ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY MEETING Thursday, November 16, 2017, 5:05 p.m.

VINCENT E. GRIEGO CHAMBERS ALBUQUERQUE-BERNALILLO COUNTY GOVERNMENT CENTER ALBUQUERQUE, NEW MEXICO 87102

A P P E A R A N C E S

COUNCILOR KLARISSA PENA, Chair (excused) COMMISSIONER DEBBIE O'MALLEY, Vice Chair MAYOR RICHARD J. BERRY, (excused) COUNCILOR PAT DAVIS, Member COMMISSIONER MAGGIE HART STEBBINS, Member COMMISSIONER WAYNE JOHNSON, Member COUNCILOR TRUDY E. JONES, Member PABLO RAEL, Trustee (excused) ROB PERRY, Alternate

BEFORE: KIM KAY SHOLLENBARGER, RPR, CCR #236 Paul Baca Professional Court Reporters 500 4th Street, Northwest, Suite 105 Albuquerque, New Mexico 87102

Page 2 CHAIRWOMAN O'MALLEY: Good evening, everyone, 1 and welcome. I call the November 16, 2017 meeting of 2 3 the Albuquerque Bernalillo County Water Utility Authority to order. Let the record show Chair Pena 4 5 and Trustee Rael are excused. We're going to begin with the invocation and 6 7 Pledge of Allegiance led by outgoing CEO Rob Perry. (Invocation/Pledge of Allegiance) 8 9 CHAIRWOMAN O'MALLEY: Thank you. We go next to Item 3, which is the approval of minutes. I move 10 to approve the October 18, 2017 minutes. 11 12 COUNCILOR JONES: Second. 13 CHAIRWOMAN O'MALLEY: There's a motion and a second. All those in favor say aye. 14 15 MEMBERS: Aye. 16 CHAIRWOMAN O'MALLEY: All oppose say no. The 17 motion carries. 18 We go next to proclamations and awards. So 19 there's an award here. 20 So this is in recognition of longevity for 21 Member Perry for endurance, longevity, all this sort 22 of thing, for serving on the Albuquerque Bernalillo County Water Utility Authority for seven years 23 representing Mayor Berry. So we have a gift for you. 24 I don't know what it is. You should open it and share 25

Page 3 it with everyone. 1 2 (Opening of gift) 3 MR. PERRY: It's very nice. CHAIRWOMAN O'MALLEY: Oh, very nice. 4 It is kind of a watch. 5 Oh, that's great. I'll point 6 MR. PERRY: 7 that out. It's a beautiful plaque with a picture of 8 some guy I've never seen before, and a clock. 9 I want to say thank you so much to the Board 10 and to staff for this. It's a real honor and a treat 11 and it's been great being on this Authority Board. Ι 12 think you guys serve the interest of your constituents in a amazingly competent, professional and ethical 13 way. And the issues of water are so critically 14 important to a multitude of things for this community 15 and every community and it's just been an honor and a 16 17 treat and privilege to work with such professionals. 18 And the employees of the Water Utility Authority that 19 are out there are some of the best I've ever worked 20 with. 21 My son actually had the opportunity, he's an 22 engineering student at the University of Louisville, and he had the opportunity to work, and Mark said, "Do 23 you want him to come in and do inside work in the 24 engineering office, " and my son said, "No, I want to 25

Page 4 work out in the field." He had worked on the ground 1 2 on utility work before and he would tell me stories 3 about these guys and how hard they work. And he never missed a day. He said they went in, start their day 4 5 at 7, worked until 4, then overtime, the full-time employees, and it was amazing, you know, what they did 6 7 for our consumers and our public and our citizens and that's what makes it successful, and the management 8 9 and the folks, and the citizens that are involved, all 10 make it a very, very successful endeavor, 11 organization, something to be proud of. So thank you so much, Madam Chair, all the 12 Board Members, all the employees, and Mark and his 13 14 staff. Wonderful people. CHAIRWOMAN O'MALLEY: Well, thank you. 15 We wish you well and your family well. 16 17 (Applause) 18 CHAIRWOMAN O'MALLEY: So I just want to 19 recognize someone who probably doesn't want to be 20 recognized, but so what. Her name is Patti Jenkins. There she is. Hi, Patti. And she's retiring from the 21 22 Water Authority. She was one of the few employees to start when the Water Authority was created and she 23 will be missed. Thank you for your service. 24 25 (Applause)

Page 5 CHAIRWOMAN O'MALLEY: Do I have to make a 1 2 motion to move up Item 10A? Okay, I would like to 3 make a motion to move up Item 10A. COUNCILOR JONES: Second. 4 5 CHAIRWOMAN O'MALLEY: There's a motion and a second to move up Item 10A. All those in favor say 6 7 aye. 8 MR. PERRY: Aye. 9 COUNCILOR DAVIS: Aye. 10 COMMISSIONER HART STEBBINS: Aye. 11 CHAIRWOMAN O'MALLEY: Aye. 12 COUNCILOR JONES: Aye. 13 CHAIRWOMAN O'MALLEY: All those oppose say Motion carries. This is on the water report. 14 no. Welcome. 15 MR. SHEAN: Good evening, Madam Chair, 16 17 Members of the Board. 18 Tonight we're having Intera Incorporated, our environmental contractor, to provide you with a recent 19 20 review they did of one of the Air Force's documents related to the work, the corrective action, occurring 21 22 on bulk fields facility spill that you have been aware of for a few years now. 23 But briefly, before we go over our comments, 24 25 just sort of a status report from staff's perception.

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1 The Air Force has made much progress as far as some 2 interim measures of going since 2014, particularly 3 when the Air Force and the Engineering Center got 4 involved.

5 Staff, myself and Intera still committed to 6 working with the Air Force and the key stakeholders 7 and all the technical gurus that have been a part of 8 this to keep this project moving and going forward.

9 The report that they're going to be going over, their comments on, it was submitted sometime in 10 11 January. Prior to its submittal it was mentioned by 12 the Air Force that they recognize that the data that they were presenting had some gaps, and they were 13 14 going to have more information provided within the next two years so they could move on to the next phase 15 of work. Our work with Intera was intended to inform 16 17 the decisions and the data gaps that they would be 18 collecting.

