



Kerry Howe, *Chair*
Russell Pederson, *Vice-Chair*
Suzanne Busch
Julia Maccini
Roland Penttila

John Pietz
Roberto Roibal
Caroline Scruggs
Jennifer Thacher

Water Protection Advisory Board
c/o ABCWUA
P.O. Box 568
Albuquerque, NM 87103

Minutes: June 14, 2019
Location: Bernalillo County Public Works Division, 2400 Broadway SE, Bldg. N Conf. Room
Time: 8:30 to 10:30 a.m.

Board Members Present: Chair Kerry Howe, Julia Maccini, Roland Penttila, John Pietz, Caroline Scruggs, Steve Glass, and Camilla Feibelman

Board Members Absent (excused): Suzanne Busch

PIC Members Present: Dan McGregor, Bart Faris, Ken Ziegler, Kathleen Verhage, Kali Bronson, Mark Kelly, Liz Anderson, and Diane Agnew.

Guests: Jay Snyder (EA Engineering), Dezbah Jesus (NMED), Dan March (Laun-Dry Supply Co.), Dave McCoy (Public Attendee), and Mo Hobbs (ABCWUA).

I. Call to Order

Chair Dr. Kerry Howe called the meeting to order at 8:34 a.m.

II. Approval of Agenda

Chair Howe requested a motion to approve the agenda. Vice-chair Steve Glass motioned to approve the agenda and Board Member Mr. Roland Penttila seconded the motion. Motion to approve the agenda carried unanimously.

III. Approval of August Minutes

Chair Howe asked the board members if there were any comments on the May meeting minutes. Ms. Diane Agnew, Policy Implementation Committee (PIC) Member with the Albuquerque Bernalillo County Water Utility Authority (ABCWUA), noted that the spelling of glyphosate needed to be corrected.

Chair Howe asked for a motion to approve the May meeting minutes with the adjustments incorporated. Mr. Penttila motioned to approve May minutes, and Board Member Ms. Julia Maccini seconded the motion. Motion to approve the May 10, 2019 meeting minutes carried unanimously.

IV. Board Business

a. PIC Agency Updates

Mr. Mark Kelly, PIC member with the ABCWUA, informed the board that there will be an update to the ABCWUA Board at their June meeting on lead sampling done for Albuquerque Public Schools (APS). The Water Authority also tested the distribution system near the schools that APS tested. The sampling results indicate that lead is not coming from the drinking water, but rather old plumbing fixtures located inside the schools (e.g., sinks). Mr. Kelly said that the lead sampling was done as part of a free program for APS, and if residents are concerned about lead in their water, ABCWUA will send someone out to test for lead. ABCWUA also performs quarterly tests that look at lead concentrations in the distribution system in addition to the Safe Drinking Water Act required monitoring every three years. Neither the quarterly tests, the compliance monitoring, the testing near schools, nor the in-home testing have shown levels over the recommended action levels. Chair Howe asked if ABCWUA adds anything to the water to prevent old corrosion on old lead plumbing fixtures. Mr. Kelly responded yes, ABCWUA adds polyphosphate to prevent this.

Ms. Agnew updated the board that herself and Ms. Kate Mendoza, PIC member with the ABCWUA, attended and presented at the American Water Works Association (AWWA) annual conference in Denver. At this conference, ABCWUA received two awards; the awards were the Partnership for Safe Water Director's Award for Water Treatment and another the Partnership for Clean Water Director's Award for Wastewater Treatment Plant optimization. Ms. Agnew and Ms. Mendoza presented on the ABCWUA's Source Water Protection work with an emphasis on selecting models to use in assessments, which led to good discussion on the utilization and development of groundwater models and stakeholder models.

Ms. Agnew also gave an update on a letter the ABCWUA received from the New Mexico Environment Department (NMED) that committed their department, along with Kirtland Air Force Base (KAFB) to share information in regards to the KAFB Bulk Fuels Facility (BFF) spill. This commitment of sharing information is to ensure that stakeholders affected by the BFF spill can get data as needed and appropriate.

Mr. Bart Faris, PIC member with the City of Albuquerque (City), notified the Board that the NMED Hazardous Waste Bureau sent a letter to the responsible party of the Spartan Site, requiring them to test for 1,4-dioxane, as well as vapor intrusion of trichloroethylene (TCE). This letter could lead to a dispute resolution with NMED, the City, and the responsible party.

