

Kerry Howe, *Chair* Steve Glass, *Vice-Chair* Camilla Feibelman Alejandria Lyons Darrel Kundargi Julia Maccini John Pietz Roberto Roibal Caroline Scruggs

Minutes: September 13, 2019

Location: Bernalillo County Public Works Division, 2400 Broadway SE

Time: 8:30 to 10:30 a.m.

Board Members Present: Chair Kerry Howe, Vice-chair Steve Glass, Camilla Feibelman, Julia Maccini, John Pietz, Robert Roibal, and Caroline Scruggs.

Board Members Absent (excused): Alejandria Lyons and Darrell Kundargi.

PIC Members Present: Diane Agnew, Kali Bronson, Kate Mendoza, Kathleen Verhage, and Ken Ziegler.

Guests: Talisa Barawcik, Suzanne Busch, Anissa Duwaik, Mo Hobbs, and Shannon Weld.

I. Call to Order

Chair Dr. Kerry Howe called the meeting to order at 8:39 a.m.

II. Approval of Agenda

Chair Howe requested a motion to approve the agenda. Mr. Robert Roibal motioned to approve the agenda and Mr. John Pietz seconded the motion. Motion to approve the agenda carried unanimously.

III. Approval of Meeting Minutes

Chair Howe requested a motion to approve the meeting minutes from the August 9, 2019 regular meeting. Vice-chair Steve Glass motioned to approve the August 9th meeting minutes and Mr. Pietz seconded the motion. Motion to approve the meeting minutes carried unanimously.

IV. Board Business

a. New Board Members

PIC Member with the City of Albuquerque (City), Mr. Ken Ziegler, thanked former Board members Suzanne Busch and Roland Penttila for their service and announced that the City had appointed two new members: Ms. Alejandra Jones and Mr. Darrell Kundargi. Mr.

Ziegler was still coordinating contact with Ms. Jones and Mr. Kundargi and will be inviting them to attend the October WPAB meeting.

b. PIC Agency Updates

Mr. Ziegler announced that the New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) sent a letter to Kirtland Air Force Base (KAFB), requiring KAFB to develop a modification proposal of the Stage 2 Abatement Plan (S2AP) for the abatement of nitrate-contaminated groundwater. The S2AP was approved in 2008 and included active and passive treatments for nitrate contamination. Groundwater was previously extracted from well KAFB 7 and then discharged at the Tijeras Arroyo Golf Course for turf irrigation. In 2015, KAFB began using KAFB 7 to inject treated groundwater as part of the corrective action measures for the KAFB Bulk Fuels Facility (BFF) remediation project. Utilizing KAFB 7 as an injection well permanently discontinued the active extraction of nitrate-contaminated groundwater. KAFB has since been relying on natural attenuation without modification to the S2AP and NMED approval. Mr. Ziegler was unsure what the KAFB proposal for modification would entail.

PIC Member Diane Agnew, with the Albuquerque Bernalillo County Water Utility Authority (Water Authority), said that KAFB was initially aware of the non-compliance issues in 2015 when KAFB began using well KAFB-7. Ms. Agnew explained that one of the reasons for the recent NMED letter is that compliance with the S2AP is a requirement written in the KAFB 7 discharge permit. Ms. Agnew said that NMED will continue to require KAFB to be in compliance with both the nitrate and the BFF cleanup.

Board member Ms. Camilla Feibelman asked what the source of the nitrate plume was. Ms. Agnew responded that the former KAFB sewage lagoons, which are no longer in use, are a likely source. Mr. Ziegler stated that the U.S. Geological Survey (USGS) is performing geochemical analysis project to evaluate nitrate sources at KAFB. Mr. Ziegler added that most of the nitrate contamination is in the perched aquifer rather than the regional aquifer but there is the potential for some migration from the perched aquifer to the regional aquifer. PIC member Kali Bronson, with the County of Bernalillo (County), said there could be multiple sources and that there is an option to test for sugars and medications to determine whether the source was human waste.

Ms. Bronson asked if KAFB investigated how water injected at KAFB 7 could be impacting the nitrate plume in terms of size and migration. Ms. Agnew said that, as part of the initial discharge permit for injection at KAFB 7, KAFB was required to demonstrate that injection of treated groundwater would not impact the size or migration of the nitrate plume.