19 It's been said that maybe we've a strict 20 critic of this site. However, we would just like to 21 state, we're not looking for perfection by the Air 22 Force, but we're certainly looking for a robust 23 application of the data and the science that's 24 available to them.

With that said, let me introduce Eileen

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1 Marcillo of Intera.

2 Thank you. Welcome. CHAIRWOMAN O'MALLEY: 3 MS. MARCILLO: Good evening, Madam Chair and fellow Board Members. Like Rick said, we performed a 4 5 review of the RCRA facility investigation report, the RFI report, submitted by the Air Force. And through 6 7 our review we found four key findings that we feel are really important to be addressed in these addendums 8 9 that the Air Force are going to be submitting as part of their report. So I just want to walk you through 10 11 the four key findings that we identified. 12 The first key finding is that there is insufficient soil data to estimate vadose zone source 13 So what that is, the vadose zone is the 14 mass. unsaturated region in the subsurface that extends from 15 the ground surface to about 450 feet below ground 16 17 surface, where the water table is. And so really the 18 data that they currently have is not -- we need more 19 data so that we can understand where the mass is 20 located both laterally and vertically within that 21 vadose zone. We also need to understand, well, how is that mass being transferred from that unsaturated zone 22 to the aquifer that's most at risk. That's what we 23 call mass flux. So that was our first key finding. 24 25 Our second key finding is similar, is that

there's insufficient data and there's an inaccurate description of the fuels, that's light nonaqueous phase liquids, or LNAPLs. The fuels near and in the saturated zone. So the saturated zone is the aquifer that serves the public.

6 Our third key finding is that the analysis 7 presented misrepresents groundwater contaminant 8 trends.

9 And our fourth key finding is that there's an10 incomplete groundwater plume delineation.

So the following slides kind of provide more 11 12 detail for each of these key findings that we found. So the first one that we found that needs to 13 be addressed is that the mass within the vadose zone. 14 So how much fuel is actually in the vadose zone. 15 То be able to implement corrective measures you really 16 17 need to know how much fuel and where it's located to 18 implement an effective corrective measure and reduce 19 risk to the aquifer. So really, how much mass is in 20 the vadose zone. And then, once again, how much of 21 that mass is moving down. You know, talked a lot 22 about mass, but what about the composition of the Is EDB in the fuel that remains in the vadose 23 fuels. I mean, EDB is a particular concern to the 24 zone? 25 Water Authority because that's what's impacting the

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aquifer. So really, it has inaccurate data about the LNAPL above the water table that potentially is going to act as a source too as the water level rises and encounters that mass in that vadose zone. But, you know, we feel as though this data gap can be resolved by the proposed coring plan that the Air Force is being submitted.

8 So that second key finding that we found was 9 fuels in the aquifer, so that saturated zone. Once 10 again, it's all about location and mass and the aquifer is critical to evaluating that long term 11 12 contaminant source. As long as that mass is there it's going to be a continuing problem for the aquifer. 13 It's going to continue to dissolve and impact the 14 potable water. So the RFI doesn't really have a 15 discussion about, you know, well, what's happening as 16 17 the water level rises. It's going to be encountering 18 that mass that's in the vadose zone. It needs to include, you know, discussions that, well, we're 19 20 potentially seeing a much thicker aquifer, or a plume, 21 contaminant plume, vertically, because it's 22 encountering that new mass as it's coming up. And also, it doesn't use all the available data, the 23 concentration data, to identify, well, where is this 24 25 mass located in the saturated zone. You know,

previously, about 2009, you could go out, you could take measurements in wells and you could actually get direct measurements of fuel within these monitoring wells. Well, now that we've seen the water level

5 rising it's drown the screens, it's redistributed the 6 LNAPL. Well, there's other metrics that you can use, 7 more indirect lines of evidence, to determine whether 8 or not where the mass is.

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What we've done here is we've looked at 9 groundwater concentrations and so we know fuels and a 10 mixture of a bunch of different chemicals. How each 11 12 of these chemicals dissolves into the groundwater, you can call effective solubilities. You can take a look 13 at groundwater concentrations that have been -- at 14 each monitoring well and compare it to effective 15 solubilities of, let's say, benzene or total petroleum 16 17 hydrocarbons. So if your groundwater concentration 18 exceeds that effective solubility that's an indicator 19 that, hey, there's mass there, there's fuel there, 20 that's still an issue. Just because it's not in the 21 well doesn't mean it's gone and doesn't need to be 22 treated. So here's an image. We took data from 2015 23 for the four quarters of sampling and looked at 24

25 groundwater concentration. So each of these dots and

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yellow squares corresponds to groundwater
 concentration that exceeded the effective solubility.

3 So there was a known LNAPL in there, but it exceeded 4 the effective solubility. Line of evidence that there 5 is fuel in or near this monitoring well. And what's 6 interesting is, if you were to look at, you know, the 7 LNAPL footprint from historical reports, it's exactly 8 similar to the footprint of where these wells are 9 located.

10 So our third finding was that it 11 overestimates degradation rates. So the analysis of 12 concentration trends really says that all these concentration decreases are because of degradation. 13 It doesn't, you know, take into account other 14 explanations of why we could be seeing decreasing 15 These other explanations could include, you 16 trends. 17 know, SVE that has occurred at the site. Physically, our soil RCRA extraction site, so remediation that has 18 19 occurred. The drowning of the well screens. LNAPL 20 being redistributed. Other things. Yes, we 21 acknowledge that degradation is occurring, but we need 22 to, you know, acknowledge that there are other explanations that we are seeing decreasing trends. 23 So really it's overestimating the degradation rates. 24 25 The fourth finding was that there's an

incomplete ground -- delineation of the groundwater 1 2 So the first one is with the shallow plume. monitoring well network. As we've seen the water 3 levels rise about 85 percent of the shallow wells now 4 5 have their screens submerged. And so we're not effectively monitoring groundwater concentrations in 6 7 the shallow aquifer, which is really important. 8 Because now our shallow aquifer wells are really 9 monitoring what could be termed as the intermediate. 10 So it's really important that additional wells be 11 installed, you know, so that we can monitor the 12 shallow aquifer. And the Air Force has acknowledged 13 that, yes, this is a data gap and that they have agreed to install new shallow monitoring wells. 14

