1	ALBUQUERQUE BERNALILLO COUNTY
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3	wednesday, March 22, 2023, 5:08 p.m.
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5	VINCENT E. GRIEGO CHAMBERS
6	ONE CIVIC PLAZA
7	Albuquerque, New Mexico
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11	APPEARANCES
12	COMMISSIONER ERIC C. OLIVAS, Chair,
13	COUNCILOR TAMMY FIEBELKORN, Vice Chair
14	COMMISSIONER BARBARA BACA, Member
15	COUNCILOR PAT DAVIS, Member
16	COMMISSIONER ADRIANN BARBOA, Member
17	COUNCILOR TRUDY E. JONES, Member
18	TRUSTEE GILBERT BENAVIDES, Ex-Officio Member
19	MAYOR TIMOTHY M. KELLER, (Excused)
20	LAWRENCE RAEL, Alternate Member
21	
22	
23	
24	500 4th Street, Northwest
25	Albuquerque, New Mexico 8/102

1	TRANSCRIPT OF PROCEEDINGS
2	CHAIR OLIVAS: I call this March 22nd, 2023,
3	meeting of the Albuquerque Bernalillo County Water
4	Utility Board to order. All members are present,
5	other than Councilor Davis, who is running a couple
6	minutes late. We expect him to be here shortly.
7	Item Number 2, we have a moment of
8	silence, that will be followed by the Pledge of
9	Allegiance, led by Trustee Benavides.
10	(Whereupon, there was a moment of
11	silence.)
12	(Whereupon, the Pledge of Allegiance
13	was recited by Trustee Benavides.)
14	CHAIR OLIVAS: Thank you very much, Trustee
15	Benavides.
16	Item Number 3 is approval of our
17	minutes. I make a motion to approve the February 8,
18	2023, minutes. Is there a second.
19	COUNCILOR JONES: I second that.
20	CHAIR OLIVAS: A second from Councilor
21	Jones. Any discussion here?
22	Seeing none, I ask that all in favor,
23	say aye.
24	ALL MEMBERS: Aye.
25	CHAIR OLIVAS: The motion unanimously.

1 (6-0 vote. Motion approved.) 2 CHAIR OLIVAS: Item Number 4, proclamations 3 and awards. We have no items on Number 4. Item Number 5, public comment. 4 Ms. Salas, do we have anyone signed up to speak? 5 б MS. SALAS: I don't believe we have anybody. 7 Excuse me. I misspoke. We have Elaine Hebard. 8 9 CHAIR OLIVAS: Just a reminder, Ms. Hebard. 10 You'll have three minutes to speak, with a warning at 11 two and a half minutes. Ms. Hebard, welcome back. You have the floor. 12 13 MS. HEBARD: Thank you. My name is Elaine 14 Hebard, and I'm a long-time advocate for good water 15 administration, so I make suggestions and ideas to 16 help with that. Happy World Water Day. This year's 17 18 theme is accelerating change to solve the water and 19 sanitation crisis. And because water affects us all, 20 we all have to join in the effort. 21 My suggestions today and every month are 22 in keeping with that theme. We cannot continue to 23 live in silos so we're okay, but not everybody else. 24 While the snowpack might look good today, who knows what the summer will look like? 25

Because of the past due amounts under 1 2 the compact, basically, no storage is allowed in the 3 Rio Grande right now. So fish and farmers would once again rely heavily on the run of the river. 4 5 Due to future warming temperatures, the 6 surface water supply will be steadily decreasing. 7 Surface water supply shortages induced by climate change will drive both agricultural and municipal 8 9 industrial uses to rely more heavily on groundwater. 10 While the ABCWUA has groundwater 11 resources to rely should the river run dry, such uses 12 have consequences. Perhaps pump now, pay later 13 should be the motto. Pumping now not only reduces 14 river flows at a time when they're already declining, 15 and will continue to do so, it reduces the amount available to recycle because those flows have to be 16 used to offset the depletions. 17 18 For several years, regional consumption 19 has exceeded the compact's apportionment, causing the 20 current deficit. Even if consumption were to be 21 reduced, this may not be enough any longer. Drier 22 times will bring increased competition and demand for 23 scarce water resources. Folks with senior water 24 rights are certain to demand priority. 25 So I've made some suggestions as far as

ways to look at some of the issues in the objectives. 1 2 I'll mention two right now. 3 To reach 110 gallons per capita per day 4 by 2037, we're going to have cut out about 200 5 million gallons of water per year from our diet. б That should be a target in the objectives, not just a 7 listing of programs. Another, non-revenue water is at least 8 10 percent of the produced water. That's a lot of 9 10 There could be an objective to reduce lost revenue. 11 that every year, with a specific target. 12 The goals have not been changed since 13 2004, so using this opportunity to look at goals and 14 objectives, there could be a working session, either 15 for this year or at least for the next fiscal year. 16 There are two other efforts that I want to briefly mention. One is the basin study that was 17 18 currently underway. It's a way to get out of the 19 silo and work together. 20 The other one is MRCOG is about to talk about One Water, which would be all water has value 21 22 and we need to work together toward One Water. So 23 those are two ideas for which additional information 24 could be presented. 25 Thank you.

1 CHAIR OLIVAS: Thank you, Ms. Hebard. 2 Appreciate your comments. 3 That concludes our public comment section of the meeting. 4 5 That takes us to Item 6, announcements б and communications. Our next scheduled meeting will 7 be held on April 19th, 2023, at 5:00 p.m. in the Vincent Griego Council Chambers. 8 9 And at this time, I wanted to ask the 10 consent of the board here to move up Item Number 10, 11 which is our presentations. We've got several 12 presenters here in the chambers, and I wanted to give 13 them some respect and move up their items so that we 14 can hear from them right away, without objection. 15 So that will take us to Item Number 10, other business. And Item A, OB-2023-5, STEM in the 16 17 Burque career pathway-focused exhibition for 18 Albuquerque teens and families. We have Amon Haruta, director of project 19 20 management from Explora here. 21 MR. KELLY: Mr. Chair, I am not Amon Haruta. 22 And he was scheduled to appear to present to you, but 23 he is not here yet. So I would like to request that 24 we maybe push this agenda item a little bit. 25 CHAIR OLIVAS: With no objection, that's

fine. 1 2 That will take us to Item B, OB-23-6, 3 our drought update and water conservation program overview from Mr. Kelly. 4 5 You have the floor, sir. 6 MR. KELLY: Thank you, Mr. Chair and Members 7 of the Board. I am Mark Kelly, the water resources division manager. And today I'm going to give you 8 our monthly drought update, since we are continuing 9 10 to be under a drought watch. 11 Despite some additional rounds of rain and snow, there is still some lingering moderate 12 13 drought throughout Bernalillo County, as well as 14 parts of the county that are just normally dry. 15 We have seen our groundwater pumping as a percentage of our goal is at 116 percent, and our 16 GPCD is at a rolling annual average of 126 right now. 17 18 In terms of where we've been in the last 19 year, conditions have considerably improved. As you 20 can see from the map, there is currently a lot less excessive drought and extreme drought, which are the 21 22 dark red and the light red portions. And there are 23 wide areas of Arizona and western New Mexico where 24 there is no drought at all. 25 In terms of our temperatures this

winter, so far, we have been pretty normal throughout 1 2 the range. We've had some spiking a little bit high, 3 but nothing record-setting. In terms of our precipitation to date, 4 5 this is at the Sunport. We've received 0.7 inches. б It's slightly below the normal amount for this time 7 which is shown in green, which is 0.9 inches. Things are looking up in terms of 8 9 snowpack in our San Juan-Chama watersheds. We are at 10 136 percent of the mean. And those are where we get 11 our surface water from. Here in the middle 12 Rio Grande, snowpack is at 126 in the upper 13 Rio Grande and 110 percent. So things are looking 14 slightly above average in terms of our snowpack. 15 When we look at the seasonal drought outlook for the next few months, large portions of 16 eastern New Mexico and some of the middle Rio Grande 17 18 area do continue to have drought persisting. But 19 like I said, there are parts of southern New Mexico 20 that don't have any drought persisting. 21 With that, I will answer any questions 22 drought related. 23 CHAIR OLIVAS: Questions from the board? 24 Seeing none, thank you, Mr. Kelly. Appreciate your time. 25

MR. KELLY: So I'd like to talk about our 1 2 conservation program right now. 3 So our conservation program is an 4 integral part of our water resources management 5 strategy, water 2120. We have a conservation goal б set by Water 2120 to get to 110 gallons per capita 7 per day by 2037. And how we're going to get there is by using our conservation program. 8 9 A little historical background. Our 10 conservation program and really the actions of our 11 ratepayers have come a long way. In the '90s, we had a GPCD use of around 250. And last year we had a 12 GPCD of 127. So we've almost cut that in half, 13 14 despite, as you can see in the red line, of the 15 number of accounts growing. 16 Looking towards the future, we do have that goal of getting to 110 gallons per capita per 17 18 day by 2037. And I think we are well on our way there. I'll get into talking about how we plan on 19 20 getting there. 21 Most of our demand is from single-family 22 residential users. We also have a bit of demand from 23 commercial, multi-family and a little bit of 24 institutional, not much industrial use. 25 Our residents have done a great job of

conserving. Our residential gallons per capita per 1 2 day is around 85. And, you know, if everybody, 3 including all the industries and institutions, acted like our residents, we would be at our goal by now. 4 5 But we really consider the whole GPCD of the system. б We also track consumptive use and 7 non-consumptive use. And consumptive use is water that doesn't get into the wastewater treatment plant 8 and is not returned to the river. It's water that 9 10 either sometimes goes into the ground or evaporates 11 or is lost. In terms of the best classes for 12 13 consumptive use, we've got, you know, industrial is 14 only consuming about 13 percent of the water that 15 they use. They're returning about 87 percent. 16 Towards commercial and residential, those things go towards more of a 50/50, 60/40 blend. And our 17 18 institutional and things like parks and schools, they 19 tend to have the highest consumptive use because of 20 all that watering. 21 We're looking to achieve our 110 GPCD 22 goal using a three-part strategy. We've got 23 education, incentives and enforcement. And education 24 is teaching our customers how to conserve. Our 25 incentives are trying to get customers that wouldn't

1 necessarily conserve to get them a push so that they 2 do conserve, which usually comes in the form of 3 monetary incentives. And then we've also got 4 enforcement to make sure that we're -- our customers 5 aren't wasting the water.

б In terms of our education, we have a lot 7 of the customer support. We have ways that our customers can call in and ask an expert for 8 irrigation advice, how to set their timers. 9 We talk to customers on the phone also about leaks. 10 And we 11 do audits. We've done audits for really high users, but also for our low income users, where we also 12 13 offer retrofit kits in partnership with PNM.

14 We have a great website that shows how 15 to -- has irrigation tips as well as xeriscape tips, 16 and it's called 505 Outside. And we've recently just published an irrigation to guide customers about how 17 18 much to water and when. And we also are reaching out 19 to the professionals in the landscaping sector with 20 our Water Smart Academy, where they can come and get 21 training that counts towards their accreditations, 22 but also that we're pushing our xeriscape and wise 23 use of water for the industry, as well.

24 In terms of the incentives, we have a 25 million dollars set aside to provide rebates every

year. And those are divvied up in multiple ways. 1 2 We have xeriscape conversions, where 3 we'll pay customers \$2 per square foot for the removal of turf grass, and that has worked really 4 The trickiest part with that is that folks 5 well. б have to come to us before they move the turf grass so 7 we can verify it. We also provide rebates for rain barrels 8 so folks can harvest rain off of their rooftop and 9 10 use to water instead of potable water. 11 And we offer high efficient nozzle 12 rebates and smart controllers so that people can 13 really make their irrigation system as efficient as 14 it can be. We believe in the value of trees. We 15 offer tree-bates for folks to buy new trees, but also 16 to take care of the trees that they already have so that can be used for things like mulch or 17 18 professional tree care. 19 And we also have a Water Smart CPR, 20 which is our customized performance rebate, that 21 works with high users to achieve 20 percent rebate on 22 indoor and outdoor use and provides rebates based on 23 where they were and after they do their improvements, 24 their usage later. 25 The third part of the Venn diagram is

enforcement. We used to be very fees-based and 1 2 hammer-based in terms of our enforcement program. And now whoa do warnings and consultations, free 3 audits for those that get warnings, and then we 4 5 proceed to violations and fees. б These are for things like having water 7 that runs into the street, is where we get most of our warnings about. And so we're trying to get our 8 customers to gently move toward not wasting water. 9 10 So our conservation program is a bigger 11 part of Water 2120. We have our drought management 12 plan, that is also part of the conservation program. 13 But our conservation program is really how we're 14 going to move towards getting to our 110 gallons per 15 capita per day. We've got the drought plan that 16 sets, like, guardrails on the side that if we get out of alignment with our conservation plan, we can enact 17 18 the drought plan to bring our customers more in line and hopefully reduce use. 19 20 So that's a brief talk about our conservation a program. And I'd like to stand for 21 22 any questions. 23 CHAIR OLIVAS: Any questions? Commissioner 24 Barboa. 25 COMMISSIONER BARBOA: Hi. Thank you for

both presentations.

2	In this one, one of those last few
3	slides, you talked about the change from fines to
4	now, a few steps, and then violations. Do you know
5	what this results of that have been?
6	MR. KELLY: We've been doing that for
7	several years. And, you know, our amount of
8	violations has gone down in that time. But in terms
9	of our number of, like, customer contacts, those have
10	really stayed really the same. But we've been able
11	to address issues without going to monetary penalties
12	for a lot of people.
13	COMMISSIONER BARBOA: And what is the
14	violation when you move to the final step? What does
15	a violation mean?
16	MR. KELLY: Well, that's whenever they can
17	get additional charges added onto their bill. And it
18	really depends on the magnitude of their meter size
19	on how much those violations are for.
20	COMMISSIONER BARBOA: Thank you. That was
21	all.
22	CHAIR OLIVAS: Mr. Rael.
23	MR. RAEL: Thank you, Mr. Chairman.
24	Mark, there's an urban myth, if you
25	will, in the valley area that I'd like for you to

address, just to make sure that those who are 1 2 listening, including all of us here, that if you flood irrigate in the valley or you water your trees 3 or what have you, that somehow you're recharging the 4 aquifer and, thus, helping the water situation in the 5 б valley. 7 Is that true or false? MR. KELLY: Well, Mr. Rael and Mr. Chair, 8 I'd say that, you know, indirectly that does occur. 9 A lot of that ends up going into, you know, the 10 11 plants that actually use that water and into the air, 12 either evaporating from the soil or the plants 13 bringing it up and evaporating from the plants 14 themselves. 15 But, you know, we like to do our aquifer recharge through our aquifer storage and recovery 16 projects. And, you know, I don't have a 17 18 quantification of how great or the magnitude of flood irrigation going into the aquifer. 19 20 But, you know, I think that we would like to see, you know, that all of our aquifer 21 recharge being done, you know, by the water authority 22 and not customers taking it upon themselves to try to 23 24 bring up the levels. 25 MR. RAEL: Mr. Chairman, that just begs a

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follow-up.

So you're basically saying that at least there is some truth to the idea that if you're flood irrigating in the valley, you may be contributing to some aquifer or some recharge process, maybe at a very surface level that may not go into the deep aquifer, but it's not -- you're not really wasting water? Is that what I'm hearing you say?