Ms. Bronson informed the Board that the Bernalillo County (County), the City of Albuquerque, and other partners are working on a watershed based plan for the upper Tijeras Arroyo, for which Ciudad Soil and Water Conservation District is both managing and serving as the fiscal agent. Bernalillo County, along with Ciudad and the watershed-based plan consultant, JoAnne Hilton, are working on a Section 319 grant in an effort to secure more funding for this project.

Ms. Bronson said that the AridLID Coalition is working on a Green Storm Water/Low Impact Design (GSI/LID) workshop that includes an interactive class with information on GSI/LID, how it functions, when/where to use it, and will include interactive review of construction design drawings and site design. A large focus of LID is to slow storm water for increased infiltration and improved water quality, without causing flooding. Ms. Bronson said the County recently received a grant to implement LID along the 2nd Street trail.

In an effort to address stormwater quality outreach and education, the County sent out best management practices information to various businesses (automotive shops, gas stations, printers, contractor yards, etc.) in the unincorporated county, or who's work may occur in the unincorporated county.

The County Water Conservation Program Manager, Megan Marsee, is in the process of updating the water conservation plan.

Ms. Bronson reported that the County is launching an E. coli study in cooperation with the United States Geological Study (USGS) in the southern portion of the Middle Rio Grande (MRG). Other partners in the study include AMAFCA and the City; NMDOT and ABCWUA have also been invited to participate. The study extends from the Barelás Pump Station down to the Valle de Oro National Wildlife Refuge. Ms. Bronson said that the purpose of the study is to identify possible sources of E. coli. E. coli concentrations from the effluent compliance sampling location at the Southside Water Reclamation Plant are very low, but concentrations in the river in this section are elevated, with and without stormwater influence. The County is looking at many possible sources, one being the possibility of E. coli regrowth in areas with considerable sedimentation. Ms. Bronson says the County will utilize cross-sectional composite sampling methods. Ms. Agnew delivered an update that the public meeting and hearing for KAFB's National Pollutant Discharge Elimination System (NPDES) permit is taking place on June 26, 2019. The public meeting is from 5-6pm, and the hearing is from 6-9pm. Ms. Agnew stated she would send the meeting information to interested board members.

Mr. Dan McGregor, PIC member with the County, let the Board know that there are no new updates with oil and gas. Mr. Faris mentioned that the City is still pursuing an oil and gas ordinance in the Rio Grande Basin with a technical water resources team.

b. Annual Report

Chair Howe asked the Board if there were any changes to the WPAB 2018 Annual Report (Annual Report). Ms. Bronson said she had sent an email that included some minor changes to a section on storm water; Ms. Bronson provided the changes to the board verbally with edits made to the hard copy report. Vice-chair Glass said the appendix needs to be added in. Chair Howe requested a motion to approve the Annual Report with Ms. Bronson's revisions. Mr. Penttila motioned to approve the revised Annual Report and Vice-chair Glass seconded. Motion to approve Annual Report carried unanimously.

V. Presentation: *Update on Laun-Dry Supply Co. Stage 2 Abatement.*

Mr. Jay Snyder with EA Engineering Science and Technology Inc. (EA) delivered an update on the status of the Laun-Dry Supply Co. (Laun-Dry) Modified Stage 2 Abatement Plan (S2AP). Mr. Snyder said that the long-term soil vapor extraction (SVE) has been so successful in the first phase that they have decided to incorporate it into S2AP. Under the S2AP, EA delineated the width and thickness of the Laun-Dry solvent plume, then injected Genesis PlumeStop™ and Aqua ZVI™ along the length of the plume. The Genesis PlumeStop™ is a fine carbon, or liquid activated carbon, stops blocks plume migrations and degrades contaminants, while Aqua ZVI™ is a ferrous iron compound that dechloronates the contaminant plume.

EA installed performance assessment wells downgradient to monitor contaminant decline. EA also installed 20-50 feet of permeable reactive barrier to accommodate groundwater rise and prevent contaminant smearing and migration. Board member Dr. Caroline Scruggs asked how the plume is responding to groundwater rise. Mr. Snyder responded that the main core of the solvent plume is in the same location as it was before groundwater began to rise, although a little smearing is likely. However, the permeable reactive barrier now in place will combat smearing from worsening and is thick enough to accommodate the rising water table.