To go on with delineation is that inadequate 15 vertical definition of the northernmost part of the 16 17 plume. So on the right here is -- and from the recent 18 report is the EDB plume. And this red box is where we 19 took a cross-section, a slice, and that's the picture 20 on the left-hand side. And the picture on the 21 left-hand side, the north is on the right and the south is on the left. So each of these vertical lines 22 is significant of a well. And it might be hard to 23 see, but the blue boxes are where the well screens 24 And then behind that, actually, you have yellow 25 are.

coloring, is coarser grain sediments, sands. And then 1 2 the gray is the finer grain sediments, silts and 3 clays. And so, the two deep wells that had consistent detects of EDB, the most northern two deep wells, are 4 5 the ones on the left. And so, we have questions about, well, you know, the monitoring wells that you 6 7 have north of these two wells are not screened in the 8 proper place. So we could be missing, you know, that 9 deep EDB plume, that northern extent of that deep EDB So it's really important that a monitoring 10 plume. 11 well is installed so that it's intercepting, you know, the depth of this coarse grain could be driving the 12 EDB. 13

14 So in summary, we feel as though the RFI is not currently adequate for evaluating corrective 15 measures. We feel as though, you know -- we hope that 16 17 these data gaps can be addressed in the RFI addendums. 18 And so, in summary, it's just, where is the 19 mass located in the vadose zone, as well as the 20 saturated zone. So where is that fuel located? You 21 know, we need the data to estimate migration rates. 22 How is it transferred from the vadose zone into the saturated zone? That's really important for the plume 23 longevity, basically. And then, just to find the 24 25 shallow and deep groundwater plume. Ultimately it's

1 really important that these are addressed.

Additional data needs to be collected so that corrective measures can be implemented and reduce the longevity of the plume.

5 CHAIRWOMAN O'MALLEY: Councilor Davis.

COUNCILOR DAVIS: Thank you, Madam Chair. 6 7 Thanks so much for that. Let me just come back really 8 quickly to do a follow-up question on sort of the 9 second finding related to the RFI. You mentioned a 10 couple of times that there's some other data points 11 that are also out there. My question is, are there 12 other data points that we can reasonably point to that might help us compensate for the drowned screening 13 devices that gives us some data or that the RFI could 14 use in lieu of or do we truly need to recommend that 15 we start over with new wells that can be vertically 16 17 adjusted according?

MS. MARCILLO: I don't think that. I mean, I think it's both. I think a lot of the groundwater data from existing wells can be used to indicate where the mass is. Unfortunately, in the source area -- I mean, all over the plume we don't have shallow monitoring wells and so that really is -- you need to install those.

COUNCILOR DAVIS: Sure.

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Page 15 MS. MARCILLO: Because you have to monitor 1 And so, that's just another part of the 2 those. 3 dissolve phase. As far as source area and mass in the vadose zone, I mean, I think we calculated, it's like 4 5 six percent of the vadose zone has been sampled and a lot of those samples were collected at kind of like 6 7 predetermined depths. And so, it needs to be -- you know, I do feel as though, like, it's important to 8 9 have some continuous from the ground surface to, you 10 know -- I mean, I can't say a certain depth. 11 COUNCILOR DAVIS: Sure. 12 MR. MARCILLO: But there needs to be some continuous collection of soil core to understand where 13 the mass is. 14 COUNCILOR DAVIS: And, Madam Chair, if I 15 could follow that up really briefly. I realize we're 16 17 not writing the RFI here, but just making 18 recommendations. But in your professional experience, 19 if the RFI were crafted in order to gather the data 20 that you think is necessary to really give us that 21 picture, how much more work or how much more 22 infrastructure is that going to take? And I think part of the question is from the neighborhood there 23 that we hear from. Obviously they endured a whole lot 24 of the initial wells and it's frustrating now for a 25

lot of folks to hear now that so many, 85 percent or 1 so of some of the monitoring wells, you know, have 2 3 been drown and essentially those wells are no longer usable. There's some fear that they have to sort of 4 5 go through all this again, as they just got settled. I mean, what's your professional experience on how 6 7 much more infrastructure is it going to take to get us 8 to the place where we get the right data the next 9 A little or a lot, maybe is what I'm asking. time? 10 MS. MARCILLO: I mean, it's hard to -- it 11 depends on what you find in the source area, I guess. 12 I mean, it's a really iterate process. It's really hard to put, you know, an end point. Until the data, 13 you know, in the source area, in that vadose zone, 14 starts to be collected. I mean, when you design 15 corrective measures, I mean, your infraparameters, you 16 17 need to know where it's located and what the mass is 18 and those are two key parameters that there are 19 still -- there's some uncertainty. Sorry. 20 COUNCILOR DAVIS: We have to have the data. 21 We just want to be sure. Thank you. 22 CHAIRWOMAN O'MALLEY: Mr. Perry. Madam Chair, I just have a couple 23 MR. PERRY: I would also like to express my 24 of questions. 25 appreciation for coming down and giving us an update.

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Page 17 After hearing all of the presentation, I'm trying to 1 2 digest this to summary format. I know that you've 3 been doing the pump and treat. And I imagine that 4 getting this data of what you want to do is maximize 5 the remediation effort by getting the most dangerous contaminants, the LNAPL, things like that. 6 And I'm 7 familiar with the whole history of the effort that's been put in by this contract, as well as, I think the 8 prior contract, with characterization. And Councilor 9 Davis' questions about, well, how much work has to be 10 11 done before you can really get more accurate 12 assessment of the most volatile area and perhaps the 13 most efficient area to move, pump and treat, and that 14 kind of thing. And I'm not holding you to any specific amount of time. Is that fairly regular with 15 these types of underground plumes? 16 17 MS. MARCILLO: That you're saying? I'm 18 sorry. 19 MR. PERRY: That you would have to 20 continuously try to identify locations and character 21 of the major pollutant area within the underground 22 water plume. 23 MS. MARCILLO: What currently has been installed is an interim measure. 24 25 MR. PERRY: Right.