Chair Howe asked if there was another injection well that could be used for treated BFF water. Ms. Agnew said that there is a second injection well being evaluated that would serve as a backup to KAFB 7 but that KAFB 7 is the primary and is in a good location for injection. Ms. Agnew said there are other extraction wells close to the nitrate plume that KAFB could use for extraction of nitrate-contaminated groundwater. She emphasized the complexity of the process.

Mr. Ziegler gave his second update that he would be attending a Science, Technology, Engineering and Math, (STEM) seminar, or STEM-inar" on fracking and global warming. The STEM-inar will be taught by oil and gas expert Dr. Evan Palmer and is will place at

Central New Mexico Community College on September 13, 2019. Ms. Feibelman added that on September 12, 2019, the NMED issued a press release announcing the formation of a produced water research consortium with dates for upcoming stakeholder meetings. Ms. Feilbelman asked if Board members were aware of the upcoming public meetings and stated she would send information links to Ms. Agnew for distribution to the Board. Ms. Feibelman said she felt the consortium was moving forward too quickly, specifically in suggesting the use of produced water for agriculture. Ms. Bronson said their haste could be a result of water shortages in the southern portion of New Mexico.

Mr. Ziegler said that the City's Planning Development Coordinator was searching for properties that would be eligible for the Environmental Protection Agency (EPA) Brownfield Program that provides financial and technical assistance for clean-up and reuse of contaminated properties. Mr. Ziegler asked for Board members to inform the City if they were aware of any potential properties.

Ms. Agnew updated the Board on the KAFB BFF spill Technical Working Group (TWG) meetings for stakeholders. Ms. Agnew said the TWGs, which in the past served as a forum for discussion and collaboration among stakeholders, have been increasingly less productive. She said this is largely because there is limited access to data ahead of the meetings and because KAFB has replaced discussion with mere data presentation. Ms. Agnew said this approach was apparent at the August 2019 TWG meeting, where KAFB presented large quantities of new data in a series of morning PowerPoint presentations. The Water Authority was not able to provide feedback or participate in discussion without additional time to review the data. Furthermore, NMED representatives did not return for the afternoon session, which was then canceled because KAFB stated that it could not continue the meeting without NMED oversight.

Ms. Agnew said that the NMED is declining to attend subsequent TWG meetings and instead are asking that everything be completed in the administrative record. Ms. Agnew said that NMED asserted that the stakeholders could continue to meet without NMED participation. To this, KAFB representatives responded that KAFB would not participate in meetings without NMED attending. Upon hearing this, former PIC member with the City, Mr. Bart Faris, expressed his dismay and stated that he wished to remind NMED and KAFB that the TWG meetings have been very productive for the KAFB BFF remediation process.

Ms. Bronson asked if there might be legal reasons why NMED could not attend the meetings. Ms. Agnew responded that there was nothing in the Resource Conservation and Recovery Act (RCRA) that directly prohibited the NMED's attendance but that the NMED was likely shifting away from the TWGs in order to focus their staff resources on review of administrative record. Ms. Agnew added that KAFB staff indicated frustration with the TWG format when the new soil vapor workplan they created was rejected by the NMED. Ms. Agnew said the NMED rejected the workplan because the document did not meet permit requirements and there were issues with the analytical detection limits.

Ms. Agnew said that there are no working groups planned at this point but stakeholders will continue to advocate for consistent TWG meetings. Mr. Pietz asked if there is a public plan promised for addressing changes to the TWG process. Ms. Agnew replied that there is no

promise per se but collaborative and stakeholder involvement was part of a written commitment from the NMED to the Water Authority.

Ms. Agnew highlighted that the TWG meetings are the only space for stakeholders to access data and evaluate progress outside the quarterly reports. Ms. Agnew said the original scope for remediating KAFB BFF spill was to first address the front end of the plume from spreading further downgradient and then to shift the focus to remediation in the source area. At this time, the stakeholder group is particularly focused on completing characterization of the source area and implementing interim measures to protect the Department of Veterans Affairs (VA) Hospital supply well.