Mr. Snyder stated that the upgradient segment of the solvent plume appears to be “behaving well”. Since SVE at the source began, EA has documented a substantial decline in contaminants at the upgradient segment resulting merely from cutting off the source. Contaminant concentrations have also declined within the down gradient segment. Mr. Penttila questioned when the Laun-Dry site is expected to below recommended action levels. Mr. Snyder said in regards to trichloroethylene (TCE) the site is lower than the current action level of 100 micrograms per liter (µg/L), but on July 1, 2020 new regulations are effective, lowering the action level for TCE to 5 µg/L; concentrations of TCE in groundwater will be above the new action level. In the initial stages of SVE, the concentration levels for contaminants were between approximately 4,000 to 5,000 parts per million by volume (ppmv) but have fallen to approximately 1ppmv.

In the source area of the solvent plume, there is little TCE which is the degradation product of Perchloroethylene (PCE). Accordingly, PCE is concentrated around the source of the plume, whereas, TCE is largely found beyond the source area. At the segment of the solvent plume located near RAKS Building Supply, Inc., there was high vapor intrusion occurring. Initially, contaminant concentrations at this location were approximately 10 ppmv, but EA has abated the vapor intrusion pathway and the new concentration is approximately 1 ppmv. Mr. Snyder said that in EA’s professional opinion, there was presumably high vapor phase transport, and therefore mitigating the vapor intrusion pathway enabled concentrations to drop dramatically. Both TCE and PCE are under the current groundwater standards, which may change as regulations become more stringent in July 2020. Mr. Snyder noted that before EA started remediation there was some natural attenuation over a 15 year period.

Mr. Snyder said the medial section of the solvent plume runs roughly from 6th street to 2nd street, and the distal portion is east of 2nd street. At this distal portion of the solvent plume, EA had stopped sampling wells because they lost access, but access was recently renegotiated and EA will resume sampling of monitoring wells in this portion of the plume. There is concern that Raymar Auto & Truck Center (Raymar) on 4th street, is an additional source of contamination. Reinitiating sample should help determine if Raymar is further contaminating the plume. At monitoring well MW-4H-06, near Raymar, the last sampling concentration of TCE was 230 µg/L. Concentrations of TCE at wells Raymar-W and RayMar-E were approximately 400 to 450 µg/L. Mr. Snyder concluded his presentation and opened the floor for questions and discussion.

Mr. Penttila asked Mr. Snyder if Laun-Dry owners and operators were EA's client and if they are contributing to the remediation costs. Mr. Snyder responded that they are EA's client and the fully responsible party, taking on remediation costs. Board Member Mr. John Pietz raised concern over potential exposure pathways for vapor when nearby cemeteries are irrigated. Mr. Snyder said that if there is vapor intrusion in any residential areas, people would be getting exposed all day and night, which is why the Environmental Protection Agency (EPA) is so concerned. Mr. Snyder says EA sampled residential locations to the south of the plume, as well as commercial spaces to the east. EA collected these samples from both indoor and sub-slab sampling locations. Mr. Snyder stated that prior to sampling, EA shut down SVE to make sure the vapors were at equilibrium.

Mr. Pietz then asked Mr. Snyder what the injection schedule for Regenesi PlumeStop™ and Aqua ZVI™ was, and Mr. Snyder replied that the injection occurs once but is designed to last around 12 years, with the potential to last up to 20 years.

Board member Ms. Camilla Feibelman asked Mr. Snyder and Mr. Dan March, with Laun-Dry, for a brief summary on the contamination history of the site. Mr. March said Laun-Dry began operations in the 1950's and received dry cleaning solvent loads by rail cart. While workers transferred solvent off the cart, solvent escaped onto the ground. Mr. McGregor noted that that management practices of the 1960s recommended hosing out solvent tanks and letting the waste product empty on the ground. Ms. Agnew pointed out that you do not need a substantial amount of solvent to generate a large plume. Ms. Feibelman then asked who Laun-Dry and EA report to, and Mr. March responded that Mr. Justin Ball, with the NMED Ground Water Quality Bureau, is the regulator for the site. Mr. Feibelman asked if there is a peer review process, and Mr. Snyder said the NMED serves as third party oversight. Ms. Agnew added that the S2AP of abatement also went through a public comment period.