9 MR. KELLY: Well, I think, you know -- I 10 wouldn't say that all flood irrigation is, you know, 11 wasting water, if it's done right and appropriately. 12 But, you know, we're trying to get people to use 13 water in the best, most wise way possible, so not to 14 overuse water. But I don't think, like I said 15 earlier, that we want customers to take it upon 16 themselves to recharge the aquifer.

And, you know, there's a new book being written by John Fleck over there about water use in the middle Rio Grande. And I'm certainly not the expert on how much is getting into the aquifer from there.

MR. RAEL: Fair enough.

23 CHAIR OLIVAS: Trustee Benavides, you had a 24 question?

TRUSTEE BENAVIDES: Yes. I'm thinking about

the incentive program and how it applies to the yard with a large, water-thirsty tree, surrounded by a lawn/ and, you know, the water-thirsty tree has probably been there for a long time; perhaps it's a cottonwood.

Is there much savings to be gained by ripping out your lawn and then putting native plants, low water-use type shrubs and things like that?

9 MR. KELLY: Well, yes, Trustee Benavides and 10 Mr. Chair, there are a lot of savings that can be 11 found by replacing turf grass with desert friendly 12 landscapes.

And that's one of our requirements that we have, as well, is we don't give the rebate unless the landscape is replaced with desert friendly landscape. So we won't give a rebate for folks that have ripped out and just put a bunch of rock down. But we're looking to create desert friendly landscapes.

But we have found that, you know, sometimes people don't take into account that watering that was done through the grass to their trees. And we do talk to people about -- in our xeriscape conversion program, we do remind them that you're going to have to set up either watering your

trees by hand -- the way I like to water my trees at 1 2 home is from my rain barrels -- or some other way of 3 making sure that your tree gets that nice, deep watering or setting up some kind of drip irrigation 4 5 for your trees. TRUSTEE BENAVIDES: And I realize the trees б 7 require a deep watering, whereas, the lawn does not. And perhaps the native shrubs do not, as well. 8 But I'm just thinking of the quantity of water that you 9 need to pour on your trees just overwhelms what you 10 11 put on your lawn. Am I wrong about that?

12 MR. KELLY: Trustee Benavides and 13 Mr. Chairman, I do think you are wrong about that. 14 Where trees do need a big gulp, but they need less 15 often. So we found that, you know, compared to a 16 lawn, that has to be water hopefully no more than 17 three times a week during our Water by the Numbers 18 and in the middle of the summer, that, you know, those once monthly watering of trees is less 19 20 watering, we've found. 21 TRUSTEE BENAVIDES: Thank you. CHAIR OLIVAS: Any other questions or 22 23 comments from board members? 24 I did have one quick question for you. 25 MR. KELLY: Yes.

1	CHAIR OLIVAS: In my neighborhood, I've
2	actually seen some electronic devices going in on
3	fire hydrants. They look like meters or something
4	like that. Is that part of a leak detection program
5	or something like that?
6	MR. KELLY: Mr. Chair, I believe that is
7	part of our leak detection program. Those are
8	actually like listening to the water pipes and
9	listening for the water that is going out. And they
10	can address those leaks later.
11	CHAIR OLIVAS: So it's really looking for
12	like a non-revenue water loss, pipes, meters and
13	stuff?
14	MR. KELLY: Yeah, exactly.
15	CHAIR OLIVAS: Great. Seeing no further
16	questions from the board up here, thank you for your
17	report and thank you for your time here.
18	MR. KELLY: Thank you.
19	CHAIR OLIVAS: That takes us to Item C.
20	This is project updates on the Kirtland Air Force
21	Base Bulk Fuels Facility. We have four separate
22	presenters on this particular item. So we'll go
23	ahead and get started with our first presenter, which
24	is going to be Colonel Jason Vattioni, the commander
25	of Kirtland Air Force, along with Mr. Ryan Wortman,

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physical scientist from the Kirtland Installation 1 2 Support Section. 3 Welcome, Colonel. 4 COLONEL VATTIONI: Thank you. Good evening. Honorable Chair and Members of the Board and to all 5 б present tonight, I am Colonel Jason Vattioni, as you 7 mentioned, installation commander for Kirtland Air Force Base. And thank you very much for having us 8 here tonight and allowing us the opportunity to 9 10 present. 11 The Air Force, in conjunction with the 12 New Mexico Environment Department, made tremendous 13 progress on the bulk fuels facility project between 14 2014 through 2019 and continues through today. We installed four extraction wells and 15 16 have successfully treated more than one and a half 17 billion gallons of water. We received an approved 18 risk assessment for groundwater and soil from the 19 New Mexico Environment Department which states: Due 20 to the responsive actions already taken by the 21 Air Force, there is no danger to the drinking water 22 of the City of Albuquerque. 23 In addition to groundwater treatment, we 24 have treated all impacted soil in the source area to 25 a depth of 20 feet. These activities are huge

undertakings and are successes we all can celebrate
on our road to a final cleanup of the bulk fuels
facility.

The tremendous progress we have made 4 since 2014 is due to the effective working 5 б relationship the Air Force has had with both 7 regulators and community stakeholders. Through technical meetings with the water utility authority, 8 9 the New Mexico Environment Department and renowned 10 experts in the field, we've developed work plans for 11 the construction of our state-of-the-art water 12 treatment system and implemented the robust sampling 13 methods currently employed at the site.

Unfortunately, we are encountering a shift from the collaborative environment that has facilitated the superb progress of the site thus far. Recently, there seems to be concern questioning the great work done together by our collective agencies and partners. We should strive to prevent any undoing of the progress made.

The Air Force will continue to work with the New Mexico Environment Department to transparently address concerns and engage in collaborative decision making to complete our task of building a reliable and comprehensive path forward.

1	Most importantly, the Air Force is
2	committed to ensure the water supply continues to be
3	protected. We will not waiver from that primary
4	mission.
5	We will continue to partner with the New
6	Mexico Environment Department to obtain approval, to
7	close the investigation phase and, begin evaluating
8	final remedies within the corrective measure
9	evaluation process.
10	That said, tonight I am here with our
11	subject matter expert, Mr. Ryan Wortman, to address
12	concerns and present the current project status.
13	Again, the Air Force is ready to advance
14	the cleanup process and to continue working with our
15	New Mexico partners and neighbors.
16	Thank you again for your time,
17	consideration and for allowing us to share with you
18	this evening. Mr. Wortman will now take the podium.
19	Thank you.
20	MR. WORTMAN: Thank you for that
21	introduction.
22	And, again, thank you to the board for
23	allowing us to speak on this subject. And we're
24	really looking forward to giving you a status
25	in-depth update on the bulk fuels facility cleanup

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project and where we are currently. 1 2 This is my first time speaking in front 3 of the board, so just a little background on myself. 4 I grew up in Albuquerque and got a degree in geology 5 from UNM. And through growing up here and just б living here in general, we understand the valuable 7 resource we have as our groundwater. And that kind of drove me towards getting a degree in geology and 8 pursuing a career in this environmental field. 9 10 I've been working with the Air Force 11 since 2020. I've really understood their commitment to ensuring the protection of the aquifer from this 12 13 release, as well as their continuously progressing 14 this project forward to that ultimate goal of site 15 cleanup. 16 My experience on this project specifically is I've been working on this project 17 18 since 2015 in some capacity or another. Some things to note, I've worked on coauthoring the risk 19 20 assessment, the facility investigation report 21 Phase 1, as well as helping to install several of 22 those extraction wells that were mentioned, as well 23 as getting the treatment system up and running. 24 So topics that I want to cover tonight 25 include the pump and treat interim measure, our plume 1 contaminant plume, as well as some of our monitoring 2 plans, our process that we go through as far as the 3 clean-up process, from beginning to end and where we 4 are currently. We'll be talking about our source 5 area, our site activity time line, as well as a risk 6 assessment overview.

So this is a very critical image that we show at all our open houses and all our public meetings, because it shows where this ethylene dibromide dissolved phase contaminant plume was in 2015 and where it was in our most recent site -- from our most recent site data.

13 So what we're seeing here is a change in 14 the plume geometry, and this is due to those four 15 extraction wells and that 1.6 billion gallons that 16 were removed. We've been able to reduce and control 17 that northern portion of the plume. And this is done 18 under the interim measure provision of our permit 19 that NMED administers over us.

And what this provision does is it allows us to remediate, to reduce exposure pathways and reduce risk and eliminate risk to exposures. Then for this, this would be exposure to drinking water users through the drinking water supply wells. But by these extraction wells controlling the migration of this contaminant plume, we are eliminating that risk. So this is a very important image.

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And just a little bit of background 4 5 about dissolved phase plumes and how this came to be, б is there was leaking infrastructure associated with 7 this small black and white, checkered box here, is where the leak occurred. This was a small release 8 that occurred every time fuel was transferred, but 9 this small release occurred every time fuel was 10 11 transferred for decades at a time, resulting in a large amount of fuel being released. 12

That then traveled through the earth, until it came in contact with the groundwater. And when fuel comes in contact with groundwater, contaminants will dissolve out of that fuel and into the groundwater and travel with the groundwater.

So what we're looking at here is ethylene dibromide that is within the groundwater, and this is our main risk driver at the site, because this migrated far away from where the fuel contacted the groundwater, much further away than any other constituent that we also monitor at this site.

24 So just going back to highlighting the 25 success of our treatment system, these are some other

data points that just validate that success. Right 1 2 here, we're looking at -- the orange line is our estimated mass of that that yellow shape, the plume, 3 the EDB plume in that northern area and how it's 4 5 reduced over time. And then the blue line that we're б 7 looking at here, it shows the mass removed from our treatment system building. So this is when we get 8 water to the treatment system, and we're calculating 9 10 the mass from that water going into the system. 11 And that inverse correlation there, 12 that's really what you want to see to show that 13 you're measuring what you're removing out in the 14 field, along with what you're measuring at your 15 treatment system building. 16 So seeing that correlation is really great to see. We expect that to continue to flatline 17 18 and, you know, maintain this kind of shape as we move 19 forward in the future, as well. 20 Additionally, some things to note on here, is this shows when all the extraction wells 21 22 came online. They didn't all come online at the same 23 time. They were done over that period of 2014 to 24 2019 time period. 25 And each of these extraction wells, you

1	can see some of the greatest decreases in our
2	estimated mass from our monitoring wells is
3	associated when those extraction wells came online.
4	Another interesting thing to note on
5	here, too, is we show when we changed sampling
6	methods to this passive sampling technique. And we
7	can see that the estimations before and after this
8	transition are relatively consistent, which is what
9	you would want to see from a representative sampling
10	technique, which we'll talk about a little bit more
11	on a later slide.
12	So the yellow shape that we talked
13	about, that ethylene dibromide plume, I want to take
14	a couple minutes here to really deep dive on how that
15	illustration is developed, because that's really
16	telling us where this contamination is and how our
17	treating system is impacting it.
18	So what we're seeing here, it's a very
19	complicated image. And I apologize for it, because
20	this is straight from our periodic monitoring
21	reports, which we submit to the state. Every six
22	months, we redevelop this same image based off of the
23	most recent data.
24	So what we're seeing here on the circles
25	is all of our monitoring wells. There's 167 of them

1 that are monitored on a semiannual basis to create 2 this illustration, as well as we're seeing the 3 different colors illustrate the different depth that 4 those wells are at.

5 Each of these wells is tagged with a 6 specific concentration that that well came from, and 7 everything -- the yellow shape is drawn around all the wells that are above the maximum contaminant 8 limit for ethylene dibromide, which is 0.05 9 micrograms per liter. And for context, what that 10 11 means, an analogy that we use, if you put a drop of ethylene dibromide in an Olympic-size swimming pool, 12 13 that's around what the 0.05 micrograms per liter is. 14 So it's a very small amount that we're talking about.

15 But this is a very important number because this is the Environmental Protection Agency's 16 maximum contaminant limit, EPA MCL. And what that 17 18 is, is it's a federally derived standard that is 19 enforced across the nation as a drinking water 20 standard. And what they're saying is anything at 21 that concentration or above, if a human drank that 22 water directly, there's a chance for an adverse 23 health side effect from that water. But anything 24 below that concentration is deemed safe to drink per 25 the EPA.

And we'll see in a later presentation of 1 2 drawing this contaminant plume to lower 3 concentrations than the MCL. And we have a lot of concern with that, because that's basically showing 4 5 water that's deemed safe to drink by the EPA as a б contaminant plume, which we want to make our 7 decisions based off of where the risk is at the site and gear our strategies towards where this 8 9 contaminant plume is at the MCL level or above. 10 So another update for the site is our 11 revised monitoring work plans. We've recently 12 received correspondence from the state requesting 13 revised work plans for both groundwater monitoring 14 and soil vapor monitoring. And in response to that, 15 we've requested a meeting as of March 1st with NMED 16 to discuss these work-plan revisions in detail. And our main concern and reason for this 17 18 meeting is because of the determination they made 19 about the methodologies currently employed at the 20 site. The state's determined that eight years of groundwater data -- or eight years of soil vapor data 21 22 and five years of groundwater data is not 23 representative of site conditions. 24 This is very concerning to us, because 25 the reason behind that, the main reason behind that,

is just how these methodologies were developed.
These were done at collaborative technical working
group meetings, where we brought in technical experts
across the nation, as well as subject-matter experts
from the water authority, the city, the county, NMED
and the Air Force.

7 And between 2014 and 2019, we had multiple technical working groups on these subjects 8 9 to look at industry standards as well as, you know, 10 site-specific conditions. And we looked at all those and came up with these methodologies and then agreed 11 12 upon them at these meetings and then documented them 13 subsequently in work plans. And then those were 14 approved by NMED eventually. And all of our work has 15 to be done in accordance with NMED approved work 16 plans per our permit that we're regulated over.

So we really want to get an 17 18 understanding of why this decision has been made and have that collaborative discussion with the state, 19 20 because we've seen success with that in the past. As 21 well as, when you revise these work plans, we want to 22 ensure that it's going to develop usable data 23 throughout the entire RCRA corrective action process, 24 which we'll talk about on the next slide.

25

So the RCRA corrective action process,

this is the RCRA permit, which is what we're regulated under. That stands for the Resource Conservation and Recovery Act permit. This is how NMED administers their cleanup process. This is the flow chart of the entire process. I want to focus in on where we are now and what our next step is on this slide.

So right now, we're in the kind of 8 middle box here, the RCRA facility investigation 9 10 phase. The intent of that phase so collect data to 11 describe the entire nature and extent of 12 contamination. And once we've described that, we 13 then document that in our report. We've done that in 14 the RFI Phase 1 report, which was partially approved 15 by the state.

16 There was two data gaps identified within that report that would have been subsequently 17 18 written work plans that were approved by the state to go out and address those in the intent to close out 19 20 the investigation phase. Those reports were 21 submitted in 2021, and we're waiting for NMED's 22 response on those to figure out what actionable 23 objectives we have to close out the investigation 24 phase.

25

We've recently heard about an LNAPL

migration pathway work-plan requirement from the state, and that is, you know, another data gap investigation, is what that would trigger. However, we need responses from this 2021 report in order to figure what objectives are needed to be met by this additional work-plan requirement.