Ms. Agnew emphasized that is important to stay proactive and continue to hold regular stakeholder meetings to investigate the source area and prevent plume migration. Ms. Agnew said one of the issues of holding monthly stakeholder meetings was lengthy travel time for NMED staff so the format has changed to monthly phone call meetings with inperson meetings occurring once a quarter.

Mr. Ziegler said that KAFB is treating water for EDB contamination that is at a concentration of 0.05 micrograms per liter (μ g/L), but they could treat water with higher concentrations without causing any issues. Mr. Ziegler said that in the location where the well extracts contaminated EDB groundwater from the source area, the concentrations are going down. He said an additional well might be required to extract adjacent groundwater with higher concentrations. Mr. Ziegler said there is also some natural attenuation but not enough to significantly lower concentrations or prevent migration. Mr. Ziegler noted that it is preferable to have KAFB generate RCRA waste in the treatment plant rather than in the groundwater. Mr. Pietz asked if there was a problem with having RCRA waste in the treatment plant, and Ms. Agnew responded that KAFB says it's an issue but the stakeholders have asked for NMED to weigh in. The issue of source area remediation was supposed to be discussed in the afternoon session of the August 2019 TWG meeting, which never happened.

Ms. Agnew suggested that some of the BFF spill oversight issues may be related to the transfer of regulatory oversight from NMED's Office of the Secretary back to the Hazardous Waste Bureau (HWB). Also, the Air Force is no longer funding NMED staffing oversight of the project while it renegotiates a now-expired memorandum of agreement with NMED. Chair Howe asked Ms. Agnew if there were open communications with Water Authority Executive Director Sanchez and NMED Secretary Kenney. Ms. Agnew replied there were and that NMED Director Stringer was communicating with Water Authority staff. Board Member Ms. Caroline Scruggs asked if there were any other sources of funding to support the NMED in their oversight. Ms. Agnew said that funding would have to be provided by the NMED.

Ms. Bronson announced that the Stormwater Annual Report and the Stormwater Management Update are due December1, 2019, and would be available for comment October 16, 2019.

V. Presentation: City of Albuquerque, Environmental Services Update, Mr. Ken Ziegler.

Mr. Ziegler presented the City's Environmental Services Update for the Rail Yard site (Site). This is a Voluntary Remediation Program (VRP) put forward by the City to the NMED that encompasses approximately 27 acres of land. The Site, formerly a railroad maintenance and storage facility, has soil contamination from metals and petroleum hydrocarbons. Building interiors contain asbestos and, in some cases, highly flammable creosote wood blocks. There had been a number of environmental investigations and cleanup efforts that took place prior to the City purchasing the Site in 2007. Mr. Ziegler said the cost of developing the Site is estimated at \$55 million.

Mr. Ziegler said the City's VRP final workplan for the site was submitted to the NMED on June 28, 2019. The benefits of working in VRP are: (1) A certificate of completion that confirms the contamination has been mitigated to the satisfaction of the NMED; (2) An enforcement shield for the City as long as they are successfully following the workplan; (3) Prevention of future owners from pursuing litigation; and (4) Liability protection for future owners. Mr. Pietz asked if BNSF maintained any responsibility and Mr. Ziegler replied that they did not.

Mr. Ziegler said contaminants the City detected include total petroleum hydrocarbons (TPHs), volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and metals in soil samples, and VOCs and metals in groundwater samples. Chair Howe asked if there were metals, other than lead, that were a concern. Mr. Ziegler said lead is the primary concern but they also found minor concentrations of arsenic and antimony in soil. Mr. Ziegler added that once the lead is removed, the other metals would also be removed. Mr. Ziegler also noted that the City had remediated and sealed off asbestos up to 8 feet in height within the buildings; the asbestos is primarily found in the seal around the window glass panes in the buildings. The City has excavated soils to physically remove contaminants. As for soil vapor contamination, the majority of contamination is located on the southern half of the site and will be addressed in a future VRP workplan. Mr. Ziegler said the City is not currently proposing a groundwater remediation plan because contaminant levels were low when sampled in July 2018. Chair Howe asked about the depth to water at the Site, and Mr. Ziegler responded that they are approximately 25 feet to 40 feet below ground surface (bgs).

