



Kerry Howe, *Chair*
Steve Glass, *Vice-Chair*
Camilla Feibelman
Alejandria Lyons
Darrell Kundargi

Julia Maccini
John Pietz
Roberto Roibal
Caroline Scruggs

Minutes: November 8, 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, Alejandría Lyons, Darrell Kundargi, Robert Roibal, and Caroline Scruggs.

Board Members Absent (excused): Julia Maccini and John Pietz.

PIC Members Present: Diane Agnew, Kali Bronson, Mo Hobbs, Mark Kelly, Danielle Shuryn, and Ken Ziegler.

Guests:

I. Call to Order

Chair Dr. Kerry Howe called the meeting to order at 8:32 a.m.

II. Approval of Agenda

Chair Howe requested a motion to approve the agenda. Board member Mr. Robert Roibal motioned to approve the agenda and Board member Dr. Caroline Scruggs 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 September 13, 2019 meeting. Vice-chair Steve Glass motioned to approve the September 13th meeting minutes and Mr. Pietz seconded the motion. Motion to approve the meeting minutes carried unanimously.

IV. Board Business

a. New Board Members

Chair Howe introduced the new Water Protection Advisory Board (Board) members Ms. Alejandría Lyons and Mr. Darrell Kundargi, both appointed by the City of Albuquerque (City). Ms. Lyons works for Valencia County and is pursuing dual master's degrees in

community and regional planning and water resources. Kundargi is serving as a private citizen but works as a hydrologist with the U.S. Fish and Wildlife Service at the Bosque Del Apache National Wildlife Refuge.

b. PIC Agency Updates

Mr. Ken Ziegler, Policy Implementation Committee (PIC) member from the City, informed the Board that all General Obligations Bonds for Public Safety were approved in the City's 2019 election, including ones for stormwater, power and energy, the Los Angeles Land Fill Site remediation, and the Rail Yard Site (Rail Yards) remediation. Mr. Zeigler informed the Board that the City has selected and awarded a contractor for the Rail Yards, but final approval by Mayor Tim Keller is required.

A ribbon cutting ceremony for the new courtyards at the Rail Yards was held on Saturday November 2nd. Leading up to the ceremony, 13,000 tons of soil had been removed. Mr. Zeigler said the City is often asked how soon the southside portion of the Rail Yards remediation will begin and what type of strategy will be used. Mr. Zeigler said Mayor Keller has been thus far been committed to announcing new developments every 18 months. Mr. Zeigler expects the remediation for the southside will be communicated during the next round of development announcements. In September, Mayor Keller announced that the "Flue Shop" building, adjacent to the Rail Yards Market, would be the next phase of remediation and will become a venue available to rent out for events.

Mr. Zeigler also informed the Board that the City Environmental Health Department manager position, formerly held by Bart Faris, remains unfilled at this time.

Ms. Kali Bronson, PIC member with Bernalillo County (County), informed the Board that the County's Stormwater Management Plan update is due December 1, 2019. Ms. Bronson said the County is still accepting review and feedback. Ms. Bronson said the Tijeras Creek Watershed grant was approved by the New Mexico Environment Department (NMED). Meetings with the Tijeras Creek Collaborative will begin the week of November 11, 2019.

Ms. Bronson said the County is working with the U.S. Geological Survey (USGS) on expanding their investigative study of total coliform (i.e., fecal contamination and environmental contamination) in the Middle Rio Grande (MRG). Ms. Bronson that for the study, both composite and transect samples will be collected for *E. coli* and bacterial source tracking for human, canine, and avian sources. Chair Howe asked how many transects would be incorporated into the sampling scheme and where they would be located. Ms. Bronson said there will be five transects, with the first located near the Rio Bravo Boulevard bridge, one above and one below the Southside Water Reclamation Plant (SWRP), one below the South Diversion Channel, and one at Valle de Oro National Wild Life Refuge (VDO). Chair Howe asked if the total coliform study would incorporate seasonal variation and Ms. Bronson responded that they are proposing to collect samples six times throughout the year in both wet and dry conditions. Ms. Bronson added that they are particularly interested in *E. coli* load when there has not been a stormwater event to look for sources not related to stormwater. The County, as well as other MS4s, already sample stormwater under the NPDES permit. Ms. Bronson said they will also look at why the east side river drain has higher *Escherichia coli* (*E. coli*) levels than the west side drain, without influence of stormwater. Ms. Bronson said that they are currently working with the City and

the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) and would be happy to involve other interested agencies.

Dr. Scruggs asked what could be done to control avian contamination. Ms. Bronson said there are not many ways to control for avian sources, and avian contributions are considered “background.” The County and other MS4s focus on controls for human and canine sources. Ms. Bronson said there has been some improvement in *E. coli* levels in the upper segments of the MRG from Angostura to Tijeras, but there are still elevated levels in the southern portion. Vice-chair Glass asked if they would be looking at *E. coli* levels in both water and sediment, and Ms. Bronson responded that they would be mainly analyzing levels in water but would incorporate some sediment sampling.