7 And then the next phase here is the corrective measures evaluation. Our goal is to close 8 out the investigation phase and get to that 9 corrective measures evaluation, CME, because this is 10 11 one of the most critical steps in the cleanup This is where we talked about that interim 12 process. 13 measure that's dealing with the migration of the 14 This corrective measures evaluation contaminants. 15 will then look at all the remaining contamination above cleanup standards, and Air Force will present 16 strategies on how to remediate that to the state. 17

18 They will then select the most 19 protective and feasible strategy, and we'll present 20 that to the public for a public comment period, and a hearing can be held on those strategies. And this is 21 22 where the public is actually involved in the cleanup 23 process, and it's a very important step that we're 24 looking forward to get to. And the Air Force's 25 position is that we have enough data to move there.

However, this has to be done on NMED's 1 2 direction, so we look forward on working with them 3 and figuring out how to close out that investigation phase and start looking at immediate solutions for 4 5 all the remaining contamination at the site. б Another thing to highlight, this is the 7 source area here. I just want to spend a second on this slide because this is showing where our -- we 8 9 have other contaminants out there besides EDB, 10 although that was the main risk driver that will 11 trigger the interim measure. But we have other 12 contaminants out there. This plume we're seeing from 2016 and 13 14 2022, there hasn't been much change to this plume due to the relatively flat groundwater gradient in this 15 16 area and just the natural characterizations of the chemical and natural process that prevent this from 17 18 migrating towards drinking water supply wells. 19 We monitor and remap this image every 20 six months to ensure it's not moving. And if it did 21 end up moving at some point in the future, you can 22 see on this image we do have our extraction well and 23 these contaminants would be treated by our current 24 treatment system. So if it did end up migrating, it

25 | would be captured by our extraction wells. And

that's, you know, something we're looking at 1 2 constantly. But right now, there's no risk associated with this because it's not impacting 3 drinking water supply wells and it's not moving 4 5 towards drinking water supply wells. So site activity time line, there's been б 7 a lot of information already discussed and there's a lot of information on this slide because a lot of 8 work has been done to date on this project. 9 I just 10 want to highlight a few things. 11 The approved risk assessment, which 12 we'll talk about on the next slide, partially approved risk assessment, as well as those data gap 13 14 investigations. We installed new wells. We did 15 coring to address the data gaps from the RFI Phase 1 16 report, and those were submitted in 2021, those 17 reports. 18 The interim measures done to date, like Colonel Vattioni said, we remediated soil down to 19 20 20 feet, as well as we've operated soil vapor extraction systems, as well as technologies used to 21 remove free phase fluid from above the groundwater. 22 23 These technologies removed about three-fourths of a 24 million equivalent gallons of fuel from the source 25 area to remove that continuous source of

contamination. And then, of course, the groundwater
treatment system, the most important interim measure,
which is preventing the migration of contaminants
towards drinking water supply wells.

And the risk assessment overview. 5 So in б 2017, NMED requested the Air Force to develop a risk 7 assessment to follow a very prescribed process that quantifies risk in very prescribed manner. That task 8 9 was performed in 2017 by the Air Force; NMED then 10 approved it. And the conclusions were no risk to 11 soil, because, like we said, that was removed to 20 12 feet. And that groundwater is not currently 13 impacting drinking water supply wells. And with the 14 current operation of the interim measure and land use 15 controls in place, that it would prevent future 16 exposure.

Again, every six months we evaluate this position by redrawing these plume illustrations and doing performance assessment of our pump-and-treat system. So we continuously reverify these conclusions in that manner to make sure that we're eliminating that exposure pathway.

There will have to be an update to this risk assessment as we move further along in the process, but I just wanted to highlight how important

that is. And in just the overall for -- the 1 2 conclusion to our overall position is we're going to 3 continue to operate the treatment system, continue to monitor the networks to verify that there is no 4 5 impact to the drinking water supply wells, as we're б going to continue to engage NMED to move us along in 7 that RCRA corrective action process until we get to that CME phase, where we can further evaluate 8 9 remedial strategies for the bigger picture and the 10 remaining contamination at the site. 11 So with that, I know that's a lot of information, and I apologize. But there's lot to go 12 13 over on this project. And if you guys want anymore 14 detail on any of these subjects in the future, we're more than happy to come back. We'd also offer up a 15 16 tour of our treatment system on base. If you would like to participate in that or you have any 17 18 constituents that would be interested, our contact information is here. So with that, I'll open it up 19 20 to questions. 21 Thank you, Mr. Wortman and CHAIR OLIVAS: 22 Colonel, for being here. 23 Councilor Davis. 24 COUNCILOR DAVIS: Mr. Wortman, thank you for 25 being here. I'm catching up a little bit. I took a
year off from the water authority board, and I think
I feel like I stepped right back in to where I left
off a year ago. And thank you all for working on
this.

5 My question is, what -- I think the -б when I left the board maybe a year ago, so I'm 7 catching up to all of our data points here, the Air Force was working on a groundwater remediation 8 testing plan. And some of the community groups had 9 10 raised -- and the water authority had raised some 11 concerns about the one the Air Force was submitting. 12 I see now that NMED denied that and you guys were 13 going back to the table to work through it.

What was the challenge in that entire year that got us to submitting the application that MMED ultimately denied? What was deficient there that didn't get addressed in that whole year?

18 MR. WORTMAN: Are you talking about the work 19 plan?

20

COUNCILOR DAVIS: Yes.

21 MR. WORTMAN: So the monitoring work plan, 22 we've been working on developing new work plans, but 23 we really need to figure out the status of those old 24 work plans that we're currently operating under. 25 Because per our permit, we can't monitor outside an

1 approved work plan. So we really need to understand 2 that status before we can deliver another revise work 3 plan. And that's part of our engagement with 4 5 the state right now, is to figure out how we can use б the data generated to date and how -- the status of 7 those current work plans. COUNCILOR DAVIS: Mr. Chairman. 8 9 Thank you, Mr. Wortman. And, Colonel, 10 thank you for being here. And as always, we 11 appreciate when you all make time to come see us, 12 because it is important for all of our community. And Commissioner Barboa and I represent 13 14 those neighborhoods there. And it's been exciting to 15 see some progress for some time. And I think we sort of hit a roadblock there. And so glad that you guys 16 17 are back on it again. 18 But, again, I think it's disappointing 19 to feel like we kind of lost a couple years there 20 trying to figure out what the plan was going to be and then to have the plan ultimately denied by NMED 21 22 because it didn't meet those standards. 23 And so I hope that this next round, 24 hopefully with the technical advisory groups and 25 other that can help participate, you can get the data

you need to do that. I'm encouraged that maybe 1 2 there's a better path forward. But it does feel 3 disappointing that there was a lot of time and money wasted and there's concerns that remained. 4 And we talked about how the water table 5 6 was rising back, and we weren't sure what data we 7 were going to get from some of those submerged data points, as I recall. But I appreciate that. 8 9 Do you know, Mr. Wortman, just by chance, what do you think a time line looks like? 10 What is your perception of getting that data back 11 that you need in order to submit a revised plan that 12 you think would meet the problems identified by NMED? 13 14 MR. WORTMAN: Well, that's a great question. 15 It's difficult to give a specific time line because 16 of the nature of this RCRA process. We submit 17 documents that have to be approved by NMED. So it's 18 two agencies on separate time lines, and we have to 19 be lockstep to move forward. And if there's any, 20 like you said, deficiencies in the reports that we 21 submit identified by the state, that's going to cause 22 delay. 23 So I can't give specific time lines. 24 But from our position, we have enough data to start 25 closing out that investigation phase and looking at

1 those remedial solutions in that CME phase. And 2 that's where we can give a more actionable time line, 3 once we start sharing those strategies with the 4 public and NMED selected the most protective strategy 5 that we present to them. And that's when I can give 6 more specific time lines.

But at this point, it's just going to be working and getting approvals through the state. And, again, I'm encouraging collaborative discussions with the state. Because if we get things approved the first time around, of course, that's going to significantly accelerate the time line.

13 So that's our main goal, getting things 14 in front of the state that can be acceptable and give 15 us clear, actionable objectives to close out that 16 investigation phase.

COUNCILOR DAVIS: Mr. Chair.

17

18 Mr. Wortman, one more just to finish 19 there. Thank you. My concern would be -- and I'm 20 not the technical expert here, so you can dissuade me from this. My concern would be if we do figure out 21 22 the data to fill those gaps and to address those 23 deficiencies, and thanks, that's the word I was 24 looking for, address those deficiencies, my concern 25 would be that if it shows some variance from the

models, that there's more time now to go back and 1 2 revisit and restudy. At least that's been my 3 experience. And so I feel like we're a little 4 5 behind. I'm grateful to hear that you all are б working on a new collaborative process with the 7 community members and see the value of sitting down at the table. And I'm grateful to have you all here. 8 I'm glad that you all are focusing on it. 9 10 I'm worried about where that might take us, but certainly hope that you can keep us updated 11 12 on the status of getting that data and anything we can do to help move that along. I know our staff is 13 14 anxious to do that, as well, and I'm grateful to see 15 them here. So thank you for being here. Ι appreciate. I'm glad to hear things are sort of 16 working forward through those gaps. 17 18 Thank you, Mr. Chair. CHAIR OLIVAS: Commissioner Barboa. 19 20 COMMISSIONER BARBOA: Thank you. And thank you, Chair and Councilor Davis. Thanks for the 21 22 presentation. It's great to get an update. 23 Also, when I first came -- this is my 24 first time serving on the water board, but when I 25 first came on to the commission, I did get a tour,

obviously. But I have not heard much. I tried to 1 2 attend some of the public hearings that have 3 happened. But I guess it does -- I'm thankful for the presentation and all the information. 4 T think 5 maybe I need to re-catch up. б But when I hear you talking about final 7 cleanup and final remedies, that feels like you're on a pathway to closure, which sounds hopeful on your 8 9 end. But I worry that we both haven't got the data and there's concerns with New Mexico Environment 10 Department that -- I guess I would like to see the 11 plan for how we make sure remedies are occurring 12 before we're planning for our final recommendations. 13 14 MR. WORTMAN: I believe I could speak to 15 that. So in that corrective measures 16 evaluation, there is a public comment period to 17 18 where, you know, that's a very interactive phase of 19 this process, to where the public can weigh in on 20 those selections. 21 But I would say those data gaps that 22 NMED identifies are important to address, I 100 percent agree. We just need to flesh out what those 23 24 specific data points are and what is needed to close 25 out that investigation phase. And, again, this is

all going to be done under NMED approval. 1 2 But as an assurance during this, we're 3 committed to continuously operating that treatment 4 system and monitoring the groundwater data to make sure there's no unanticipated migration that could 5 б potentially impact drinking water users. 7 So that's the commitment while we iron out these more detailed scientific models and those 8 9 kinds of things moving through the process. 10 COMMISSIONER BARBOA: Thank you, Chair. 11 And I guess a question about funding. Ι know when I -- I live in the neighborhood, so does 12 Councilor Davis, adjacent to the Air Force base. And 13 14 yeah, I know I've heard a lot about funding. What 15 kind of funding is committed to the cleanup? 16 Yeah. So to date, MR. WORTMAN: \$130 million has already been spent on this project 17 18 to get to where we are today. And there's been no issue since me joining the Air Force in 2020 in 19 20 securing any amount of funding. 21 It's just we need to come up with that 22 clear, actionable work plan so I can put that funding into contracts and get it executed into the field. 23 24 That's one of my main responsibilities. 25 But as far as securing funding from the

Pentagon down, it's not been an issue on this 1 2 project. They understand the importance and due to 3 proximity of the drinking water users of this 4 contamination, so... 5 COMMISSIONER BARBOA: Okay. Thank you. And б I maybe would like to talk about funding over the 7 past few years, what that's looks like and what you're budgeting for, it sounds like after you get 8 9 some plans. 10 MR. WORTMAN: Yeah, yeah, if you wanted some 11 specific numbers, we can go ahead and do that. I 12 don't have those on hand, obviously. But it's a good 13 follow-up question. 14 COMMISSIONER BARBOA: Thank you. Thank you 15 for the presentation. 16 Thank you, Mr. Chair. Trustee Benavides. 17 CHAIR OLIVAS: 18 TRUSTEE BENAVIDES: Yeah, it's a great 19 presentation. 20 So when I look at the maps of the plume, that show were the contaminants are, those are 21 22 two-dimensional maps. So I'm assuming that is where 23 the contaminants are in the groundwater. Right? And 24 you know that through measurements from wells, I 25 assume. So that's a good indication of lateral

1 migration.

2 So I'm wondering about vertical 3 migration. Are there instances where there's a plume 4 above the groundwater that has yet to make it to the 5 groundwater?

6 MR. WORTMAN: Yeah, so that's a great 7 question; something I didn't go into. The image I 8 was showing was the dissolved phase contamination, so 9 that's the actual impacted groundwater. And we show 10 the uppermost layer, because that's the most impacted 11 by the fuel.

But there's other residual contamination in the vadose zone as well, so that's where fuel is still being absorbed into soil. That's going to have to be addressed in that CME evaluation. So there's other contaminants. We're just looking at the dissolved phase plume.

So if you'd like, we can go into some of those other details in a follow-on presentation. But there's other work to be done than just the impacted groundwater out there.

TRUSTEE BENAVIDES: Do we have a very good idea of where those contaminants were introduced into the soil?

25

MR. WORTMAN: Yes. It's associated with

that leaking off-loading rack that would leak every 1 2 time fuel was transferred from train car into the 3 bulk fuel storage area. And this occurred over a decade period 4 It was identified in 1999, when it finally 5 of time. б started daylighting to the surface. That 7 infrastructure was then removed immediately. And currently, we have all aboveground piping in that 8 area, with leak detection systems in place to make 9 sure there's no continuous fuel source to this area. 10 11 TRUSTEE BENAVIDES: Thank you. 12 CHAIR OLIVAS: Any other questions from 13 board members? 14 I suspect we may have others as we move 15 through some of these other subsequent presentations 16 that may bring us back to some of your points. So thank you, Mr. Wortman. Appreciate it. 17 18 So this takes us to Item Number 2. We 19 have an update from NMED, Mr. Rick Shean, the 20 resource protection division manager. 21 Welcome, Mr. Shean. 22 MR. SHEAN: Thank you, Mr. Chair. My name 23 is Rick Shean. I'm the resource protection division 24 director at the New Mexico Environment Department. 25 And I would like to thank you on behalf of Secretary

Kenney for inviting us and allowing us to get into
our perspectives on what the current status is as to
the bulk fuels facility site.

4 I'd like to also note, too, I've just been in my new position for about maybe a month or 5 б I was hazardous waste bureau chief prior for so. 7 just about a little over a year. But I've been around this site since a young professional when I 8 started working with the water utility authority as 9 their water quality hydrologist. So I'm very 10 11 familiar with this site, and I have some more 12 historical perspectives to share in my presentation.

But first, just to define our role and our interactions that we have with the Air Force, our hazardous waste bureau actually enforces the Resource Conservation and Recovery Act federal laws, and we've been given delegation authority by the EPA in order to do that. This has been for a long time now.

We also enforce the New Mexico Waste Act, and we implement this through the regulations that we have. One of the instruments that we have for several facilities is a permit. And that's something that both the permittee, that's Kirtland Base at this point, and state sign.

