential.

CAB members expressed some confusion about the information presented. Jeffrey Drumm explained the history of the operation of the system and well installation. Since 2005, both the City and ADEQ have looked at the system in terms of whether it is getting full containment. He said that what the City is saying is that additional wells are needed on the western edge of the site. He said ADEQ has been unable to getting funding for the additional wells.

William Ellett said we know contamination is located beyond the system, but as regulators, ADEQ is focused on the 5 ppb threshold. ADEQ is accountable to the legislature and cannot regulate below the drinking water standard. We just recently contracted with Clear Creek Associates to update the groundwater model for the Feasibility Study. Part of this work will include evaluating the effectiveness of WCS. Ralph Marra said models are not exact and have uncertainty. That is why wells need to be installed and then the model adjusted based on the data from the wells. He said that the model does not determine whether you have achieved containment.

The CAB discussed modeling and the likelihood of contamination currently passing by the WCS. The board decided to hold a further discussion of this subject at the next meeting.

## **7. Site Update plus Q&A Other Administrative Business**

(This discussion took place prior to Agenda item 6). Jeff Drumm, City of Tucson, Environmental Manager for the Environmental Services Department, informed the CAB on how they can obtain a copy of the Landfill Ordinance on the City website. He said it was updated in 2004. He described the development restrictions relating to the Broadway-North Landfill. He said the City does inspect the drawing and designs of developers. He described the requirements for site assessment before a building can be constructed. He said houses were built in the area before the ordinance existed. He said that methane boundary levels are monitored regularly. He also described the landfill gas system and how it is burned off using a flare. The CAB discussed past developments in the area and their concerns about vapor intrusion into structures. Jeff Drumm explained the protections in place for methane.

Gretchen Wagenseller provided a site update. She said a rebound test was performed on the landfill to determine if VOC levels have risen since the SVE System was turned off in 2002. She said she will have this data to present at the next meeting. She said ADEQ is also doing groundwater testing

for a site-wide assessment. She said the Groundwater Remedial Investigation Responsiveness Summary is still being reviewed by ADEQ management.

**8. Call to the Public**

No one wished to comment.

**9. CAB Outreach Reports**

This agenda item will be held until the next meeting due to time constraints.

**10. Other Administrative Business**

Eileen Palese notified the CAB that a Workshop for co-chairs will be Wednesday, May 7 at ADEQ in Phoenix. She said that if the co-chairs could not attend, then a regular CAB member could be designated to go in their place.

**11. Next Meeting Date/Agenda Discussion**

The next meeting of the Broadway-Pantano CAB will be held from 6:30 p.m. to 8:00 p.m., Wednesday, June 18, 2008, at Eastside City Hall, Room A, 7575 E. Speedway, Tucson, AZ. Call Eileen Palese, ADEQ Community Involvement Coordinator, SRO, at (520) 628-6712, or email at palese.eileen@azdeq.gov, for meeting information and proposed agenda.

Janet Marcus suggested that a subcommittee of CAB members with technical experience could be formed. Judy Burns said that could be discussed at the next meeting, but CAB members can call ADEQ and the City with their suggestions at any time and then report back to the CAB during the site update of the next meeting.

**12. Adjournment**

The meeting was adjourned at 8:30 p.m.

*This meeting was recorded on a digital device as a record of the proceedings. To listen to a recording, or for additional documents mentioned in these minutes, contact ADEQ's Southern Regional Office, Community Involvement Office, 520/628-6712.*