Ms. Bronson said the County is also monitoring water quality at the VDO. Ms. Bronson said the U.S. Army Corps of Engineers (USACE) was funding a USGS stage gage at the VDO, but has since lost funding and will be approaching Albuquerque Urban Waters for supplemental funding.

Ms. Bronson said the County is working on updating technical standards for for the County and will incorporate green stormwater infrastructure / low impact design (GSI/LID) and how that can be incorporated into County and private development projects. Ms. Bronson said nine or ten GSI/LID techniques will be included.

Mr. Mark Kelly, PIC member with the Albuquerque Bernalillo County Water Utility Authority (Water Authority), informed the Board that the National Pollutant Discharge Elimination System (NPDES) permit for the SWRP effluent discharge goes into effect on December 1, 2019. Mr. Kelly said the permit is similar to the previous one in terms of limits, but it requires additional sampling for salinity and mercury in fish tissue. Board member Ms. Camilla Feibelman asked what the sources of mercury for influent are at the SWRP. Mr. Kelly said there is legacy material in the form of sediment that remains in old sanitary wastewater pipes, which could contain some amount of mercury. Mr. Kelly said that up until 2012, dentist’s offices were allowed to directly discharge old fillings containing mercury into their wastewater. Dentist’s offices can receive violations for not properly disposing of mercury, and the compliance has been reasonably good. Mr. Kelly said that although that source is now regulated, the historic disposal of mercury fillings can remain in sediments.

Chair Howe asked if the total dissolved solids (TDS) limits had changed for the updated NPDES permit, and Mr. Kelly replied that that they hadn’t. Mr. Kelly added that the additional testing for salinity is to get a better understanding of background levels of salinity by sampling along a longitudinal gradient.

Mr. Kelly stated that the Water Authority has also just been issued a groundwater discharge permit by the NMED for aquifer storage and recovery (ASR) at the San Juan-Chama Drinking Water Plant. Dr. Scruggs asked what amount of water the Water Authority was approved to inject. Ms. Agnew, PIC member with the Water Authority, replied that 5,000 acre-feet per year was approved with a total allowable volume of 50,000 acre-feet. Mr. Kelly said the NMED is primarily concerned with water quality of recharge water. Ms. Agnew added that the permit for the storage volume is issued by the Office of the State Engineer. Chair Howe asked if the new ASR permit included the Bear Canyon Recharge Project permit, and Ms. Agnew said the two recharge permits and any upcoming recharge would remain separate. Ms. Camilla Feibelman asked what the ultimate goal of the ASR

project was, and Ms. Agnew responded that it was to take advantage of times with lowdemand and build up a volume of water in storage that could be used when needed.

Vice-chair Glass asked Mr. Zeigler to update the Board on the development of the oil and gas guidance document. Mr. Zeigler said there was a decision to create a technical working group (TWG) because there is concern that there will not be coordination between the various governance entities. Ms. Feibelman asked if the oil and gas guidance document would include language for produced water. Mr. Zeigler said that produced water oversight is held by the NMED, but that the guidance document can suggest stricter guidelines. Mr. Zeigler said the general opinion is that the best option for reuse of produced water is on sight. Ms. Feibelman asked if there is a hindrance for reusing produced water on site, and Mr. Zeigler responded that there are very few oil and gas sites with an injection well for treated produced water. Vice-chair Glass asked if the sites that did, were extracting water from deep within the aquifer then injecting the treated water into shallow areas of the aquifer. Mr. Zeigler said it depends on the site. Chair Howe stated that he believes the few injection wells for treated produced water inject deep within the aquifer, then noted that deep wells can cause seismicity. Ms. Feibelman added that she's seen studies that show that drilling within the Permian layer can also cause seismicity.

Mr. Ziegler said the development of the oil and gas guidance document has been primarily focused on the background and legal sections rather than use of produced water. Ms. Agnew said that there were concerns relayed about comfort in using produced water off site at the public meetings held by the NMED. Ms. Feibelman asked the Board if they were inclined to formally submit concerns or suggestions on the use of produced water. Chair Howe stated that the Board should track the guidance document development and assess if water quality for water resources could become impaired. Ms. Agnew said it is within the purview of the Board and she can keep the Board informed on new developments. Ms. Feibelman said there will be an advisory committee for the oil and gas guidance document development and that it would be beneficial for Board members with a science background to participate. Chair Howe stated that it was his plan to join the advisory committee.

Ms. Agnew said she felt the planning process for the oil and gas guidance document was being introduced to the public a little early, because the produced water working group are still in the information gathering phase. Ms. Feibelman asked how far a produced water pipeline for off-site use would need to be, and Ms. Agnew said it was unclear from the meeting.