25

Within that permit, there is section on

1	corrective measures, corrective action. I may use
2	those interchangeably, so I apologize if it sounds
3	the same; I mean the same thing.
4	The bulk fuels facility falls under this
5	corrective action that were going on right now. So
6	it was their as a part of the permit, there are
7	several designated called solid waste management
8	units, a fun acronym we say is SWMU. So there were
9	several. There are two SWMUs associated with this
10	leak. So we enforced it on the SWMUs associated with
11	this.
12	I will note, before I get to this slide,
13	that the history of the site from 1999, when the
14	Air Force reported it to the New Mexico Environment
15	Department, at that time they requested that it be
16	regulated by the groundwater quality bureau under the
17	Water Quality Act. NMED did do that for ten years.
18	And up until about 2010, NMED became
19	was not satisfied with the progress on the site and
20	moved it back into under the hazardous waste
21	bureau to be enforced through their permit again.
22	About three, four, five years, sort of
23	the biggest action that was taken during that time,
24	hazardous waste instructed Kirtland Air Force Base to
25	put in several monitoring wells. Golly, it was a

huge drilling campaign, and for those who lived in 1 2 the area and endured it, it's been -- we think that 3 we could not fully appreciate what happened during that time and what the neighborhood was put through. 4 5 But between the years of 2011 to most of б 2014, the Air Force, meaning Kirtland leadership, and 7 when I speak of Kirtland leadership, I am not speaking -- reflective now of who is in the seat as 8 9 the commander of the base. But I will say at that 10 time, there was fierce resistance to the idea of a 11 pump-and-treat system. And it took this board, 12 Mr. Sanchez reaching out and finally using some 13 political capital to get in the face of the 14 congressional delegation to New Mexico to get the Air Force to the table to start that collaborative 15 16 process. And during 2014 up to 2019, I would say 17 18 the big success out of that, and as the Air Force pointed out today, was the reduction of that 19 20 contaminant groundwater plume mass. That was, at 21 that time, headed toward one of Ridgecrest wells. We didn't know really -- modeling told us one way, could 22 23 go another. We looked at range of options. 24 So the importance of the collaboration 25 at that point was to take care of the problem that we

didn't -- we didn't know anything at the time. It seemed like an emergency at the time. We didn't know how far, we didn't know how deep that plume was. So it took a lot of people to get in the same room and work around the table.

And Air Force did show up with the money б 7 at that point and the effort to take care of the plume. And as the map has seen, there has been a 8 9 great reduction in the mass. And I don't think the 10 water authority thought at the time when it was doing 11 its conservation and when it was going to implement its action in with the San Juan-Chama diversion, that 12 13 they thought they'd have an impact with this, but 14 that helped, as well. That brought the water table 15 And now, where the plume sits, I would say the up. 16 last two, three, four years, I have never seen the 17 plume more stable. So we know where it is. So I 18 agree with the Air Force, we have said it before, 19 they have done a good job with that dissolved phase. 20 There are still other portions of the contamination 21 to deal with.

22 So as Mr. Wortman did -- he did an 23 excellent job describing the corrective measures 24 process. And right now, we're in the investigation. 25 We do hope to get to the corrective measures 1 evaluation. As Mr. Wortman mentioned, there will be 2 an opportunity for the public at that time to weigh 3 in and discuss this.

But then we have to make a selection. 4 5 And it's the New Mexico Environment Department that's б going to choose what corrective measure is put in 7 place. And there is an opportunity for a dispute resolution if that is not what is liked by the 8 permittee or maybe even the public. And then at that 9 point, the final remedies we talked about, that's 10 when we start implementing those and get to a final 11 12 remedy in place.

So what we're seeing now in the current investigation phase, as I just described, the drop in municipal use of the water authority has risen the water table, putting the dissolve phase plume in a stable situation after much pump and treat and removal of a lot of the contamination mass.

However, the source area has not been adequately addressed. You know, just as the environment department took back the site into the RCRA program to enforce it, now this is what we want to do, we want to normalize the situation again, get this back on the RCRA track. Which we think the added benefit to the Air Force is that there is more

predictability in what we're going to ask, and we can 1 2 do one item at a time. So although there's a very successful groundwater treatment plant -- treatment 3 system in place, it does not address the source area. 4 5 Also, what we want them to continue to 6 look for during this interim is the extent of 7 contamination in the source area. And related is the soil vapor contamination. The soil vapor is where 8 all these off-gases -- if you've seen gasoline poured 9 10 on the ground and watch it evaporate, well, it does the same thing once it gets underneath the surface; 11 it's off-gassing. It creates little -- like a 12 13 groundwater plume, but it makes a vapor plume. So we 14 want them to look at that.

15 We also want them to look at the pathway that the released fuels have gone to. I mean, one of 16 the great things that the collaborative effort did 17 18 and all of the work together was come up at least with a conceptual model of what the release would 19 20 look like. They sort of dug into their files and 21 they know the leak, they know what was happening 22 during then. But the conceptual model, as good as my 23 description putting on a drawing right now, it's not 24 going to tell you exactly where you need to go and 25 put that remediation system in place so we can deal

with the risk once and for all.

2	So one of the challenges I see is that
3	in the letters that we have since 2019, we've been
4	trying to get the Air Force to come back into the
5	RCRA, and we see we have a difference of opinion.
6	And there were approvals that were given back during
7	that time when we were in what we could refer to as
8	sort of an experiment period. We stepped away from
9	formal RCRA actions and we took advantage of the
10	flexibility of the interim measures.
11	But now we want them to get back to the
12	table and start dealing with the source area, much
13	like we did when we brought them back to the table
14	and told them, "You've got to drill all these wells
15	out in the neighborhood and we really have to get
16	ahold of what's going on."
17	So at this point, we have actually
18	provided we've had some back and forth. If you
19	ever find the time, you want to read some boring
20	letters, there's a lot of back and forth between the
21	environment department and Kirtland on what exactly
22	is the next step. But we're hoping we can when we
23	talk about collaborate, we can work in this
24	relationship between the regulator and the permittee.
25	Data gaps, as I think even Mr. Wortman

brought up, free phase fuels, he probably talked 1 2 about the LNAPL plume, that's where the gas sits as gas, and it's either floating on top of the water or 3 it's caught in between rocks, sand, soil, clay in the 4 5 ground. However, it's still releasing and still б dissolving into the groundwater. So we want them to 7 make sure we can find where all these pockets are, exist. Also, as I mentioned, the migration pathway. 8 9 It's our feeling at this point that a 10 risk assessment cannot be a true representation, 11 although we did approve -- as we talked about the 12 groundwater phase, yes, as far as the pathway and drinking water, we believe that's been resolved at 13 14 this point, as things sit today. 15 But we cannot take the full sort of risk until an investigation is completed and we fully 16 understand what we're looking at. And to make sure 17 18 that groundwater cleanup standards are met across the 19 entire site. 20 We also have soil vapor sampling and groundwater monitoring. I'm not going to go through 21 22 all the details. I've provided this so you can read 23 it over time. 24 But our next steps, as I said, we want 25 to get back on the RCRA track with this site, we want

to fill the data gaps and we want to complete the 1 2 investigation activities so a remedy can be selected. 3 There's also been -- we feel we're getting pushback from Kirtland Air Force Base 4 regarding the direction we're giving on how they're 5 б sampling. They made references to approvals we gave 7 back during the experiment. Yes, there were a lot of smart people sitting around the table and they all 8 made a decision, how can we do this for cheaper, how 9 10 can we do it faster because we had to respond. 11 At this time, I think we're out of the 12 threat, and now we can get back to the work we did at 13 RCRA. We can start following standard protocols on 14 the sampling that they're doing and the way they 15 collect samples, much like Kirtland does on all the 16 other corrective action sites that we have on base and they do for their regular monitoring. 17 So we're 18 not asking them to do anything out of the ordinary. We're just asking them to sort of handle this the way 19 20 they do the other sites on base. 21 So when the data gaps are filled and the 22 data is collected, the investigation phase can be 23 completed and we can get to the -- we can find a 24 viable remedy through the corrective measures 25 evaluation.

That's my formal presentation, and I'm 1 2 happy to answer any questions. 3 CHAIR OLIVAS: Thank you, Mr. Shean. 4 Any questions or comments from the 5 board? Commissioner Barboa. б COMMISSIONER BARBOA: Thank you, Chair. 7 I just thank you for the presentation. I haven't met you and I'd love to maybe follow up and 8 9 meet folks. I guess thank you for saying that -right, the needed investigation and that that's in 10 11 process. I guess I'm -- are all parties that need to 12 be participating in the investigation doing so 13 willingly? 14 I'm sorry, I missed that last MR. SHEAN: 15 part. 16 COMMISSIONER BARBOA: I guess are all parties participating that need to be a part of this 17 18 investigation, you know, coming forth and willingly 19 participating in the investigation? 20 MR. SHEAN: So the Air Force is present. They are at the table. Are you referring to maybe 21 22 water authority staff, other stakeholders? 23 COMMISSIONER BARBOA: Yeah, I guess all 24 other stakeholders, but also, yeah, I guess 25 specifically Kirtland Air Force. When you say

there's an investigation happening right now and we 1 2 heard we can't really have time lines around what 3 this might look like -- I feel like when I came on, there was a lot of conversation about what had 4 5 happened. And it's been two years now that I've been б on the commission and that's the same information 7 that was presented tonight. So I quess my community -- what does the investigation process look 8 9 like?

10 Yes. I mean, are we almost MR. SHEAN: 11 I would like at least two more years using there? 12 data, using the analyses and sample protocol that we 13 are requiring, actually, of the Air Force to do this 14 going forward. I'd like to see that data in two 15 years till we probably get to a point to say, okay, 16 now we know exactly what we're looking for and we can put this in place. It's going to be many years, even 17 18 when we get the final remedy in place, it's going to 19 be many years.

That's why, thankfully, the Air Force did change, did bring money to the able in 2014/15 to put that remediation system in place so they could address what was the immediate threat. So I think we have some time on our hands using the standard process.

1 COMMISSIONER BARBOA: Using the standard 2 process, and that's ongoing? 3 MR. SHEAN: The RCRA. COMMISSIONER BARBOA: That's ongoing right 4 5 now? б Okay. Thank you, Chair. I think that's 7 it. Thank you. Thank you, sir. 8 9 CHAIR OLIVAS: Mr. Rael. MR. RAEL: Mr. Chairman. 10 11 Rick, if I may call you by your first 12 name. I'm a little bit concerned with your last 13 comment. When you say to this board and the 14 community that's listening, you refer to we're just 15 not sure what we're looking for or what's there. 16 That gives me a bit of concern in that, because of 17 the length of this process and what's been done, and 18 there's no question there's been some good work done, are there other issues that you feel that -- or other 19 20 contaminants or other severity situations with this 21 plume that we should be, if you will, more cognizant 22 about? Or is it just simply your concern that the --23 because it's on federal land, et cetera, that you 24 don't have enough information and you're hedging your 25 bets a bit in terms of what you might find?

1	MR. SHEAN: Mr. Rael, thank you for pointing
2	that out. What I will say is, we have a lot of data
3	on the site. We have a lot of information about the
4	plumes around the groundwater plume. I'm less
5	concerned about that dissolved phase plume at this
6	point. I'm not saying forget it. I'm saying we can
7	monitor it right now. We have a good idea.
8	The information we want, though, is
9	going to be more specific to the contamination and
10	the source, where all this was leaking in the soil.
11	That's what we really need, some good data, in order
12	to put something. And that's the Air Force, to
13	their credit, they spent a lot of years doing soil
14	vapor extraction. They were taking care of this
15	plume.
16	So in addition to removing those vapor
17	plumes, they were also moving fuel in the vapor floor
18	out of it, so they did get started. However that
19	system has not been on for quite a while. So it is a
20	concern if they don't turn back to that, and we may
21	have some it may take longer than is really
22	necessary. But there is a lot of data. So I don't
23	want you to feel concerned that we don't know
24	anything about this. We do.
25	MR. RAEL: Mr. Chairman, one more question

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1 to follow up.

So, Rick, and just for those of us listening and for us as members of this board, tell me what you think the solution looks like, and how much longer do you think we'll -- assuming all the parties come to the table, at least as we've talked about tonight? Are we talking two or three years out, and what does that look like?

9 MR. SHEAN: Mr. Rael, that two- to three-year time frame, if we -- and they've 10 11 recommended and the Air Force does want to work on 12 getting something that we can approve, and I will 13 accept that commitment of theirs, if we can do that 14 and not play this game of sending letters back and 15 forth, I think this is going to get done faster than 16 it is, faster than otherwise, the other alternative.

MR. RAEL: Mr. Chairman, I would just make acomment to the colonel and to the Air Force.

This is a significant issue for that part of our City of Albuquerque. And I would really make a request on behalf of the mayor and the city administration that if there is a method, a process that we can expedite the communication between NMED and the base to get these issues resolved, it would be in the best interests of all of us as it relates

to what we are going to do to remediate this and to 1 2 assure that the citizens of that part of the city 3 and, quite frankly, the entire region that relies on this aquifer, that we try and expedite that 4 5 communication to try and get to a solution. б I recognize that there may be difference 7 of opinion between, if you will, the experts on both sides of this issue. But I am sure that we can get 8 to some point in the process where we can get 9 10 together and really utilize those resources to get 11 this done quicker. Thank you. 12 MR. SHEAN: Agree. Thank you. 13 CHAIR OLIVAS: Councilor Davis. 14 COUNCILOR DAVIS: Really quick, Rick. It's 15 good to see you again. Thank you for bringing all 16 that back. 17 MR. SHEAN: Thank you. 18 COUNCILOR DAVIS: And I appreciate it. Ι 19 remember, I think I had repressed the trauma, but at 20 one point, I was part of that group that went to D.C. 21 to talk to our delegation to ask for some help to get 22 some more attention and some more resources. And so 23 I disagree a little bit that resources have always 24 been available. They quite frankly weren't, and that 25 was part of our challenge in previous years. But I

understand they are better now. 1 2 And I'm glad that you're here, 3 Mr. Wortman. Thank you. It's been refreshing to 4 have you here. 5 But at the end of the day, like, there б are disagreements, there are letters flying back and 7 forth, all of those things. But in this RCRA process, at what point -- I mean, NMED is ultimately 8 the agency responsible for overseeing or approving 9 10 these plans. So what are you not getting in terms of 11 there are these data points that are apparently out 12 there that we're not -- they're saying they don't 13 have access to or don't have in a timely manner? 14 Who is responsible for getting those 15 back? Is that NMED contractors? Is that their 16 contractors? Like, what's the -- what's the data gap and who is responsible for getting that back? 17 And 18 who is the referee in determining what data is right or what interpretation is right? 19 20 MR. SHEAN: I look taller in vertical stripes, so you could say the NMED is --21 22 COUNCILOR DAVIS: The referee. 23 MR. SHEAN: -- is the referee. COUNCILOR DAVIS: We've all used that term 24 25 for you all I think.