Ms. Feibelman asked if the lead-based paint could case water contamination and Mr. Ziegler said that lead is hydrophobic and will be found bonding to the soil, rather than water. Mr. Ziegler said as part of the VRP workplan, the City will continue to monitor groundwater contaminant levels and add two upstream groundwater monitoring wells to more accurately define contaminant detections in groundwater. Mr. Ziegler said some of the challenges of adding new wells is access, with a well needing to be placed in the street.

Mr. Ziegler next discussed several contaminant exceedances of groundwater quality standards during groundwater monitoring in July 2018. A total of six monitoring wells were

sampled, with four of them showing contaminant concentrations greater than groundwater standards. Two wells had an exceedance of manganese, one monitoring well was in exceedance for naphthalene, and one well had an exceedance of manganese, naphthalene, and iron. Mr. Ziegler said there were also exceedance values detected in soil vapor probes, with one sample location exceeding the value for trichloroethene (TCE) and one for naphthalene. Mr. Ziegler said the presence TCE is surprising because it is a chlorinated solvent, which they were unlikely to be using at this Site. The exceedance value can be found on the online version of the presentation. Ms. Bronson added that manganese could be a result of degradation processes, and Mr. Ziegler said they are taking that into consideration.

Mr. Ziegler said another possible source of lead contamination in the soil is industrial batteries that BNSF used to store on the site. Battery storage areas, along with areas with known lead contamination, were excavated and removed by the City's Environmental Services Division (ESD). The ESD utilized a portable x-ray florescence (XRF) (XRF) instrument to measure in situ concentrations of lead. Another consideration is the in-vitro bioaccessibility analysis (IVBA). Soils with lower bioaccessibility are less harmful, but the IVBA determined that some soil samples with elevated lead concentrations had higher than expected bioaccessibility. Mr. Ziegler said the City is building a bioavailability model with a site-specific residential soil screening level of 650 parts per million (ppm). Mr. Ziegler the City is unsure if the NMED will expect a screening level of 400 ppm (residential soil screening level for lead) or will approve a level of 650 ppm.

Mr. Ziegler said that as of September 2019, the City had stockpiles of excavated soil and filled in holes. The City plans to plant grass and incorporate tree planters, a stage for music, and paved areas for food trucks in the area of the former Sheet Metal House. Mr. Ziegler said that areas already containing pavement would preclude the need to excavate soil, but would require milling to allow for engineered stormwater drainage into vegetation. Moving forward, the City has completed the Request for Proposal for the City Rail Yards Environmental Cleanup selection, but this has not yet been awarded. The VRP will also be amended to include the entire site.

Ms. Agnew asked if there could be funding opportunities from the film industry to offset remediation costs. Mr. Ziegler said he didn't think so and that a large portion of funding comes from general obligation bonds. Mr. Ziegler said the City is very serious about acquiring funding because they recognize the benefits of environmental remediation for residents of Albuquerque and specifically for that neighborhood.

Chair Howe asked the location of the nearest Water Authority well and Ms. Agnew responded it was approximately 3 miles away. Chair Howe asked if there were any other wells nearby, and Ms. Mendoza said there were some Presbyterian Hospital supply wells. Ms. Agnew said that the water supply wells are not downgradient of the Site.

Vice-Chair Glass asked about stormwater concerns for the southern portion of the Site. Mr. Ziegler said the amended VRP will include remediation for this portion, and he noted that BNSF still uses the southern portion of the Site to move trains. Ms. Mendoza said she observed some stormwater ponding at the site. Mr. Ziegler said that was due to a dip in the pavement but they plan to address it.

VI. Other Board Business

Mr. Roibal said the South Valley Acequia Committee met to discuss concerns about glycophosphates. Mr. Roibal said he would like to have them provide a presentation to the WPAB and Chair Howe requested that be added to the agenda for next year.

VII. Public Comment Period

None.

VIII. Adjourn

Chair Howe requested a motion to adjourn the meeting. Mr. Roibal motioned to adjourn and Ms. Feibelman seconded. The meeting adjourned at 10:10 a.m.