V. Presentation: Kirtland Air Force Base Jet Fuel Release Update, Director Stephanie Stringer, New Mexico Environment Department.

NMED Resources Protection Division Director Ms. Stephanie Stringer provided an update on the abatement of the Kirtland Air Force Base (KAFB) Bulk Fuels Facility site (BFF Site). Director Stringer said the NMED and the U.S. Air Force (Air Force) are jointly working towards selecting a final remedy for the BFF Site by 2021. Director Stringer pointed out that

this is an ambitious goal and they would not select a final remediation for the BFF site in 2021 if there is inadequate information to do so. Director Stringer said selecting a final remediation strategy is the number one priority for this site. Board member Mr. Robert Roibal asked if the ambitious goal was created in response to ongoing litigation. Director Stringer said it was created out of the Resource Conservation and Recovery Act (RCRA) process rather than from litigation.

Director Stringer said they are still behind due to a recent return of regulatory oversight to the NMED Hazardous Waste Bureau (HWB) from the Chief Scientist office, along with changes implemented by the new administration and getting new staff familiar with the BFF Site. Director Stringer said that the new administration still wants to receive agency feedback and public input on abatement. Chair Howe asked if Mr. Dennis McQuillan, a chief scientist with the NMED who previously held oversight of the BFF site, would still be involved. Director Stringer said Mr. McQuillan would have a more of an advisory role for providing background and filling in knowledge gaps.

Director Stringer said the NMED had recently rejected the KAFB Soil Vapor Sampling Work Plan but KAFB will submit a new plan by November 8, 2019. Director Stringer said KAFB had just recently submitted a source zone characterization report that aims to identify data gaps in the horizontal and vertical extent of residual non-aqueous phase liquids (LNAPLs) in both the vadose zone and in submerged groundwater. Director Stringer pointed out that there has been no detection of contamination in sentinel wells or drinking water wells. Ms. Feibelman asked if ASR injection would impact the hydrocarbon plumes resulting from the BFF spill in the way that the rising water table had. Ms. Agnew said ASR sites are selected based on not being in close proximity of contaminant plumes and verified that it would not impact a contaminant plume using groundwater modeling.

Director Stringer noted that the NMED is asking KAFB to address data gaps created by the rising water table using plume characterization modeling. Director Stringer said her understanding was that the Environmental Protection Agency (EPA) uses similar modeling tools and that the NMED has a contractor on board to provide oversight of the KAFB plume characterization model. Dr. Scruggs asked what type of model KAFB is using and is that data available. Ms. Agnew stated that KAFB is using FEFLOW to characterize the plume and that the data is not available because a license is required for use. Dr. Scruggs asked if the EPA model results gathered by the contractor were similar to the results that KAFB was showing, and Director Stringer responded that technical staff would know better but it was her understanding that they were similar. Ms. Agnew pointed out that the mathematical formulas used in FEFLOW are fundamentally different than other groundwater models and the results would unlikely be similar. Ms. Agnew also pointed out that the model assumptions and parameters input into FEFLOW are not available for review and oversight. Dr. Scruggs asked if both the EPA model and the FEFLOW model will be used for deciding the BFF Site final remedy. Director Stringer said that both the Air Force FEFLOW model and the new EPA model would be used in the corrective measures evaluation.

Director Stringer stated there have been rumors circulating that the pumping and treating of groundwater will stop, but KAFB had recently confirmed that there was no intention to shut down the pump and treat system. Director Stringer highlighted that there is still an ethylene dibromide (EDB) plume existing north of Ridgecrest Drive, but all four pump-and-treat extraction wells were operating. Ms. Agnew pointed out that extraction well KAFB-106233 was not operational and asked if there was any information on why it was shut down and

when it may come back online. Mr. Kundargi asked how KAFB planned to address the EDB plume south of Ridgecrest Drive. Director Stringer said the goal of the interim measures has been to stop plume migration to the north and not to collapse the entire plume. Mr. Kundargi asked why plan only addressed EDB. Director Stringer said that they were addressing the greatest and immediate concern of EDB reaching drinking water wells. Director Stringer noted that although KAFB is not addressing additional contaminants, KAFB is required to continuously test for all constituents. Director Stringer said both the NMED and KAFB agree that all other contaminants are stabilized and not a threat to public health. Chair Howe asked if the final remedy would include a plan for addressing LNAPL and Director Stringer said that it would.

Director Stringer next discussed the movement towards a new structure for Technical Working Group (TWG) meetings for the BFF Site remediation because the NMED wants to shift staffing resources to a more focused TWG to drive progress towards a final remedy. Director Stringer said the feedback received about TWG was that the meetings had become presentations rather than problem-solving workgroups. Director Stringer said that if the new TWG structure process isn't working, the NMED would accept feedback. Director Stringer said the NMED will also be accepting feedback on a public involvement plan coming out soon for the BFF Site.