1 MR. SHEAN: Yes. Thank you. We're the 2 referee, and so we're just calling a foul, giving a 3 yellow card, saying, "Hey, come back to the rules and work at it." 4 5 Because, as you mentioned, it's us б making the decision at the end of the day and we are 7 going to have to defend it to the public if the public brings up or anyone brings up that there's --8 9 this data doesn't -- the quality of this data is not good and you've made decisions based on it. So at 10 11 the end of the day, it's the state that's going to 12 have to defend that. 13 COUNCILOR DAVIS: Mr. Chair, I appreciate 14 it. 15 And thank you, Mr. Shean. I appreciate 16 that. Yeah, in the past, that was kind of the problem. Again, I've been gone a year. I don't feel 17 18 like we're gotten very far in this process. Mainly, 19 because the plan that NMED was going to review when I 20 left just got denied. So that tells me we didn't get 21 very far. 22 But I do think that it felt like the 23 Air Force at one point was trying to move faster, 24 with different staff and different people. I fully 25 acknowledge it. I'm grateful for having some new

ones. But it felt like they were trying to move
faster just to do the cleanup and say they were done,
that they had a final action, move to final action
when we didn't have good data.

And so I hope that this next phase of denying that, sending it back for deficiencies, I hope there's enough specificity in NMED's denial to tell them what we need and where that data can come from and that there are resources on the ground to fill those gaps where needed. And if there's not, I hope that someone will include us.

12 I know the water authority has stepped 13 in previously to provide contractors, to provide 14 resources, to provide data to help move that process 15 along. And I can't speak for everybody here, but I'm 16 willing to bet that we would be willing to be a partner in helping with that again. I certainly know 17 18 the city would if we needed to be. Although, you 19 know, be careful what you ask for. So please, keep 20 us informed.

Thank you, Mr. Shean, for doing that. And I know our staff and our teams are with you all around those tables. But we have to get this done. It's been two years now and we still don't have the data we need to know the, sort of -- we know where

the plume is, but we don't know the extent of how 1 2 we're going to do this. And people still live there, we're still dealing with those issues and we've got 3 to get this done. It's been 25 years now. Yeah. 4 We 5 should have a party of something. б MR. SHEAN: Yeah. When I first started, I 7 didn't think I'd still be on it, I've got to say. Ι was hoping there was another division deputy 8 director, quite honestly. 9 10 Thank you, Mr. Chair. COUNCILOR DAVIS: 11 CHAIR OLIVAS: Anything further from board 12 members? Commissioner Barboa. 13 COMMISSIONER BARBOA: Thank you, Chair. 14 Just one follow-up question. I think, 15 again, to my point about money and where the budget is, I guess NMED being the final decision maker, do 16 you have authority to set some deadlines around --17 18 MR. SHEAN: Yes, we do. COMMISSIONER BARBOA: And have those been 19 20 set? 21 MR. SHEAN: We provide deadlines for, say, 22 the work plans we have coming up. And every time --23 if we provide them with a deadline to get the work 24 plan, they ask for an extension, we can offer it. 25 Two deadlines just recently passed and we have not

formally responded at this point. We're still 1 2 dealing with general counsel on how we're going to 3 deal with that. But yes, we can. COMMISSIONER BARBOA: Okay. Thank you. 4 And I guess just I maybe want to see where those --5 б because I understand there was -- like Councilor 7 Davis reminded us of the expense -- of the -- both resources, monetary and staff, and development of 8 9 treatment plans was robust at some point. It seems to have plateaued, and I don't know what -- yeah, 10 11 like, let's keep moving. 12 CHAIR OLIVAS: Councilor Fiebelkorn. 13 VICE CHAIR FIEBELKORN: Thank you, 14 Mr. Chair. 15 So along those lines, you know, there's deadlines that are coming and going, and then we set 16 17 a new deadline and it comes and goes. What is the What kind of 18 ramification for missing a deadline? authority does NMED have to actually make something 19 20 happen here? This has been a quarter of a century, 21 and it just seems like there should be some authority 22 within your purview to really move this along. 23 MR. SHEAN: We do have options. We have do 24 have the authority to do something. I would like our 25 general counsel, you know, to let us know what they

1 think we should do. Because you're right, it's been 2 a long time. 3 VICE CHAIR FIEBELKORN: Thank you, Mr. Chair. 4 5 Again, this is really important to the б City of Albuquerque and the residents here. And 7 missed deadlines are not something that I think should be tolerated in this situation. 8 9 Thank you, Mr. Chair. Thank you, Councilor 10 CHAIR OLIVAS: 11 Fiebelkorn. And not seeing any further discussion on 12 this, I just kind of have one -- it's really more of 13 14 a comment. But echoing what Mr. Rael and others have 15 said up here, this is a critical issue for our entire 16 community. It's just not that region of the city, that the respective commissioner and councilor 17 18 represent. It's our regional aquifer, our regional 19 water system that we're very proud of, and we have to 20 maintain and protect that precious water supply. So 21 I think this is a critical issue beyond this one 22 area. 23 And I also want to acknowledge the 24 importance of the Air Force case as a critical 25 partner, not just on this issue but in the economic

impact that that facility has and the important 1 2 impacts that has on our community as a whole. 3 But, you know, water is life and this is a precious key resource that underpins all of those 4 Without the water, we don't have the 5 things. б economic impact of that facility. So I hope that -- I really appreciate 7 the historical perspective that you're bringing to 8 9 this, and I hope that you'll continue to be a leader 10 in this. And I hope that we see this partnership 11 grow closer together, as it seems like, you know, right now, we're not communicating in the same 12 13 language all the time. 14 And missed deadlines, as Councilor 15 Fiebelkorn said, are just really not acceptable when you're talking about a resource like this that needs 16 protection and an issue needs to be addressed. 17 18 So appreciate you being here. Thank you, Mr. Chair. 19 MR. SHEAN: 20 CHAIR OLIVAS: That takes us to our third update here. This is a project update on the bulk 21 22 fuels facility from Diane Agnew with the water 23 authority. 24 MS. AGNEW: Mr. Chair, Members of the Board, thank you so much for the opportunity for me to come 25

1 and provide you with the water authority's

2 perspective. I know it's making for a long night of 3 presentations, but we all value your support and your 4 interest.

5 I am also going to spend just a hot 6 minute to talk about my background. So Rick and I 7 have a unique, long view of this project we've both 8 been engaged in since 2009, 2010, which means that we 9 can see both where we have been and where we are not 10 going and some of the obstacles in place, places for 11 opportunity for us to make some progress.

With that said, I'm just going to spend just a short period of time on this slide, because we've all talked about -- both Ryan and Rick talked about the history, but this was -- answers one of the questions that you had, Mr. Benavides, about where the leak actually occurred.

The picture on the bottom is what the old fuel off-loading rack used to look like. So it was this aboveground just like rack that the train cars would pull up next to, and then the fuel would go down into the ground into a pipe and it would go underground into the tanks and fill up the tanks.

And so there's nothing visible of the fueling infrastructure until they showed up to work 1 in 1999, and that's also shown on this graph, this 2 picture on the bottom. That's what the site looked 3 like after they found fuel pooled on the ground 4 surface and then removed the soil. So you can see, 5 even in that dated photo the staining of the soil, 6 and that was just the surface expression.

And then these other two photos are of the hole in the pipe. So when they pulled out the pipe to replace the infrastructure, they found the holes. And you can see that they're fairly small, about the size of a quarter. But it didn't take that much of a hole for millions of gallons of fuel to come through.

Just simply how the system works. So a little bit of the background on how the infrastructure was set up.

I also want to spend a minute talking 17 18 about MCL and really putting it into the correct 19 The maximum contaminant level is set by framework. 20 the EPA and it doesn't represent human health. Ιt 21 represents what the EPA believes is a technical 22 feasible level that they can both measure a contaminant to and treat a contaminant to. 23

24The number that the EPA has that25actually represents what's safe to consume is their

MCL goal. And so whenever the EPA talks about MCL 1 2 for EBD, but also put the MCL goal, which is zero. 3 That means that the EPA recognizes that the only safe amount of EDB to consume is zero. It's not the MCL. 4 It's an important factor when we're talking about 5 б risk and what the site should be cleaned up to and 7 how it should be monitoring the site. I also thought it was funny -- we all 8 have our own RCRA arrow. I'm not going to talk about 9 10 it. 11 This graphic is -- there's this fairly standard environmental stakeholder model, and I just 12 adopted it from bulk fuels. Because I'd like to talk 13 14 about why you just heard presentations from 15 Air Force, NMED and now the water authority. 16 So in the center is the problem. What are we all facing? We're facing the soil and 17 18 groundwater that's been impacted by the leaking jet 19 fuel. 20 Who all is involved? Well, you have the water authority. We fall into the category of the 21 22 may be adversely affected by decisions. 23 So this is -- we have legitimacy in our concern, we have urgency in our concern. We do not 24 25 have any power to change the outcome for ourselves.

But we can be affected by the decisions being made. 1 We can be affected by the delays in the project. 2 We can be affected by the failure to characterize the 3 project. So that's where we sit in this bubble. 4 5 The environment department, they sit in 6 the bubble of being responsible for preventing or 7 minimizing the risk. And, you know, they're state regulators and they do that through the RCRA permit, 8 as Rick just talked through the RCRA process, holding 9 the permittee accountable, making sure they're 10 11 meeting the metrics, delivering data that reliable 12 and robust. 13 And then the other part of this 14 structure are two really important parts. There's 15 those who created the risk. In this case, it's the U.S. Air Force with the leaking jet fuel, and then 16 there's the contractors. 17 18 So the Air Force hires contractors to do 19 all the work that they presented to you, and those 20 fall into the category of may favorably me affected by the decision. Typically, they have a gain. 21 In 22 this case, contractors get paid to do the work for 23 the Air Force to investigate and implement. 24 I'm just going to also briefly update 25 the water authority. We did install our data gap
monitoring well. We decided that well was critical. 1 2 We've been watching this site and we evaluate all of 3 the Air Force's groundwater monitoring data ourselves. We do our own groundwater modeling. 4 And 5 based on all those inputs, we decided that there's a б part of aquifer that had not been investigated that 7 we were concerned about, as the EDB may be moving toward our supply wells without being measured. 8

9 And it was worth it to us to go after 10 capital outlay funding. Thanks to our legislators, 11 we received it. We installed the well. It has no 12 EDB, which is great news. Because that means that we 13 have a point where we can see reliably and we know 14 that ethylene dibromide is not moving towards our 15 supply wells. And it also gives us the ability to 16 better constrain the plume. We can put that into our conceptual model. 17

18 This is a cartoon of what the site conceptual model is. And it really, I think --19 20 hopefully it brings together everything we've talked 21 about in a very -- a 2-D view, and also with a lot of 22 text and a graphic. So the idea is that where that X 23 is, that's where the fuel off-loading rack was. Ιt 24 leaked fuel over time. Some of that fuel stayed in 25 the ground. Some of it is sitting as a fuel vapor.

Some of it's actually fuel that's stuck in the soil. 1 2 And some of it moved down to groundwater, where it's 3 dissolving and moving towards our supply wells. We don't have complete characterization 4 5 of the fuel mass, but Rick just talked about how б that's a big data gap. And that's something that 7 they really want the Air Force to characterize, and we completely agree. 8 9 The Air Force's slide showing the 10 benzene plume where they're touting plume stability 11 actually highlights plume instability, because if you look at the graphic on the left and compare it to the 12 graphic on the right, it gets more dark red. That 13 14 means higher concentrations. And, in fact, if you 15 look at the graphic on the left data and you look at 16 the graphic on the right data, you see some of those data points change by an order of magnitude. 17 18 So there's fuel in the ground. As the 19 groundwater comes up, it's touching that fuel. 20 That's going into the groundwater. And as long as that's occurring, we have a risk to our groundwater 21 22 supply. 23 And then that's where we get to the 24 source treatment. So without treating that remaining

fuel, you're going to have that leak continue for --

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what we've actually modeled, that will continue for 1 2 over 100 years. So if there's nothing implemented to 3 go after the source, we're talking about over a century of impacts to our groundwater supply, even if 4 5 that pump -- and that's assuming the pump-and-treat б system is running. So with the pump-and-treat 7 system, we just have to keep going for almost three generations without any changes. 8

9 Another slide I'd like to talk about, I 10 know we've brought it up, and it goes to the 11 groundwater monitoring discussion. The NMED is 12 requiring Air Force change their groundwater 13 monitoring program in a way that completely aligns 14 with the recommendations of the technical staff at 15 the city and the water authority.

And the other thing that we keep talking about is we are urging the Air Force to contour their plume to all detections. What they are showing in their maps is they are showing just the concentrations of the ethylene dibromide above the MCL.

So, again, MCL is not protective of human health. It's just the regulatory cleanup standard. The MCL goal is zero. So contouring all detections really is what we want to look at to be

able to understand what the true risk is: Where is 1 2 EDB and where is it not? 3 The map on the left is what the water authority has done with our contractor. This maps 4 5 all detected ethylene dibromide at the site. б Another key difference between the two 7 maps is that we are actually showing what ethylene dibromide looks like right at the water surface. So 8 to go back to my cartoon here, right where the top of 9 the blue line is, that's where we expect ethylene 10 11 dibromide to be because of how it behaves in water. 12 And so when you contour the measured 13 concentrations at that water table and you do all the 14 detections, you get a plume that looks like this on 15 the left. 16 The Air Force is presenting something remarkably different when they go and present just 17 18 the MCL, and then they use a reference elevation 19 that's much deeper than the water table, where you 20 would expect to see lower concentrations of ethylene 21 dibromide. 22 And then I should say that both these 23 maps are using Air Force data that isn't in 24 compliance with the NMED groundwater monitoring 25 requests. So there is some adjustment that would

need to be made getting that data that NMED has 1 2 requested, getting multiple corners, and then you can 3 look at how the plume is moving and shaping. And when I -- when we decided to build a 4 time line -- the Air Force time line is looking at 5 б tasks. And they certainly have done a lot of work out here and they've spent a lot of money out here. 7 I'm going to put this time on the 8 projector. Our time line focuses on progress, 9 10 because ultimately what we want to get to is final 11 remedy. And that's the remedy selection. This remedy selection, that's really where we want to go. 12 13 The water authority wants to get to final remedy as 14 much as anybody else. That's when we know we can 15 start having confidence that our water is getting 16 cleaned up and there will be reduced risk to our water supply. 17 18 So that's why it has that characterization. That's the big RCRA milestone that 19 20 the Air Force needs to clear. As Rick said, they to complete that investigation so they can move into the 21 22 corrective measures evaluation. That is incomplete. 23 And what we'd like to highlight here is 24 that they are currently working and continuing to 25 collect data under a work plan that's been

1 disapproved by the environment department.

2 Since 2020, the state has issued ten 3 notices of disapproval. The Air Force has responded with issuing 16 extension requests. None of these 4 5 extension requests argue the technical merits of what they're doing. Instead it is a lot of letter б 7 movement, which we saw when we were on the site in 2009 and 2010, similar to what Councilor Davis is 8 referencing, when there was a need to start meeting 9 10 with the delegation and getting increased political 11 pressure.

12 The height of this time line really doesn't illustrate what was referenced with the 13 14 technical working groups. So a lot of effort was 15 made by this board and by our local elected 16 officials, the city, to go and get funding for the project. You see that spike in funding in 2014. 17 18 That coincides very neatly with when the groundwater 19 treatment system was put into place. That was the 20 effort of a collaborative approach with technical working groups involved with the City of Albuquerque, 21 22 water authority and the environment department and 23 the Air Force.