MS. MARCILLO: The purpose is to collect more 1 2 data so that the Air Force and their contractors can 3 install permanent solutions. So I think in this process, yeah, it would be -- I mean, typically you 4 5 want to have a full understanding of the situation before you implement a remediation system, or whatnot. 6 7 But you can always put pilot test systems or interim 8 measures while you're concurrently collecting data so 9 then you can build out to a full-scale system. 10 MR. PERRY: Got it. 11 MS. MARCILLO: Does that answer your 12 question? It does to a certain extent. 13 MR. PERRY: It 14 certainly hones it down and I appreciate your efforts. My question wasn't very precise and clear. But in 15 plumes of this nature, and I understand probably no 16 17 two plumes are the same. I'm assuming TAT this type 18 of data effort is pretty common. I mean, does it take 19 five, ten years to really probably do a lot of that

20 data so that you can, you know, put permanent measures 21 that are confirmed to be at least close to high level 22 of efficiency with remediation efforts in place? 23 MS. MARCILLO: Any field effort, yes, it's 24 going to take -- I mean, it's a lot of energy and

25 time, because you have to secure permits and whatnot.

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Page 19 And I also think it's an iterate process. 1 You can't 2 just, you know, sit and be like, hey, we're going to put a hole here, here, here or here, you know. So, I 3 mean, the Air Force has gone out and done it. 4 You 5 know, they've put, you know, a lot of monitoring wells in, definitely, you know. Unfortunately, some of the 6 7 data may be previously in the source area could have 8 been collected at the time those wells had put in and, 9 you know, don't feel like there was sufficient data 10 collected. Some data was collected, but we feel as 11 though, you know, there's still some -- obviously some 12 data gaps. So unfortunately, since when those wells were being put in, that data was not collected. 13 MR. PERRY: Sure. I understand. I think I 14 understand. And let me express my appreciation, 15 because I think they have some -- the Air Force is 16 17 committed to it to start with. They have the 18 resources and they put resources towards it. Very 19 high capital cost of those resources. They've 20 listened to the community, probably most importantly, 21 try to do a good job with keeping the community in the 22 loop of what's going on and transparency related 23 thereto. You come down and told us it's not perfect,

24 we still have work to do. I mean, that's what you're 25 telling us tonight in plain, simple English. And I

understand it's a process of science and engineering 1 2 and a whole host of other things and that it will be 3 time-consuming. And they've got people like yourself that are really smart and probably makes us all feel 4 5 You'll keep up with the science and the at ease. engineering and the hydrology and everything else 6 7 that's related to it. But we hope to continuously get 8 updated as these problems -- well, I shouldn't say 9 problems. These issues and occurrences develop. 10 Thank you, Madam Chair.

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11 CHAIRWOMAN O'MALLEY: Commissioner Stebbins. 12 COMMISSIONER HART STEBBINS: Thank you, Madam 13 Chair. I have a couple of questions. If you were to 14 say, like what's the most significant shortcoming in 15 the RFI, what would that be?

MS. MARCILLO: It would definitely be those 16 17 first two findings. It's really understanding the 18 mass, where it's located in the vadose zone and the 19 saturated zone. The longevity of the plume is totally 20 dependent on that mass and if you don't know where it 21 is and you don't know how much is there, it's really 22 difficult to implement a corrective measure. So I think it's really important that the data is collected 23 to help fill in the holes with the data that's already 24 been collected and it will make a complete picture. 25

Page 21 But it's just really important to get an understanding 1 2 of where the fuel is located in the vadose zone within 3 the source area so that it can be remediated and the risk can be reduced to the potable water supply. 4 5 COMMISSIONER HART STEBBINS: And I hope I ask this the right way. So several years ago, I think it 6 7 was either Shaw or CB&I did a test well that was 8 supposed to measure how water and contaminants move 9 through the soil there at the site of the fuel spill. 10 How much of this RFI is based on that, I think it was 11 called a pump test. How much of the RFI that was just 12 recently presented is based on that pump test? A lot of the estimates of like how things are moving are 13 based on that or something else? 14 MS. MARCILLO: I do not recall off the top of 15 I mean, I do know, the RFI, it's a 16 my head. 17 culmination of like all the data. And so it's based 18 on, you know, from the first soil sample was taken to, 19 you know, present day. So I don't think a lot -- I 20 mean, that test won't tell us about the mass or 21 anything like that. That's just going to tell us 22 about the aquifer parameters, which -- the aquifer characteristics, which is a huge parameter for 23 designing pump and treat systems. Yeah, I don't 24 25 recall.

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COMMISSIONER HART STEBBINS: So it would be
 important though in the estimate of how the EDB plume
 is moving? Capture perhaps.
 MS. MARCILLO: Yes. Most definitely capture
 perhaps. Definitely it's very sensitive. We know
 that it's a very heterogeneous system. We know that

7 for these aquifer characteristics, there's a couple 8 that are T inputs, but there's a wide range out there. 9 So the capture of these plumes are definitely

10 sensitive to this range.

11 COMMISSIONER HART STEBBINS: I think we all 12 recognize that the pump and treat system that's in 13 place is an interim measure. There are three wells in 14 place. One soon to be installed.

MS. MARCILLO: I believe it's installedalready and I think we're putting it on line, yes.

17 COMMISSIONER HART STEBBINS: How comfortable 18 are you that those wells are going to capture the EDB 19 plume?

MS. MARCILLO: We do have some videos from the last time, I presented. It was prior to the pump and treat system being installed. Intera had created a model and we had put some hypothetical wells in, just to kind of show, you know, capture. Basically, the uncertainty it is with respect to the aquifer

characteristics. You know, with five wells versus 1 2 three wells. You know, like hydraulic conductivities, 3 basically how water flows through soil. There's a wide range, you know. I think the pump test that 4 5 you're talking about, a range from 70 feet per day to 300 feet per day. So we updated what we had shown you 6 7 guys, we updated the model and put in the three extraction wells that currently the Air Force is 8 9 actively pumping at and we have them at 150 gallons per minute. So here we have -- I can replay it. 10 On 11 the left-hand side is the shallow plume. The 12 intermediate is the blue. And then the brown is the deep plume. So what those are, you can think of all 13 those little colored dots as EDB particles. You know, 14 this is one set of parameters of the aquifer that we 15 could test it at. So, you know, here in this 16 17 situation, where the K was set at 175 feet per day, 18 these wells are doing a fairly good job, right. You 19 see all the little particles are being captured by the 20 three black dots, which are the extraction wells. And 21 then I can show you the next simulation that we did 22 with the model that we had created and it's a little bit different. And so we changed, we altered the 23 parameters to be what would fall within the 24 25 variability of the system. And you can see we have

some escape. And so it is a variable. You know, it's 1 2 a lot of heterogeny and so it's really important when 3 you're evaluating capture to take a look at all the different permeations that you could have as far as 4 5 aquifer characteristics. So with the three wells, I mean, I definitely wouldn't be confident or four wells 6 7 be confident, unless -- to say that it's all going to 8 be captured unless, you know -- I mean, we need to 9 evaluate it. You know, look at the models. Look at 10 the data to see.