Mr. Penttila asked what is EA's plan in the S2AP. Mr. Snyder said that the first step was removing the leaking tank, then SVE will lower contaminant concentrations, leading to reduced concentrations downgradient. Mr. Snyder says they plan to perform SVE at the Raymar locations.

Chair Howe asked Mr. Snyder about remediation standards for vinyl chloride, cis and trans isomeric versions of 1,2-dichloroethylene (DCE) at the Laun-Dry sites. Mr. Snyder says they dealt with these contaminants by injecting Aqua ZVI™ which dechlorinated

the plume. Mr. Snyder mentioned that cis and trans-DCE had historically not been regulated. Dr. Scruggs asked why DCE standards were just now coming out, and Ms. Agnew stated that NMED is aligning their standards with the EPA maximum contaminant levels. Chair Howe pointed out that there are also different standards for groundwater compared to drinking water.

Mr. Pietz asked if the Laun-Dry plume is stable. Mr. Snyder responded that the plume is relatively stable with some minor variations out to the east. Mr. Snyder says these fluctuations in plume morphology are likely related to the rise in groundwater levels within the Albuquerque Basin. Chair Howe asked Mr. Snyder if EA believes that they've captured most of the source. Mr. Snyder replied that there are action and no action zones, and if they can bring down concentrations at Raymar, then contamination concentrations across the entire plume will likely improve over time. Chair Howe asked how long it will take for the site to be fully abated. Mr. Snyder said that with the new groundwater standards, it will likely take around 10 years.

Mr. Penttila asked if Raymar is a second source of contamination, how would the cost of remediation be distributed with two separate responsible parties? Mr. Snyder said he is unsure at the moment, but there could be some cost allocation between Raymar and Laun-Dry. Mr. Snyder said that cost sharing would be more difficult if Raymar hired on a different contractor.

Vice-chair Glass asked Mr. Snyder how large the plume will be once the new standards go into effect in 2020. Mr. Snyder says that it may become slightly larger, but will be relatively unchanged. Vice-chair Glass expanded that the plume may not become larger, but would the areas of disconnect disappear with the new standards? Mr. Snyder said yes, those areas likely would. Vice-chair Glass asked if the plume is located in a former river channel, and Mr. Snyder said some of the plume is in a former river channel but in the eastern portion of the plume, there is more permeable geology because of the Sandia Mountain Range. There were no more questions or discussion from the Board.

VI. Other Board Business

Ms. Agnew reminded the Board that there is no meeting scheduled for July 2019.

VII. Public Comment Period

Mr. Dave McCoy informed the Board that Sandia National Laboratories (SNL) issued their mandatory five-year review for clean-up efforts at the Mixed Waste Landfill (MWL). Mr. McCoy summarized that SNL review documented that excavation of MWL was possible and that the existing dirt cover is not a long-term solution. The public comment period ends July 23, 2019, and Mr. McCoy requested that the Board issue a recommendation to move forward with excavating the MWL.

Chair Howe asked the Board members if they felt they had enough information to provide comments and recommendations by July 23, 2019. Chair Howe then asked Mr.

McCoy if there was a preferred recommendation laid out in the report. Mr. McCoy said he was unsure if excavation was the preferred recommendation, but rather that it is feasible. Ms. Agnew stated that the five-year review is a mandatory requirement that evaluates the efficiency of remediation operations. Ms. Agnew said that she has requested that either or both NMED and SNL come and present on the MWL five-year review, but both have so far declined; SNL stated they could not present until they had received NMED's review and comments.

Ms. Feibelman suggested that the Board write a letter to SNL requesting a presentation as well as an extension of the deadline for public comment. Mr. Penttila proposed writing a first draft while everyone is together to avoid forming a subcommittee to draft the letter. Ms. Agnew said they could hold a special meeting to vote on the final letter. The Board drafted a letter requesting that NMED and/or SNL give a presentation to the Board before the public comment period ends, and to also extend that deadline. Chair Howe requested a motion to have a special meeting on June 21, 2019 to approve the final letter. Ms. Feibelman motioned to approve the special meeting and Ms. Maccini seconded the motion. Motion to approve an special meeting carried unanimously.

VIII. Adjourn

Chair Howe asked for a motion to adjourn the meeting. Vice-chair Glass motioned to adjourn and Mr. Penttila seconded the motion. The meeting was adjourned at 10:38 a.m.