24Those technical working groups, they did25not happen after 2018. We had our first technical

working group in 2021, actually. And there was 1 2 supposed to be a follow-up technical working group. 3 That has never happened. We've requested it. And the environment department is amenable to having a 4 5 technical working group if they can get the Air Force б to come and meet. The Air Force is so far not 7 willing to come to those technical working groups. But we feel that -- you can see that the combined 8 9 technical working group collaborative approach with 10 funding is where you saw a lot of progress at this 11 site. And that's where we think there's a need for 12 increased push to see that progress move forward 13 again at a time line that is appropriate. 14 I'd also like to highlight the -- it 15 ties back to that cartoon graphic again, the source 16 There's no source area cleanup area cleanup. happening now, but there used to be source area 17 18 cleanup. And Rick mentioned it in his presentation. 19 The Air Force was running a soil vapor 20 extraction system that was very effective. It was 21 pulling fuel out of the ground. It was consuming it. 22 And they've removed tons of fuel from the ground. 23 And that system was shut down in 2015. And it 24 actually has since been decommissioned, though it was 25 proving to be a very effective way to treat fuel in

the soil. 1 2 So there are technologies that we know 3 work out here that we could revisit and we could apply to get off of that source so that we could 4 reduce the risk to groundwater and also make rapid 5 progress towards cleaning up the site. б 7 So moving forward, really, there's three main areas to focus on. Many more here. 8 But 9 ultimately, active remediation of the source area is really critical. Until that happens, we will have 10 11 continued risk to the groundwater source. That funding allocation is also key, 12 making sure that the Air Force is requesting 13 14 sufficient funds to be making aggressive progress at 15 the site, that they're coming into compliance with 16 NMED. And along those lines, continuing to support 17 the environment department in their efforts to do 18 oversight at the BFF project site. And again, that's 19 really how -- how this happens is through engagement 20 with the public, through the elected officials and 21 this board. This board has been instrumental, hugely 22 supportive. And we'd like to encourage and support 23 that in any way that we can. 24 So with that, I will stand for questions. 25

CHAIR OLIVAS: Ouestions for Ms. Agnew? 1 2 Seeing none, I really want to thank you 3 for coming before us and letting us hear your update here. I think that really tied things very nicely 4 together for us. And I just kind of have one 5 б question on this. 7 I mean, what I'm hearing is, if that source, that point source is not remediated, we're 8 9 going to continue to see those fuels, whether it EDB 10 or benzene, any other of those components of the 11 fuel leach into the aquifer, into the water table, 12 and continue to migrate out into the community if that point source is not addressed. 13 And so 14 currently, that is not being done? 15 MS. AGNEW: That's exactly right. And it's 16 worth highlighting, there's a couple things in here 17 that make this site unique in the need for that 18 treatment, is if we had a static water table and it 19 wasn't rising, you could maybe get closer to the, 20 quote, unquote, plume stability. But that is not the 21 This water table is rising because of our case. 22 groundwater management practices. 23 So these little red ovals in this 24 cartoon, those are pools of fuel still in the soil. 25 So as that water table comes up, it comes into

contact with that fuel reservoir and just dissolves 1 2 and increases concentration. So it's a dynamic system that will continue to be dynamic until we get 3 some treatment in the soil. 4 CHAIR OLIVAS: And one other point I wanted 5 to clarify, as well. 6 7 On threshold levels that are being measured that makes those difference in those two 8 maps, to be clear, the water authority's perspective 9 10 is that there is no safe level of EDB for human 11 consumption? And that is what your map reflects, is where is there any detectable level of this 12 13 contaminant versus the Air Force map which is showing 14 only the threshold. At any point where it's above 15 the threshold, dangerous contact essentially. And 16 you also made that distinction about the level at which it's being measured also causing some of that 17 18 discrepancy; is that correct? 19 MS. AGNEW: That is correct, Mr. Chair. 20 That's correct. So you've got it exactly right. And 21 while it is -- so the MCL is what the environment 22 department can currently force the Air Force to clean 23 up the aquifer to. 24 The approach should, in our opinion,

really be that the plume should never go past where

it is right now, because any migration is going to be 1 above zero and that's not safe. We need to be 2 3 reducing this now. We would actually like to see cleanup to 4 5 But that is truly safe. That is when this zero. б will become an available resource to us. As long as 7 there's ethylene dibromide, this is not available for us to use. 8 9 And to say there's no risk to the 10 groundwater or no risk to the drinking water supply 11 wells is not entirely -- what that statement means in 12 a true risk perspective, what that is, is that 13 there's no supply well in this plume right now. That 14 doesn't mean there's no risk. And I think that's 15 what we're trying to highlight with that. 16 CHAIR OLIVAS: Mr. Rael? Okay. Seeing no further discussion, 17 18 thank you so much for coming here and filling us in 19 on this. 20 So our last item on this topic here, we have an update from --21 22 MS. AGNEW: Yes, sorry, I forgot to 23 introduce Mr. John Fleck. He is with our technical 24 advisory committee, and I failed to introduce him 25 entirely. I apologize. He's here to present on the

1 TCAC.

That's okay. I don't have a lot 2 MR. FLECK: 3 to add, and so I won't take much of your time. My name is John Fleck. I'm a faculty 4 5 member at the University of New Mexico working on б water policy and the water resources program, doing 7 natural resource water work, and was part of the technical advisory committee group. We, you know, 8 advised -- you know, we view our role as helping 9 10 advise the water authority on issues such as this. 11 We are significantly concerned about 12 what we have seen. But my history with this project 13 actually goes back a lot further. I spent a lot of 14 time sitting in the back as a newspaper reporter and 15 writing about this. I think interestingly, Diane and 16 Rick and I all go back to the beginning. 17 And the concern I have, when I return to 18 this issue in my role as technical customer advisory committee, is that we're kind of in the same place we 19 20 were when I stopped writing about this many years ago 21 in the newspaper. 22 Diane did a nice job of explaining the 23 complicated regulatory dance that is underway here. 24 We have a state regulator, we have a regulated 25 permittee. And then we have the water utility

authority off on the side as the party most 1 2 potentially harmed by all this. And when I say the 3 water utility, I really mean your constituents. And as a sort of academic water policy I 4 5 want this to be like a super fascinating question, б but that's my water supply and my community. So I'm, 7 you know, emotionally attached to it, in a way, beyond the mere academic nature of it. 8 9 But there's really an important point, and I think Rick made this point in the exchange with 10 11 Councilor Davis, that one of the really important things that I saw back when I was covering this as a 12 13 newspaper reporter for the Albuquerque Journal, and 14 what we have seen in the years since, is that, in 15 fact though you don't have regulatory authority, your 16 political capital as community leaders, as elected 17 officials charged with the responsibility of both 18 sitting on this board but also representing the city and county residents, the investment of political 19 20 capital on your part to provide the necessary 21 pressure on the dancing parties -- I mean, we've 22 heard a lot of discussion about how the dance is 23 going right now. And, you know, I'll point to ten 24 notices of disapproval and 16 time extensions, gives 25 me a sense of where I think the problem is now. But

we have seen that active involvement by elected 1 2 officials in this community as leaders and representatives of the community has helped make 3 4 progress. 5 And so I guess that's, as a technical б customer advisory committee, what I'll ask of you. 7 You've got a great technical staff, but your investment of some of your political capital to put 8 9 the pressure on the necessary places, and it may need to be the Air Force now, there may be times when it 10 11 needs to be the state regulators, is crucial to 12 getting this problem solved. So I won't take any more of your time. 13 14 We've been here a while. Thanks. And I don't know, 15 any questions maybe? Thanks. 16 Thank you, Mr. Fleck. CHAIR OLIVAS: Any questions from any of the board members? 17 18 COMMISSIONER BARBOA: Thank you. 19 CHAIR OLIVAS: Really appreciate everyone 20 tonight on this issue. And I just want to say thank 21 you to everyone that participated in this, from the 22 environment department, Colonel Vattioni and 23 Mr. Wortman, and of course our own water authority 24 staff and our technical advisory board. 25 This is an issue that is obviously

ongoing and really has gone on too long, and we're 1 2 not at the end yet, unfortunately. But I really hope that this can serve as a wake-up call to everybody in 3 the room that this is the time to really come 4 5 together and act and work together. And if that б means some of us up here putting pressure on other 7 elected leaders or working with regulators or whatever we need to do, I think this is a really 8 critical issue for our entire community. 9 And appreciate the buy-in from all parties here. 10 11 And I really do want to, again, thank the Air Force or being here along with our 12 13 environment department and all the staff. So thank 14 you. MS. AGNEW: Mr. Chair, I want to let you 15 know that our first presenter is here. 16 Thank you so much. 17 CHAIR OLIVAS: 18 So we will return to our first, but now 19 our last presentation here on STEM in the Burque 20 career pathway. We have Amon Haruta here, the 21 director project management from Explora, to tell us 22 about this exciting project. 23 MR. HARUTA: Thank you so much, Mr. Chair 24 and Members of the Board. This is my first time in 25 this building. And my apologies for arriving late.

I live in Santa Fe, so I rely on Google Maps 1 2 sometimes, and my Google Map took me to Vincent 3 Griego Child Care Center on Alameda, so my apologies. But thank you so much for having me. And I'm very 4 excited to give you an overview of this project and 5 б exhibition called STEM in the Burgue. 7 So what is STEM in the Burgue? It is an immersive exhibition, with many components, housed in 8 9 this brand-new extension building that we just 10 finished at Explora called X Studio. And, really, 11 it's a co-creation project that we have been doing with the community, local teens, water utility 12 13 authority and other local STEM employers and 14 educators. 15 There are three goals. One, to increase awareness of STEM activities that's happening in 16 Albuquerque and extended New Mexico communities. 17 18 Number two, to empower teens and also their families to think about solutions to the world's big problems. 19 20 And number three, to encourage and really develop 21 Albuquerque youth and New Mexico youth to be future 22 STEM leaders. 23 This exhibition, STEM in the Burque, has

24 several components. Biggest component would be, I 25 would say, the exhibits. As many of you may know,

Explora is known for the hands-on activities and 1 2 different types of activities and exhibits. We have 3 14 brand-new exhibits, seven of which -- and I should actually say nine of which we've developed in 4 5 collaboration with water authority. And I see б several faces here who have been part of this great 7 project. So those nine activities, exhibit activities, are based on different ideas and focuses 8 9 of the water resource management.

And the exhibition, as I said, has other components. Team lounge, classrooms, makerspace and other types of facilities and mentor corners to meet with different STEM professionals.

14 Now, how did this STEM in the Burque 15 develop? So we have to go back several years, almost 16 ten years ago. The initiation of the concept for STEM in the Burque really started with community 17 18 listening sessions. Over the years we held, I would 19 say, 25-plus, probably more than 30 altogether, 20 communities sessions really asking the community what 21 the aspirations are and what they would like to see 22 in the community.

And with that, out of it, we came up with this concept of creating a space, an exhibition for teens. Because teens historically and generally speaking are somewhat underserved and a little bit overlooked in the museum world. So we also felt, listening to the community, decided that it was important to create a physical space and also exhibition that are dedicated to really elevating and providing opportunities for the teens.

7 So about three years ago, we also had more listening sessions in the conversations with 8 9 several teens about what they would like to see and what they want to see. And after that we decided to 10 11 put this grant into writing and we got the grant from a federal institution, the IMLS, Institute of Museum 12 13 and Library Services, and there we were. We started 14 the project.

And throughout the project, some of the key elements of this project were really active participation by the community, mainly teens, partners like the water utility authority, several subject-matter experts, and educators and other people, other museums also throughout New Mexico and also other states.

22 Challenging also was the continually we 23 made an effort to really keep the buy-in from 24 everybody involved, and especially in this case, this 25 project got so prolonged because of COVID. Also

construction delays of the new center. It was a 1 2 challenge. But also a great challenge to really keep 3 the interest of all parties involved. This was, by far, the largest exhibition 4 5 project that Explora took on in our history, so we utilized a lot of resources, not just internally but б 7 also, again, community partners and different vendors and contractors. So it began a real community 8 effort. So it's a culmination of different 9 10 components of our community, teens, employers, 11 educators and different businesses. 12 Now, how did this start? We go back 13 about three years. It's hard to believe three years. 14 But we kicked off with a small meeting with people 15 from the water authority, and we had this fun 16 activity called design charrettes. Again, several faces I see here were part of this design charrette. 17 18 We do this in the museum world. We get people together and we play with different materials to 19 20 create what we want to see for the exhibit. 21 In those sessions, we came with three themes for this exhibit, especially, particularly, 22 23 this nine exhibit set themed around the water 24 resource management, watered resources division, 25 water treatment and conservation stewardship.

Conservation, when we say conservation, 1 2 is not just conservation of water, but also 3 conservation of wildlife through water resource 4 management. 5 And seven focus areas we came up with as well: Aquifer shortage and recovery; reuse; б 7 watershed protection; water storage; groundwater and surface water protection; water treatment and 8 9 distribution; and wastewater collection and 10 treatment. 11 And key note that we wanted to convey 12 through these nine exhibits was everyone has a role 13 to play in the work of Albuquerque Water Utility 14 Authority and New Mexico's water treatment and water 15 resource management. And the key question: What is 16 your role? Now, I'd like to just briefly go over 17 18 those nine exhibit expanses. And the first one is sort of a centerpiece of the exhibit set, and I 19 20 really encourage all of you, if you have haven't been 21 to Explora recently, please come and check it out 22 yourself. The centerpiece of this exhibit set is 23 called Water 2120 Game. It's really based on the 24 Water 2120 plan. We worked with a local company 25 called Electric Playhouse to create this game to

simulate sort of a time travel scenario that you can
 play. And you can play with different water
 resources and sources, really, to see how you can
 come up with a really sustainable water plan for the
 future.

б Now, second one is the Water Resource 7 Distribution. This is really more of an engineering problem-solving game. It simulates the water source, 8 so the route from Rio Chama to watershed. And you 9 use different water resources available to come up 10 11 with an amount of water needed for the day. So the 12 exhibit generates the requirement for the day, 13 randomly, and you play with the different allocation of water. And it simulates the water movement 14 15 through different water sources.

Water Bar, this one has four different activities. One is a simulation of circulation. Another one is a filtration. We have a microscope to look up the microorganisms in the waste water. And then a Pac-Man-like game to simulate how bacteria helps treat the water, clean water.

Another piece is the Conservation. This is a pretty simple game. Rick was real instrumental in creating this game. It really stimulates the water -- well not really, simply visually represents 1 use of water, depending on what kind of daily 2 activities at home. And you have a choice of high 3 efficiency option versus normal option. And it 4 really simple represents how much water you could 5 save using different options.

6 We have also Aquifer model. This is a 7 model of aquifer in groundwater. You can use a food 8 dye to really see how the water seeps into the ground 9 and how it gets stored. And also that represents if 10 contamination happens, then how it gets into the 11 aquifer system.

And we have Refugium. This is more of a passive exhibit. It's not necessarily hands-on. But we also like to represent -- model the aquifer refugium to see water resource management also really, you know, helps protect wildlife.

We also have Showcase of water authority 17 18 staff. Diane is one of them. Yeah. And we have 19 those posters or panels throughout the building 20 highlighting STEM professionals. And in this case, 21 of course, and the water utility staff. And not just scientist, but also people who help science happen, 22 23 who help make those things happen, we are 24 highlighting. And these are three of the 15 panels 25 we have in the building.