11 COMMISSIONER HART STEBBINS: And the reason I 12 ask that question. Again, I recognize that this is an 13 interim measure. Several years ago Deputy Assistant Secretary Mark Correll was here. He had a meeting 14 with many of us elected officials, where he made a 15 commitment to eight wells. I absolutely agree that 16 17 there's no need to do eight, given the cost of eight, 18 if it's not necessary. But I quess I just always go 19 back to that original commitment, is eight what we 20 need and maybe it's too early to tell. Right now in 21 your evaluation, three or four, doing the job? 22 MS. MARCILLO: We're further evaluating it. I mean, I think we need to run more simulations, you 23 know, put that fourth well in. Confirm how much each 24 25 of these wells is actually pumping, to make sure that

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Page 25 we're modeling the system correctly. Really then, you 1 2 know, kind of take a look at the data as well and, you 3 know, evaluate whether or not there is a hundred percent capture of the plume. 4 5 COMMISSIONER HART STEBBINS: Thank you. Madam Chair, just one more quick question. Can you 6 7 explain the complexities of the rising water table? 8 MS. MARCILLO: With respect to additional source mass or just altogether? 9 10 COMMISSIONER HART STEBBINS: Well, just the 11 remediation. If the water table were where it was ten 12 years ago, that would be one circumstance. Т 13 continually hear that the rising water table is just 14 going to create more complexity in the remediation 15 process. MS. MARCILLO: Well, I think, yes. 16 I think 17 you're going to have -- two-fold. I mean, it's easier 18 to treat the unsaturated zone, basically, instead of 19 just pumping and trying to dewater and then treat the 20 There's other ways that you can do it, by air soil. 21 sparging, you can heat it up. But I think also, I 22 think what's -- you know, we're seeing wells, you know, the expensive wells that are being put in are 23 now being submerged and so they're going to have to 24 25 put more wells in. And additionally, what's really

important is that we have this mass in that vadose 1 zone and so as it's rising up it's just, you're adding 2 3 mass to that plume. And so your plume is getting thicker and thicker and thicker. But I think just 4 5 overall, it complicates things when water is involved. Did that answer... 6

7 COMMISSIONER HART STEBBINS: Yes, it does. 8 Thank you. I think most of us look at the rising 9 water table as a good thing, except in this particular 10 circumstance. Thank you very much.

MS. MARCILLO: At sites all over New Mexico 11 12 you see wells going dry and we're having to go out and install new wells because the wells went dry and then 13 all of sudden, you know, wells start -- the water 14 levels are rising in some areas and then the well is 15 -- so it's not just in Albuquerque. You know, it is 16 17 happening in other places.

18 COMMISSIONER HART STEBBINS: Thank you, Madam 19 Chair.

20 CHAIRWOMAN O'MALLEY: Commissioner Johnson. 21 COMMISSIONER JOHNSON: Thank you, Madam 22 Chair. I thank you for your work.

MS. MARCILLO: Yep. 24 COMMISSIONER JOHNSON: You know, half the 25 time it leaves me scratching my head. Sometimes I'm

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wanting to scream, we need to get rid of all of our water conservation programs because obviously it's messing up the whole --

MS. MARCILLO: Don't do that.

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5 COMMISSIONER JOHNSON: No, I'm kidding. Please don't report that, Martin. In any case, one of 6 7 the things I think is really important to realize is that you get to a certain point, and it's your best 8 9 educated guess, you're really trying to define a 10 system with a limited number of data points and the modeling that goes in there. I see this in the East 11 Mountains quite a bit when you're dealing with water, 12 once you get about five feet underground nobody knows 13 really what's going on and it's just your best guess 14 that -- educated guess, because you're very smart 15 I wouldn't presume to tell you how to do your 16 people. 17 job or anything else. But we also have to realize 18 that there's a range of different ideas as far as how 19 serious it is and what the consequences are across 20 that board. And we need to make sure that all the 21 players are engaged in a continuing dialogue. Because 22 you have a spectrum of risk across that board, it's a very high risk to low risk and what you're trying to 23 do is balance that as a public official across the 24 25 So I was very happy to have you work and have board.

this report. But I also see there's some folks here from the 377th and I don't know whether they want to make any comments on this. Ms. Lynnes or Colonel Nichols or someone? Someone smarter than me would probably be a good person to comment from the Air Force's perspective.

7 MS. LYNNES: Thank you, Madam Chair. And 8 thank you, Commissioner Johnson. For those of you who 9 don't know me, my name is Kate Lyness and I'm the 10 Senior Advisor for the Air Force for the Bulk Fields 11 Cleanup Project.

What Intera just presented to you today, we're actually more in agreement than it may appear at first glance. The RFI report, and for those of you who were able to come to our public meeting the other night, Diane Agnew from NMED presented this part of it as well.

18 We started doing investigation work 16 --19 well, now more like almost 18 years ago. And so the 20 RCRA facility investigation report that was submitted 21 to the State collects 16 years worth of data. So 22 basically the stopping point of the data that was analyzed in the report was the end of 2015, which is 23 not that long after our first extraction wells were 24 25 put in place.

The purpose of an RFI report is to 1 2 characterize the nature and extent of the 3 contamination. I think what got a little confusing, and I can see it more clearly now based on Intera's 4 5 review and other people's review of the report, is that we also summarized the progress of the interim 6 7 measures to date in that report. But keep in mind, 8 these things are ongoing. I think it led to the 9 impression that we thought we were done and ready to 10 go to the corrective measures evaluation, but the 11 report actually clearly states that is not the case.

12 In fact, the report, if you look at the conclusions and recommendations, says that additional 13 characterization was needed on the ethylene dibromide 14 plume, the one that's gone off base, as well as coring 15 and other characterization activities in the source 16 17 area that was just being discussed. And that coring 18 work plan, you know, will do just that. And we're 19 working on the locations with the State.