Director Stringer said the Air Force generally provides additional funding to the NMED HWB for the BFF Site through a cooperative agreement. However, the Air Force has not signed the agreement and therefore has not submitted funding. The Air Force originally committed to the 2019 cooperative agreement funding in March 2019 but has not provided a draft agreement as of November 7, 2019. Without the additional funds there could be gaps in progress and the goal of selecting a final remedy in 2021 will be difficult to achieve. Ms. Feibelman asked why the cooperative agreement funding had not been submitted. Director Stringer said she was unsure, but Deputy Assistant for the Environment, Safety and Infrastructure, Mr. Mark Correll had delayed sending a draft agreement after the NMED had rejected a KAFB Soil Vapor Sampling Work Plan. Mr. Kundargi asked if the cooperative agreement is voluntary and what options NMED had if they did not get the additional funding. Director Stringer responded that the NMED would still send invoices to the Air Force per the Hazardous Waste regulations but the project is too large to be remediated without the additional funding. Director Stringer said at this time there are very limited options for gathering any other additional funding sources. The NMED budget requests and amounts were assuming that they would have an agreement in place with the Air Force.

Chair Howe said in the past, the Board had gone on record for concerns about stakeholder input and TWGs. Chair Howe asked if there is any intent to continue TWG meetings. Director Stinger highlighted that getting new staff up to speed has been slow but she anticipates momentum to increase.

Vice-chair Glass proposed that the Board could again go on record for KAFB but this time for support of the Air Force fulfilling their cooperative funding agreement. Chair Howe agreed. Director Stringer said any facilitation to promote the HWB getting funding is something the NMED supports. Mr. Ziegler added that without additional funding, the NMED would not be able to provide KAFB BFF plume characterization model review. The Board agreed to create a subcommittee to draft the letter and hold a December meeting to review and edit the draft letter.

VI. Other Board Business

Ms. Feibelman relayed to the Board that the deadline to sign up for the advisory committee for development of the oil and gas document was coming up soon.

Mr. Roibal said the South Valley Pajarito Village Association is concerned about glyphosate being transported through acequias from non-organic farms to organic farms. Mr. Roibal questioned how they could do a study or if there was available literature on acequias and glyphosate. Ms. Bronson suggested that they should be looking at soil levels for glyphosates. Ms. Bronson also suggested that graduate students could be a good avenue for creating a study, and that Mr. Roibal could speak with people in the New Mexico agriculture community to see if there are any distance regulations or if they have any additional information on available literature. Chair Howe said he could check with Mr. John Fleck, Director of the University of New Mexico Water Resources Program, on any previous, ongoing or potential studies by students. Mr. Scruggs said she could also help with providing graduate students.

Ms. Agnew reminded the Board that the 2020 Board Work Plan was being developed and to let her know if there were any topics Board members wanted to add to the agenda. Ms. Feibelman suggested a presentation on glyphosates be added, which would be given by the Middle Rio Grande Conservancy District.

VII. Public Comment Period

None.

VIII. Adjourn

Chair Howe requested a motion to adjourn the meeting. Dr. Scruggs motioned to adjourn and Mr. Roibal seconded. The meeting adjourned at 10:14 a.m.

Addendum to Water Protection Advisory Board

November 8, 2019 Meeting Minutes

This addendum to the Water Protection Advisory Board (WPAB) November 8, 2019 incorporates supplementary post-meeting comments by the New Mexico Environment Department (NMED) Resources Protection Division Director Ms. Stephanie Stringer.

- Director Stringer commented that it was her understanding that a contractor would utilize an Environmental Protection Agency (EPA) model with similar modeling tools to the Kirtland Airforce Base FEFLOW model. Director Stringer added that the statements regarding the model similarity and utilization of both models in corrective measures evaluation needs to be clarified by technical staff.
- Director Stringer objected to her previous statement that the NMED is moving away from technical working groups (TWG), but rather moving towards a new structure that is more focused to drive progress towards a final remedy. Director Stringer clarified that if this new process of TWG, in contrast to the meeting minutes statement of no TWG, the NMED would accept feedback. Director Stinger highlighted that the statement of moving away from technical working groups is misinformation.
- Director Stringer added post-meeting that TWG would occur when a specific purpose was identified and the appropriate technical experts would be included. Director Stringer said Mr. Dave Cobrain, Program Manager of the NMED Hazardous Waste Bureau (HWB) has already identified a need for an upcoming TWG. Director Stringer did give supplementary comments on what the need was.
- Director Stringer provided supplementary information that the NMED had requested an increase in the NMED HWB budget from the legislature for the 2020 session but could have increased the amount requested if the NMED knew the uncertainty with the KAFB agreement.