1	So what's next? This has been very much
2	a learning experience for us and for the community,
3	as well. In Explora, we are all learning how these
4	exhibits work and also how programming will work.
5	And we are evaluating right now and we're learning a
6	lot. Some things are breaking down, but we're coming
7	up with solutions to keep it going. And we will also
8	do periodic evaluations of them, not just physical
9	exhibits, but also how programming activities will
10	work in this building. And we also will continue to
11	maintain and improve exhibits and equipment.
12	And the water authority really
13	generously is helping us in terms of both funding and
14	also subject-matter expertise to keep that going.
15	Several ideas have been exchanged
16	between us and water authority. Some of them, as you
17	see here in this presentation, we are really hoping
18	to have "Meet a Scientist" or "Meet a Professional"
19	type of activities, involving teens and inviting
20	people, like Rick and Diane, Liz and Mark here, to
21	talk to the teens and interact and talk about water
22	resource management and conservation.
23	We are also thinking of some kind of a
24	field trip also, organized by water authority, and
25	work with our interns, as well, to facilitate that

kind of activity, inviting families and teens, other 1 2 youths. So yes, we are very, very excited. 3 And it's really -- this STEM in the Burque and X Studio combined, it's really a promise 4 to teens and their families, and especially teens of 5 б low income background and also teens of color and 7 their families, that every single youth, every kid has an opportunity to choose their future. And we 8 are promising them, we are promising the community, 9 working with a community partner like water 10 11 authority, to do our best to make that happen. 12 CHAIR OLIVAS: Thank you, sir. Appreciate the report. 13 14 Any questions or comments from board 15 Trustee Benavides. members? 16 Yeah. TRUSTEE BENAVIDES: The Explora is a wonderful asset for the city and there's many 17 18 different age-appropriate activities going on. 19 How do we get more teens to visit 20 Explora. I think maybe you were touching on that 21 with your last slide. Do you have thoughts about how 22 we do that? 23 MR. HARUTA: Thank you for the question. 24 This STEM in the Burque, because we knew the target 25 audience for this particular exhibition, teens, teens

are a very tough crowd, so as you can see, on the 1 2 color scheme you see in this presentation is also the color scheme for the exhibition, itself, in the 3 building, we wanted to make ourselves a little bit 4 5 more relevant to the teens, meaning: Be cool. б So it's a challenge, but also, we have 7 teen interns now, about 45 to 50 teen interns already. So through that, we are really counting on 8 word of mouth, as well, and they talk to their peers, 9 social media, whatnot. 10 11 And also, we reach out to schools and 12 different teen groups. We work with the city youth 13 council. We also have a youth advisory group, teen 14 advisory group, and we engage those people and we 15 tell them to talk to the teens, we ask them to talk 16 to their families. 17 And also, we try to stay relevant, 18 meaning we try to stay cool and more interesting to the teens. And that's just some of the examples. 19 20 And we also host, as you may be aware, we have teen nights. We invite just teens to take over the museum 21 22 and have some fun activities that are related to teen 23 subject areas. 24 So those are some of the examples that 25 we try to court more teens into the building and

1 | engage in teen activities.

2 TRUSTEE BENAVIDES: I used to do hands-on 3 science for Los Ranchos Elementary School. And 4 taking science-type activities to the schools was a big hit. Of course, we're talking about elementary 5 б schools. 7 But what I'm thinking about, do you go -- do you reach out to the schools? Will you out 8 9 there --

10

MR. HARUTA: Yes.

11 TRUSTEE BENAVIDES: -- with some hands-on
12 activities?

MR. HARUTA: Absolutely. Yes. Yeah.
Explora reaches pretty much every corner of the state
and actually beyond. We reach southern Colorado
also. We have a relationship with virtually every
library in the state, as well.

18 So several things. You know, we have a numerous number of activity kits that we send out to 19 20 the communities, school districts, libraries. We also, again, outreach activities also involve 21 22 physically bringing mini Explora to different 23 schools, different districts, different communities. 24 So we bring Explora to those communities, as well. 25 And I mean, literally, our education

team logs thousands of miles every single year. 1 And 2 I would say about probably 20,000, actually more than 3 that, several tens of thousands students we reach, 4 both at Explora and away from Explora. 5 TRUSTEE BENAVIDES: Thank you. б MR. HARUTA: You're welcome. 7 CHAIR OLIVAS: Anything further from the board? 8 9 I overheard some chatter from Councilor Jones about a field trip. I think it's a great idea 10 11 for all of us. I think there's a lot for us to 12 learn. It's a great facility and exciting 13 partnership. 14 COMMISSIONER BARBOA: We want a water 15 utility night. 16 TRUSTEE BENAVIDES: Yes. CHAIR OLIVAS: A really exciting 17 18 partnership. Thank you, Mr. Haruta, for being here and doing what you're doing for our entire state and 19 20 our STEM career pathway. 21 That concludes Item Number 10, other And that will take us back into our 22 business. 23 regular order of business. 24 Item Number 7, introduction, first reading of legislation, Item A, R-23-6, establishing 25

one-year objectives for the Albuquerque Bernalillo 1 2 County Water Utility Authority in fiscal year 2024 to meet five-year goals. We have Ms. Elizabeth Anderson 3 4 here to present this item. 5 MS. ANDERSON: Thank you, Mr. Chair, Members б of the Board. So I'm here for introduction, like you said, for the goals and objectives. I'll try and get 7 through this quickly today. I know we've had a 8 9 really long agenda. 10 But this is an exciting topic. We do 11 this every year. It's part of our strategic planning 12 process. We have our five-year goals and one-year 13 objectives. So at the very top of this strategic 14 planning process, you'll see those objectives. 15 That's what we'll go through tonight. But it's just 16 the very beginning of this process. The next step is the performance plan, 17 18 which you'll also be hearing more about later in 19 coming board meetings. 20 We do an American Water Works Association utility benchmarking every year to see 21 22 how we stand with respect to statistics, you know, 23 that are collected by other utilities of a similar 24 size. 25 And we do -- and then we have effective

utility management. We do quarterly meetings and go
 through all of these objectives with our staff from
 across the utility to discuss how we're doing in
 these different areas that we're targeting improving.
 We do our annual budget. These goals

6 and objectives will get rolled into the annual budget 7 if there's any additional funding needs in order to 8 accomplish them.

9 Then here on left-hand side of this 10 graphic, you can see more of the qualitative metrics 11 that we're collecting feedback through our customer opinion survey from our customers. We meet monthly 12 13 with our technical advisory committee, John Fleck, 14 who was here presenting to you tonight, one of the 15 members of that committee. We do customer 16 conversations throughout our service area.

And we also do employee expectations, which is the performance expectations for all of our staff members, which these objectives actually get rolled out through. So that's one way that we're able to collect that, let people know how they're contributing towards this overall strategic planning process.

24 We have five-year-goal statements, and 25 all of our objectives roll up underneath these goal

1 statements. This is a program that was implemented 2 by the EPA in conjunction with a bunch of different national water agencies, including NACWA and the 3 American Water Works Association. 4 5 So these five goal-area statements, they б don't change year by year. The objectives within 7 them do change year by year. So we have goal statements for customer service, business planning 8 and management, organizational development, water 9 supply and operations, and then wastewater collection 10 11 and operations. 12 Something I also wanted to highlight 13 here is that we implement these objectives as a 14 measure for improving our systems. These aren't 15 policies. These are objectives. They're kind of 16 stretch goals, I think is what you could say. We're 17 always trying to seek ways to improve what we're 18 doing. 19 The performance measures by each goal 20 area, these provide more databased performance 21 measures that we can look back to in each of these 22 areas. 23 And so this is part of our -- these 24 objectives are part of the effective utility 25 management process that we use throughout the

utility, where we actually go back and every other 1 2 year, we look at how we're doing with respect to 3 different the areas within the organization. And we try to find ways to improve in each of those areas. 4 5 So we have strategic planning sessions with each of б our business sections and identify measures that can 7 be taken to help us get to that next level. And a lot of those do come through as objectives, so 8 there's a number of those that are included this 9 10 year. 11 I wanted to highlight just a few. Like I said, I'm going to try to do this fast because I 12 13 know it's kind of a long agenda tonight. But some of 14 the key areas that we're working on in Goal Area 1, 15 we provide leadership for the middle Rio Grande 16 endangered species collaborative program. Mark 17 Kelly is the nonfederal co-chair for that committee. 18 And we work with them on a lot of adaptive management practices for the middle Rio Grande endangered 19 20 species. 21 We also are members of the Partnership 22 for Safe Water and constantly seeking to improve how we're treating and distributing water throughout our 23 24 systems. We have some objectives that are looking at 25 arsenic treatment to improve resiliency of our

groundwater systems, because in times of drought, we 1 2 do have to lean back on those groundwater systems, unfortunately. 3 And then a lot of areas where we're 4 5 focusing on xeriscape conversions, water conservation б measures, targeting some of our high use water 7 There's objectives in here for helping customers. low income customers participate in those programs, 8 and really find ways to conserve within their 9 10 systems. 11 And then our leak detection programs and 12 constantly seeking to reduce that non-revenue water 13 loss and save water throughout our system, which is 14 an area we actually really excel at. The Goal Area 2, we've got wastewater 15 collections and operations. We have a target of 16 30 percent of our waste from the wastewater treatment 17 18 plant going out and becoming compost. And then that 19 gets taken out throughout Bernalillo County, really, 20 and used by a number of users. 21 We also have objectives for 22 collaborating with partner agencies; in particular, 23 the office of the natural resources trustee. And the 24 work that we're doing for this whole habitat project 25 right now at the outfall, which is a good

collaboration with the Middle Rio Grande Conservancy
 District and the Interstate Stream Commission, Bureau
 of reclamation, and, of course, ONRT.

4 Our customer services goals, we've 5 converted about 70 percent, over 70 percent of our б systems to the AMI, the automated meter infracture, 7 which has been an excellent way for us to find more conservation that we can do through our system and 8 provide, you know, more accuracy of billing for 9 10 customers. So we're continuing to roll out that AMI, 11 with the goal of getting 100 percent of our system 12 on AMI.

We have customer service metrics that we've been adding. We've been really targeting call quality with customers. And that's been an area where we've seen some improvement, so we've actually increased our goal for that one. And of course we're going to be doing customer conversations again this year.

For Goal 4, business planning and management, we're working hard to work with the funding that Bernalillo County provided through the ARPA program. Thank you to all of our commissioners in Bernalillo County. There's been some excellent projects that are going through, including the

Tohajiilee pipeline, and a number of other really 1 2 important projects in our system. 3 Our rehabilitation and renewal programs, we're doing a lot of infrastructure repair right now 4 5 and rehab, which is critical for our wastewater б systems. We have goals of providing at least 7 25 percent of the power to our wastewater treatment plant through renewable sources, primarily solar. 8 And they our biogas through cogeneration. So a lot 9 10 of work being done there and plans to increase the 11 solar throughout our system, as well. 12 And then finally, our organizational development area, Goal 5. We are working on 13 14 mentoring programs and some more, you know, 15 health-based programs, stretching and mental health 16 for staff, offering lots of training opportunities and reducing our vacancy rate. Our goal is to keep 17 18 it below 7 percent, and we do a very good job of 19 maintain that. 20 So that is all I have. I did want to say that we reviewed our objectives with the 21 22 technical customer advisory committee. They were 23 very enthusiastic about them, had lots of great 24 questions and comments and they were supportive of 25 these objectives, as well. And I stand for any

1	questions.
2	CHAIR OLIVAS: Any questions from the board
3	members tonight?
4	MR. RAEL: Mr. Chairman.
5	CHAIR OLIVAS: Yes, Mr. Rael.
6	MR. RAEL: I just want to ask one question.
7	As I was looking through the goals and objectives, is
8	there is a specific goal and objective to the issue
9	that we talked about this evening as it relates to
10	the plume that is directly I would say that we're
11	sending the message that we're going to focus on that
12	particular goal?
13	MS. ANDERSON: Focusing on that.
14	MR. RAEL: As I read through all of them,
15	there's some general comments about water quality and
16	efficiency, I didn't see anything specifically to
17	that.
18	And then the other question that I do
19	have. If this is a document that's available to the
20	public, it's fairly technical and it might require
21	something as it's published to the community to
22	you know, to, quite frankly, explain some of these
23	acronyms that are embedded in the entire program.
24	Because ven as much as I've been around,
25	some of these acronyms are pretty hard to figure out

what they actually mean. So maybe as an idea of 1 2 maybe including some kind of an opportunity to folks that aren't as technical as you all in the system, so 3 they might be able to understand some of these goals 4 5 actually mean. б But that's just a commentary. 7 Thank you. Yeah, we all love MS. ANDERSON: our acronyms, huh? My favorite acronym is the TLA, 8 9 the three-letter acronym, it's an acronym for 10 acronyms. 11 So we do have objectives for Kirtland. 12 We have monitoring, the goal to continue monitoring and seeking funding for monitoring for the well at 13 14 the Kirtland Bulk Fuels Facility. We also have our 15 rivers and aquifer protection plan and goals specific 16 to that, or objective specific to that. 17 MR. RAEL: I'm sorry, Mr. Chairman, to 18 interrupt. 19 What number objective is that one that 20 you're referring to? 21 1.23 is the objective for the MS. ANDERSON: 22 Kirtland Bulk Fuels. And then 1.20 is the RAPP, the 23 rivers and aquifers protection plan. So both of 24 those will focus in on our groundwater protection. 25 And I appreciate your comment about the
acronyms. We always try our best to define as many 1 2 of those as possible, but there's certainly times 3 when they sneak through. CHAIR OLIVAS: Anything else? 4 Seeing no further discussion here, this 5 б is our first opportunity to take a look at this, to 7 be clear. So this will come through here again in a month, if I'm not mistaken. So we have some time 8 9 chew on this. If there's further questions, we have 10 that opportunity. So thank you so much, 11 Ms. Anderson. 12 That takes us to Item B, R-23-7, 13 authorizing an agreement for water and sewer service 14 for MX at Petroglyphs. This is also a first reading 15 of legislation. We have Kristopher Cadena to 16 present. Hello, Mr. Chair, Members of 17 MR. CADENA: 18 the Board. My name is Kristopher Cadena. I'm manage 19 the utility development section here at the water 20 authority. And this is an introduction for a 21 development agreement for a proposed development 22 23 located on the west side of Albuquerque. It's on the 24 northeast corner of Kimmick and Rosa Parks. It's a 25 proposed 28-unit townhome development.