20 We're also getting ready to submit a work 21 plan for the locations for the additional monitoring 22 wells. And I apologize to everyone in the 23 neighborhood. Yes, there will be additional 24 monitoring wells. And I know I'm going to hear about 25 it, the dog bark in the grocery store and everywhere,

and I feel very bad about it, because there's no fun
 in having a rig in your front yard, I get that.

3 So I think, you know, when we look at it and we're looking at -- so keep in mind, you have up to 4 December of 2015. We've continued to collect data. 5 We've always known about the rising water table. And 6 7 as Diane discussed a couple of nights ago, it's been 8 gradual. It's been predictable. We knew it. We knew 9 we were going to need some additional wells, we knew all this. But all of a sudden it took this really 10 significant jump, you know, earlier this year, well 11 12 after the cut-off point for that report. So of course that report doesn't address it. 13

14 Have we done as much work in source area we would like to as we -- you know, unfortunately we 15 can't do everything at one time. We heard the 16 17 community's deep concern, as well as the State's, that 18 we get some extraction wells, get that interim measure 19 in place, particularly at the tip of the plume, you 20 know, to mitigate any potential forward movement and 21 to try -- you know, to eventually bring it back so 22 that the potential threat to Ridgecrest wells three and five is mitigated and in the future eliminated. 23 And that's what we focused our initial energy and 24 25 resources on.

Page 31

And believe me, getting a treatment plant built in four months, even for a private sector, would be amazing. And the government did that. So, you know, you have been pulling out all the stops to get that in place.

But we did have treatment in the vadose zone, 6 7 we had extraction that ran for 12 years that took out, 8 between that and some bioslurping, which is one of my 9 favorite things to say, which is getting free product 10 at the top of the water table, removed about 750,000 gallons of fuel, equivalent of fuel to vapor. And we 11 12 had to let that system shut off because it kind of reached the end of its useful life. We were putting 13 14 more propane to run the system than vapors we were taking out. So we had to let that rest and come back 15 to equilibrium so we can go back and look in the 16 17 vadose zone, were cleaned up by the soil vapor 18 extraction. What areas are left. And that's one of 19 the things that the coring that we're going to do next 20 year will help us figure out.

That fourth well that's going to come on line at the end of January -- sometime in January of next year is the one that's at the base of the plume. And what we're going to do there, the goal of that one is to start -- because we know we still have source area

-- we know, we still have fuel in the source area. 1 We don't want to continue to feed that off site plume. 2 3 So the purpose of this fourth well is to begin the process of trying to cut that plume off at the base, 4 5 you know, so it doesn't continue to feed it while we investigate. And we're going to have three different 6 7 pilot tests going on next year for ideas to remediate the source area, in addition to the investigation of 8 9 So we have not forgotten it. We never cores. intended to. We have the commitment. We have the 10 11 work funded and we're going to do it.

12 And to go to your point, Commissioner Hart Stebbins, yes, my boss Deputy Secretary Mark Correll 13 promised up to eight wells, that is still there. 14 But as you know, we do things in phases. Intera addressed 15 that iterate process that we have. And so we'll put 16 17 this fourth well in. We'll see how it works. We do 18 further aquifer tests. We do further modeling. We're 19 going to have a second plume capture meeting with 20 Intera and USGS and the City and NMED in the very near 21 future, probably early December, to talk about that as 22 well, to continue to refine how we calculate that capture, because we have lost some of our water table 23 wells and we need to look at other lines of evidence, 24 25 where our data gaps are and how to continue to address

1 this.

1	this.
2	So are we still committed to up to eight
3	wells? Absolutely we're still committed to up to
4	eight wells if it's necessary. But we haven't even
5	seen how the fourth well is going to work yet because
6	it's coming on line in January.
7	So I hope that helps put it in a little bit
8	of context and I'd be happy to answer any questions.
9	COMMISSIONER JOHNSON: Thank you. I don't
10	have any additional questions. Thank you for all the
11	work that you have done and I want to thank everybody
12	for being here today.
13	MS. LYNNES: Well, thank you for the
14	opportunity. I appreciate it.
15	CHAIRWOMAN O'MALLEY: Mr. Shean, do you have
16	anyone else who wanted to speak to this issue?
17	MR. SHEAN: I do believe the State
18	representatives are here from the Environment
19	Department, if they want.
20	CHAIRWOMAN O'MALLEY: Is it just if we have
21	any questions or did they want to make comment? I
22	guess not.
23	MR. SHEAN: Diane Agnew from New Mexico
24	Environmental Department.
25	CHAIRWOMAN O'MALLEY: Welcome.

1 MS. AGNEW: Madam Chair, Members of the 2 Board. We're here primarily for questions. We wanted 3 to be available if anything came out of the 4 presentation tonight with Intera.

5 CHAIRWOMAN O'MALLEY: Commissioner Stebbins6 has some questions.

7 COMMISSIONER HART STEBBINS: Thank you, Madam 8 Chair. Thank you for being here, Diane. So I have 9 two real quick questions. What was NMED's response to 10 the Intera report?

11 MS. AGNEW: The Intera report is very much in 12 line with the comments that we had from our review. In fact, there are four findings where -- the four 13 issues that we were discussing internally, primarily 14 the lack of mass, delineation, understanding where the 15 mass of the fuel remained. The need for additional 16 17 data to understand that distribution. The rising 18 water table. Those two things are very much high 19 priority, which I think is what Intera was also 20 expressing. Is that until you know where the mass is, you could potentially keep encountering it as the 21 22 water table rises and as the water table rises this 23 network submerges. So we don't know what's happening at the water table in the source area and that's a 24 25 critical need.

Page 35

And then the other finding that we had was not only was the degradation analysis misrepresenting what we believe for the processes that were happening, they were based on erroneous data and were overstating what was happening at the site.

6 And so that was NMED's summary in a nutshell 7 and that was reflected in our August 3rd letter.

8 COMMISSIONER HART STEBBINS: Thank you. 9 Madam Chair, just one more question. It was my 10 understanding that there was a report due from the Air 11 Force earlier this month responding to a work plan 12 that was supposed to address NMED's concerns. Has 13 that been received? Is there a deadline for that?

14 MS. AGNEW: That's right. So our August 3rd letter required the Air Force to submit a work plan to 15 address the three issues we had in our letter, rising 16 17 water table, the need for downward monitoring wells to 18 address the degradation rate and then also to address 19 the LNAPL flux. The due date was the 8th of November. 20 We had not received a work plan yet, though we've been 21 in communication with the Air Force and NMED did issue 22 of notice of deficiency today.