And for service, developers are required 1 2 to install public water and sewer for the development 3 by extending existing infrastructure in the area. And the developer will be required to pay utility 4 5 expansion charges and the water resource charges as a б contingency for service. 7 I stand for any questions. CHAIR OLIVAS: Any discussion or questions 8 9 from board members? 10 Seeing none, thank you so much, 11 Mr. Cadena. That concludes our introduction section. 12 13 Item 8, our consent agenda, we have no 14 items on the consent agenda tonight. 15 Taking us to Item 9, approvals. Our first Item here, A, R-23-3, adopting a utility 16 17 franchise agreement with the Village of Los Ranchos 18 de Albuquerque, New Mexico. We have Mr. Charles 19 Kolberg to present. 20 MR. KOLBERG: Thank you. As you know from our last meeting, this is a proposed franchise 21 agreement with the Village of Los Ranchos, the 22 23 purpose of which is to allow us to locate pipes in 24 the rights-of-way in Los Ranchos. In exchange for 25 the right to the that, we collect from the ratepayers

in Los Ranchos a franchise fee, which is then 1 2 immediately passed through to the village. 3 So it's up for approval. I stand for any questions. I'm not standing, but I will accept 4 5 questions. б CHAIR OLIVAS: Thank you, Mr. Kolberg. Any questions from board members here? 7 Seeing none, do I have a motion on this 8 9 item? 10 COUNCILOR DAVIS: So moved. 11 VICE CHAIR FIEBELKORN: Second. CHAIR OLIVAS: A motion from Councilor 12 Davis, a second Councilor Fiebelkorn. 13 14 Seeing no discussion, all in favor, say 15 aye. 16 ALL MEMBERS: Aye. CHAIR OLIVAS: Any opposed? No opposed. 17 18 Item is adopted unanimously. 19 (7-0 vote. Motion approved.) 20 CHAIR OLIVAS: Item B, R-23-4, an amendment 21 to the approved operating capital and implementation 22 program of the Albuquerque Bernalillo County Water 23 Utility Authority for the fiscal year ending 24 June 30th, 2023. Stan Allred to present. 25 MR. ALLRED: Mr. Chairman, Members of the

Board, this is for approval. It's cleanup for 1 2 operating and capital budgets. We have change for 3 Fund 41. It's a new fund that was created in the 4 last budget cycle for the San Juan-Chama Project 5 Association approved by this board. We just would б like to recognize an additional \$26,700 of revenue 7 and then appropriate additional amounts to be spent in that fund. And that is a capital improvement 8 9 fund.

We have change for Fund 29, which is the CIP fund, it's our growth fund. We had received some monies from Bernalillo County. Thank you very much. We want to recognize that revenue and apply \$796,000 worth of appropriation to projects out of that fund.

We have Fund 27, which another CIP fund. Is it our Water 2120 fund. We want to recognize water rights, lease water and water resource charge in the amount of 858,000 and apply that revenue to appropriate work to be done in the Water 2120 arena.

Fund 21, we were short one and a half million dollars for power and chemicals, so it's to add the appropriation of \$1.5 million to those line items in the budget. There's also an amendment to this budget of an additional \$1.5 million to bring that amount to 3 million.

In January and February, we incurred 1 2 about \$850,000 each month in increased gas bills due 3 to the increase in gas prices, so to make the budget whole, we're asking to increase appropriation for 4 5 chemical -- I mean, for electric and gas by \$3 б million. 7 Staff recommends approval, and I stand for any questions. 8 9 CHAIR OLIVAS: Thank you, Mr. Allred. Any questions? Seeing none, I'll make a 10 motion to move this resolution. Do I have a second? 11 12 VICE CHAIR FIEBELKORN: Second. 13 CHAIR OLIVAS: I have a second from 14 Councilor Fiebelkorn. 15 And then I have an amendment to make on 16 this. I'd like to offer an amendment on Page 1, Line 15, to read General Fund 21 fund balance 3 million, 17 18 and Line 16, General Fund 21 expense to read 19 3 million. I'll make the motion. Do I have a 20 second? 21 VICE CHAIR FIEBELKORN: Second. 22 CHAIR OLIVAS: Second from Councilor 23 Fiebelkorn. 24 Any questions on this amendment? Seeing 25 none, all in favor, say aye.

1 ALL MEMBERS: Aye. 2 CHAIR OLIVAS: The motion carries 3 unanimously. (7-0 vote. Motion approved.) 4 CHAIR OLIVAS: And that takes us back to the 5 б original motion. Any further questions on the motion 7 as amended? Seeing none, all in favor of adoption, please say aye. Seeing no opposed, the motion is 8 9 adopted as amended. 10 (7-0 vote. Motion approved.) 11 CHAIR OLIVAS: That takes us to Item C, 12 R-23-5, authorizing the Albuquerque Bernalillo County Water Utility Authority to submit a congressionally 13 14 directed spending grant request to the 118th Congress of the United States. We have Marta Ortiz to 15 16 present. 17 MS. ORTIZ: Good evening, Mr. Chair and 18 respective Board Members. Before you this evening is a resolution authorizing the water authority to apply 19 20 for grant funds through the 118th Congressional 21 District. Of that, we will be submitting 22 applications to our three New Mexico representatives. 23 The first one is Senator Martin 24 Heinrich. We'll be sending two applications. One 25 for the Thomas Wells Arsenic Treatment Plant.

And the second one is for Carnuel 1 2 Wastewater System infrastructure to Senator Ben 3 Lujan. We are sending an application for our South to North Phase 1 Pipeline project. 4 And the last one will be an application 5 6 to Representative Melanie Stansbury for our aquifer 7 storage and recovery project. These projects are consistent with our 8 state and federal priorities. And I stand for any 9 10 questions that you may have pertaining to this. 11 CHAIR OLIVAS: Any questions? MR. RAEL: Mr. Chair. 12 13 CHAIR OLIVAS: Yes, Mr. Rael. So as we look at these 14 MR. RAEL: 15 priorities, I was going to ask this question earlier, 16 but I'll ask now. Are we going to make a request for any funding as it relates to the Kirtland plume on 17 18 behalf of resolving that issue? We've talked about the fact that we've intervened before as a board and 19 20 as a water authority. Is that going to come back in 21 a different resolution, or are we not asking for that 22 at this point? 23 MR. SANCHEZ: Mr. Chairman, Mr. Rael, that 24 was part of our federal priorities request, so that 25 stands. These are just directed appropriation

1 requests to the delegation. 2 MR. RAEL: Mr. Chairman. 3 Thanks, Mr. Sanchez. So since, you know, we haven't had a face-to-face meeting in some 4 5 time, and I missed the last one, Mr. Sanchez, can б you, when you get a chance, maybe give me a copy of 7 what you all asked for. We'd obviously like the City of 8 9 Albuquerque to support that request. I'm sure the 10 county and others will want to do that, as well. So 11 thank you very much. 12 CHAIR OLIVAS: Thank you. Any further 13 questions? 14 I just wanted to recognize how important 15 several of these projects are to the community. The 16 Carnuel Water Project is in my district; an incredibly important project for an underserved 17 18 community, a historic land grant community there, with a very shallow aquifer, dependent on private 19 20 wells and septic tanks that really have that area on 21 the New Mexico Environment Department's list of sites in need of remediation. And this is an important 22 23 project to move that community in that direction and 24 get them a reliable source of water. 25 And the north/south reuse line is also a

really important project for, really, the entire East 1 2 side of Albuquerque. So, you know, we're talking about serving golf courses, parks, all kinds of 3 recreation facilities and other reuse water 4 5 facilities on that side. So it's a really important б project for moving in the direction. As we talk 7 about One Water approach, that type of thing, reuse water is critical to that. 8

9 So I hope that we're successful with 10 this request. And I hope that our Congress members 11 really help support this and allow us to make this a 12 reality for our community. So thank you.

13

14

15

MS. ORTIZ: Appreciate your support. CHAIR OLIVAS: Councilor Davis. COUNCILOR DAVIS: Mr. Chair.

Thank you for bringing this. I just want to ask -- I realize that our two senators and of course our representative always kind of cover the bases for us here in the Albuquerque region. But now, with redistricting, we also have Representative Gabe Vasquez, who represents I think all of the West side and a good chunk of the South Valley.

Is there a reason we chose not to engage the representative in that new district in this process? Or are there projects that just maybe

didn't make the list this time in that regard? 1 2 MR. SANCHEZ: Mr. Chair, Councilor Davis, we 3 actually receive communication from each delegation member soliciting funding requests. We did not 4 5 receive one from Congressman Vasquez. б COUNCILOR DAVIS: We can fix that. Lets 7 follow up, Mr. Sanchez. We know how to find those folks, and I'm sure if they can help us find some 8 money, they would be more than happy to help. 9 I'm sure our commissioner who represents that 10 11 neighborhood would know who to call. Thank you. 12 CHAIR OLIVAS: Thank you, Councilor Davis. Councilor Fiebelkorn. 13 14 VICE CHAIR FIEBELKORN: Thank you, 15 Mr. Chair. In addition to, of course, supporting 16 this resolution, I'm just wondering if there was 17 18 other actions that you need in support for these, 19 letters of support from the city, the county? Any 20 other help that we can provide, just let us know. 21 MS. ORTIZ: Yeah, we've requested those from 22 the respective delegates. I believe we've received 23 all of those already. But if we need additional 24 ones, we certainly will reach out. 25 VICE CHAIR FIEBELKORN: Great. Thank you.

CHAIR OLIVAS: With that being said, if 1 2 there's no further questions, I make a motion to 3 adopt the resolution authorizing these requests. COMMISSIONER BARBOA: 4 Second. CHAIR OLIVAS: A second from Commissioner 5 б Barboa. 7 Seeing no further discussion, all in 8 favor, say aye. 9 ALL MEMBERS: Aye. 10 CHAIR OLIVAS: No opposed. The motion 11 carries unanimously. 12 (7-0 vote. Motion approved.) Item D, C-23-4, FY 2023 13 CHAIR OLIVAS: 14 second quarter performance indicator report from 15 Ms. Anderson again. 16 MS. ANDERSON: Mr. Chair, Members of the Board, so this is our FY23 second quarter performance 17 18 indicator report, just with the action of recommend 19 receipt as noted. 20 This is something that we issue every 21 quarter, based on the data that we've gathered throughout the utility from the previous quarter. 22 23 And we've developed these different metrics to look 24 at as performance indicators that are based on 25 benchmarks that we get from the American Water Works

Association survey that we participate in so that we 1 2 can see how we're doing with respect to how other 3 places are doing things. And this just gives us some data to look 4 5 at that we can present to you as a way to look across б the utility at how things are doing in various areas 7 through our service. So what we're presenting to you today is 8 a very good report card. 18 of 22 of these metrics 9 10 are on target. Four of them are work in progress or 11 below target, so those are areas that we're still 12 working to hit that target. But, in general, 13 everything is looking very good. And you can expect 14 to see these every quarter. 15 So I stand for any questions. 16 CHAIR OLIVAS: Thank you, Ms. Anderson. Any questions from the board? 17 Seeing 18 none, I make a motion to -- a motion of receipt be 19 noted on this item. 20 MS. ANDERSON: Okay. Thank you. 21 COUNCILOR JONES: Second. 22 CHAIR OLIVAS: I have a second from 23 Councilor Jones. 24 Did you have a question, Commissioner? 25 Seeing no further discussion, all in

favor, say aye. 1 2 ALL MEMBERS: Aye. 3 CHAIR OLIVAS: No opposed. The item carries. 4 5 (7-0 vote. Motion approved.) 6 CHAIR OLIVAS: That takes us to Item E, 7 C-23-5, approving an increase to the price agreement cap with Cannon Cochran Management Services Inc., for 8 9 third-party claim services. Andres Santiago to 10 present. 11 MR. SANTIAGO: Good evening, Mr. Chairman, 12 Members of the Board. My name is Andres Santiago. 13 I'm the risk manager for the water authority. 14 We are seeking your approval to increase 15 the price cap with CCMSI. This is our third-party 16 administrator that handles our general liability claims, workers' comp claims. 17 So this contract was originally awarded 18 19 for four years. We've exceeded -- we're going to 20 exceed that \$500,000 value and we're going to be 21 extending the contract for another two years with their services. So seeking your approval. I stand 22 23 for any questions. 24 CHAIR OLIVAS: Thank you, Mr. Santiago. 25 Any question from the board?

Seeing none, do I hear a motion on this 1 2 item? 3 COMMISSIONER BARBOA: So moved. VICE CHAIR FIEBELKORN: 4 Second. CHAIR OLIVAS: Motion from Commissioner 5 б Barboa. Second from Councilor Fiebelkorn. 7 Any further discussion? Seeing none, all in favor, say aye. 8 9 ALL MEMBERS: Aye. CHAIR OLIVAS: Motion carries unanimously. 10 11 (7-0 vote. Motion approved.) 12 CHAIR OLIVAS: And that takes us to Item F, 13 C-23-6, approval of power purchase agreement with 14 Nexamp Solar, LLC, as a result of -- and I won't read 15 the number here. Nan Winter to present. 16 MS. WINTER: How are you? CHAIR OLIVAS: Doing well. Welcome. 17 18 MS. WINTER: Mr. Chair, Commissioners, 19 Councilors, Trustee, Mr. CAO, my name is Nan Winter. 20 I am general counsel -- outside general counsel, 21 sorry, Charles -- to the Albuquerque Bernalillo 22 County Water Utility Authority. 23 This is the second time you have seen 24 this matter. This came to the board in 2022. This 25 is a re-solicitation of a 2022 RFP for covered

parking solar facilities, and a Smart Flower device 1 2 to serve the groundwater pump station. It is located 3 adjacent to the Bachechi Park. The original award did not result in a 4 5 contract with the recommended 2022 vendor. That б vendor disputed the water authority contractual 7 provisions and, ultimately, there was no contract. We rebid and in this project now would 8 result in an additional megawatt to the water 9 10 authority's already about 10 megawatts of solar 11 utilization. This project will offset approximately 12 30 percent of the electrical usage of the raw water 13 pump station. 14 It will also save the water utility 15 about \$4.475 million over the course of the next 40 16 years. In addition, it saved an additional \$1.3 million over the 2022 procurement. So the 17 18 decision to rebid was a good one. Approval of this item will delegate 19 20 signature authority to Mr. Sanchez. And I will be 21 putting the final touches on the PPA, purchase power 22 agreement. 23 CHAIR OLIVAS: Any questions for Ms. Winter? 24 Sounds like a great project. And to be 25 clear, this is at the surface water pumping plant?

1 MS. WINTER: The raw water pump station, 2 Mr. Chair. What we're planning on installing down 3 there is some solar -- some covered parking and a Smart Flower device. And it will offset just raw 4 5 water pump station. So that's about Alameda and Rio Grande. б 7 CHAIR OLIVAS: Understood. Thank you. I make a motion to adopt this for 8 9 approval. 10 VICE CHAIR FIEBELKORN: Second. 11 CHAIR OLIVAS: A second from Councilor 12 Fiebelkorn. Any further discussion here? Seeing 13 14 none, all in favor, say aye. ALL MEMBERS: Aye. 15 16 CHAIR OLIVAS: Any opposed? The motion carries unanimously. 17 18 (7-0 vote. Motion approved.) 19 CHAIR OLIVAS: I believe that concludes our 20 business for this evening, and I will call this 21 meeting adjourned. 22 (Proceedings adjourned 7:40 p.m.) 23 24 25

AFFIRMATION OF COMPLETION OF TRANSCRIPT 1 2 3 I, Kelli Gallegos, DO HEREBY AFFIRM that on March 22, 2023, the Albuquerque Bernalillo County 4 5 Water Utility Authority meeting was taken before me at б the request of the Albuquerque Bernalillo County Water Utility Authority. 7 8 I FURTHER AFFIRM that I did report in 9 stenographic shorthand the proceedings as set forth 10 herein, and the foregoing is a true and correct 11 transcript of the proceedings to the best of my 12 ability. I FURTHER AFFIRM that I am neither employed 13 14 by nor related to any of the parties in this matter 15 and that I have no interest in the final disposition 16 of this matter. 17 18 Kelli Gallegos PAUL BACA PROFESSIONAL COURT REPORTERS 19 500 Fourth Street, NW - Suite 105 Albuquerque, New Mexico 87102 20 21 22 23 24 25