23 COMMISSIONER HART STEBBINS: Thank you.
24 Thank you, Madam Chair.

25

CHAIRWOMAN O'MALLEY: Thank you very much.

Page 36 Are there any other questions? I do have a question. 1 2 I quess this is for staff. Of course, this came to 3 the surface, literally. So it was mentioned that there was anticipation that the water level would 4 5 rise, it's risen quite a bit. Is that because of the recharge efforts, the water recharge efforts? What is 6 7 causing that? Apparently it's making things worse. Madam Chair, that is actually 8 MR. SHEAN: 9 part of both the move to dependence on surface water 10 as the primary drinking water supply, so we're not 11 pumping as much in the old basin, so that does allow 12 us some more water recharging in and to replace the dry soil now with saturated soil where it had not 13 been, since we have been pumping down below. Also I 14 would say conservation has also led to that. 15 CHAIRWOMAN O'MALLEY: So what is the plan? 16 Ι 17 mean, that's a Water Authority issue, right, in terms 18 of pumping and what sources it uses. So what is our 19 plan to do with this issue or is that out of our 20 hands? What is the deal? 21 MR. SHEAN: Madam Chair, one, we're still 22 patting ourselves on the backs, seeing this water rise and to increase the groundwater supply for the 23 community. As Eileen mentioned, across the state 24

25 they're usually dealing with issues of a drop of water

Page 37 supply when you're at a contamination site. 1 And in 2 those cases the responsible party for the 3 contamination are having to adjust their technologies. There are technologies to deal with both drop in water 4 5 table and a rise in water table at these spills. CHAIRWOMAN O'MALLEY: It just sounded like it 6 7 got a lot worse as a result, but you're saying there is a way to deal with it and that is to address it 8 9 with new technology or just relook at the whole thing? 10 MR. SHEAN: That's correct. 11 CHAIRWOMAN O'MALLEY: I was just curious 12 about that. I don't have any questions. Commissioner Stebbins. 13 14 COMMISSIONER HART STEBBINS: Thank you, Madam Chair. And I want to thank everybody that has come 15 here tonight. I specifically want to thank the 16 17 individuals who have come from Kirtland Air Force 18 Base. I think I saw the Vice Base Commander, Colonel I want to thank you for being here, Ma'am. 19 Nickell. 20 And the Commander of the 377th Mission Support, 21 Colonel Michael Harner. So I just want to say thank 22 you to you for being here tonight and being part of this conversation. 23 24 CHAIRWOMAN O'MALLEY: So that ends that particular item. We're going to go to public comment. 25

Page 38 Ms. Carreon, would you tell us how many people we have 1 2 signed up to speak. 3 MS. CARREON: We have seven speakers. CHAIRWOMAN O'MALLEY: So each speaker will 4 have three minutes, and then at about two-and-a-half 5 minutes you'll get a little bell that says if you 6 7 would start to think about closing up your comments. 8 If you will call the first speaker, please. 9 MS. CARREON: Becky Gutierrez followed by 10 Phil Hern. Welcome. 11 CHAIRWOMAN O'MALLEY: 12 MS. GUTIERREZ: Good evening, Madam Chair, Board Members. I'm speaking in support of Bill 13 R-17-20. Now with the rapid Albuquerque growth, it's 14 so important to regionalize and combine smaller water 15 and wastewater systems. Albuquerque Water Authority 16 17 has the means and the smarts to run these systems. 18 Carnuel Mutual Domestic recognized this back in 2008 19 and asked Albuquerque Water Authority to partner with 20 us and to represent us to run our systems. This 21 turned out to be very valuable not only to the 22 community, but New Mexico in general. By using the Albuquerque Water Authority there's now one less 23 community competing for funds and, in turn, that helps 24 25 with priorities and regionalization. Small

Page 39 communities tend to waste funds given by NMFA by 1 2 overpriced planning engineers who end up pocketing 3 most of the money of the grants and the loans and building these systems themselves. I know this 4 5 because that happened to Carnuel Mutual Domestic. We're asking the Albuquerque Water Authority to 6 7 continue to help Carnuel in our request to a water and 8 wastewater system due to poor water quality and aging 9 septic tanks. They have done, especially Frank Roth, 10 has done a wonderful job in the past in getting us 11 funds and we are hoping that they will continue to do 12 Thank you. so. 13 CHAIRWOMAN O'MALLEY: Thank you. 14 MS. CARREON: Phil Hern followed by Pete English. 15 CHAIRWOMAN O'MALLEY: 16 Welcome. 17 MR. HERN: Hello. My name is Phil -- well, 18 first I want to say, Madam Chair, thanks for letting 19 me speak. Madam Chair and Board Members, my name is 20 Phillip Hern. I'm the Union President of the 21 Management Employees of the Water Utility. The reason 22 we are here tonight is to ask this Board why they supported the imposement of the contract on the M 23 series employees without getting input from the Union. 24 Also, why would the Water Authority and this Board 25

choose to impose this contract even though the Water 1 2 Authority knew that in 2013 Judge Fry, Judge Fry's decision in the Court of Appeals in AFSCME versus The 3 City of Albuquerque, the City of Albuquerque cannot 4 5 impose a contract on its employees. Knowing this, the Water Authority came to this Board to support 6 7 something they cannot do. Since the imposement of the 8 contract the Labor Board for the Water Authority and 9 District Court Judge Bacon have ruled in the Union's 10 favor that the Water Authority cannot impose a 11 contract on its employees, but the Water Authority 12 continues to appeal these decisions. So how did we get here? We got here because the Union will not 13 agree to the status quo of two percent in a three year 14 contract until a plan is developed to correct the pay 15 inequalities within that management pay scale. 16 This 17 has turned into a younger managers versus older 18 managers. We got younger managers making more than senior managers that have been here 28, some 30 years. 19 20 You have newer managers that are coming in with only 21 six years of employment and already topped at the top 22 of the pay scale in the management pay scale. So what we're looking for or what we're asking for is for this 23 Board to look into these inequalities. And if they 24 25 are there, to help fund these inequalities for these

senior employees. The whole goal is for the senior 1 2 employees to have these equity adjustments for them so 3 they can retire at their last three years at a higher wage than what they're getting. Now, I know there's 4 5 been issues between the Water Utility and the Union, but I think it's time for us to return back to the 6 7 table and see if we can work out a deal. That's all I 8 got to say.

9 CHAIRWOMAN O'MALLEY: I just wanted to say 10 thank you. I didn't know if the Water Authority 11 wanted to respond. I don't know what the legal issues 12 are at this point, whether or not you can respond to 13 the statements or what the plans are. So I'm just 14 going to leave it up to you.

Madam Chair, Members of the Board. 15 MR. AUH: I don't think this is the right venue to get into the 16 17 complicated issues that surround the case that 18 Mr. Hern is referring to. We would be happy to set up 19 a litigation meeting and explain in detail. But the 20 quote that Mr. Hern, from the Court of Appeals case, 21 referenced has been the focus of this litigation and 22 continues to be the focus. Because our position is that it's taken out of context and it was a sentence 23 in a Court of Appeals opinion that when read out of 24 25 context makes it sound like you cannot impose a

1 contract. However, when read within the context, it's 2 pretty clear, to us anyway, that it's fact-specific to 3 that case. That case involved a pure lack of good 4 faith negotiations to an impasse and that's what 5 differentiates with this case. I mean, we can talk 6 about this all evening and I think it would be not 7 productive to try to engage in that here.

CHAIRWOMAN O'MALLEY: Well, I guess we could 8 9 talk about it all evening, but it might be good for you guys to talk. Maybe you can work something out 10 and meet. I think that's kind of what -- and I 11 12 believe that's what the Water Authority wants to do too. Without getting into too much, I think there's 13 an opportunity for further communication. Councilor 14 Davis. 15

COUNCILOR DAVIS: Thank you, Madam Chair. 16 17 Again, we know this is not the proper forum to have a 18 legal discussion and we want to allow that process to 19 take place, Mr. Hern. You know, we have a tremendous 20 amount of respect for our employees and appreciate 21 their work. We can't get that done without it. But 22 we want this to be answered. So if I can make a request, Madam Chair, if it would be conducive, would 23 it be possible for us to do an executive session on 24 25 this, either just prior to our next meeting or after

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perhaps, for the members who would like to participate? But is it possible to -- can we get a status on that now? Is it before the District Court? It is before the Court of Appeals? And do we know what a schedule on that is right now, without getting into the legal arguments and the underlying concerns there?

Madam Chair, Councilor Davis. 8 MR. AUH: Yes. The status is that we have filed what's called a 9 Petition for a Writ of Certiorari with the Court of 10 11 Appeals. The Union has responded. It is now up the 12 Court of Appeals to decide whether to grant the petition, that is even consider the case, because they 13 can just deny it and say, "we don't even want to get 14 into the merits of the matter." So we are waiting the 15 Court of Appeals decision on that threshold issue. 16 17 Sometimes these things can take a little while, 18 sometimes they pop up suddenly out of nowhere. 19 COUNCILOR DAVIS: If it please the Chair, I 20 would like to request we just do an executive session 21 at the next meeting for members who would like to 22 attend. 23 CHAIRWOMAN O'MALLEY: Is that possible? Thank you very much. The next speaker, please. 24

MS. CARREON: Pete English followed by Dave

25

1 McCoy.

2 AUDIENCE SPEAKER: Madam Chair, fellow 3 Members of the Board, I do not need my time.

4 MS. CARREON: Dave McCoy followed by Michael 5 Jensen.

MR. MCCOY: Madam Chair and Board Members. 6 7 I'm Dave McCoy, Executive Director from Citizen Action New Mexico. I've been coming to meetings about the 8 9 jet fuel spill since 2008, reading documents, writing 10 reports. You've entertained a couple of resolutions 11 and actually passed a couple of resolutions from 12 Citizen Action on this matter. One of the things that we've recommended and we think the necessity is 13 greater than ever is for the establishment of an 14 independent oversight panel, due to administrative 15 technical concerns and lack of transparency. You 16 17 know, this RFI, don't take this lightly. This is a 18 bombshell of a report. That RFI was supposed to have been done in 2014. It's three years out of date. 19 20 What were the issues then? The issues were, oh, they 21 didn't know the mass of the plume. They didn't know 22 the horizontal, the vertical extent. They didn't know the flow velocity. They didn't know, they didn't 23 know, they didn't know. Okay, so I pointed to the 24 25 fact that well screens were being submerged several

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years ago and that there were air bubbles and that 1 2 they didn't have accurate sampling data at that time. You know, this is not something that all of a sudden 3 is a new deal. This has been going on, this shortage 4 5 of information. You know, when that first RFI came out the Environment Department didn't even make 6 7 comments on it. They didn't even talk about the data 8 gaps that were in it. You know what happened to it, 9 it got withdrawn by the Air Force. So then, on the 10 basis of this RFI, that's defective, they come out 11 with a risk assessment report. Then you hear 12 discussion about the extraction wells and the recovery of ethylene dibromide. Do you know how much four 13 extraction wells are going to recover in ethylene 14 dibromide every year? 90 grams. Okay, 90 grams. 15 How many grams of ethylene dibromide are out there? For 16 17 every gallon you had two grams. So if it was 50,000 18 gallons of the aviation gas, you would have 100,000 19 grams of EDB. So if you were going to extract that, 20 just in one extraction that would be 4044 years it 21 would take to extract that with four extraction wells, 22 you know. So if you look at the map on this, it doesn't make it look like your water is real 23 protected. You got a 500-foot perimeter around the 24 25 jet fuel spill where no wells can be drilled. Well,

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Page 46 just look at that area as water that's unavailable to 1 the City now. Now, how much of your water is being 2 3 wiped out by this? Don't let the Air Force get away with this soft shoe routine where they come up and 4 5 they tell you, "yeah, you know, we're going to get it done and everything and we're considering this." 6 This 7 is a walk in the park for them. This is not aggressive remediation. It's not aggressive 8 9 protection. 10 CHAIRWOMAN O'MALLEY: Thank you. 11 MS. CARREON: Michael Jensen followed by 12 Elaine Hebard. 13 CHAIRWOMAN O'MALLEY: Welcome. 14 MR. JENSEN: My name is Michael Jensen. I'm going to be talking about that provision of water 15 services to Valle De Oro. So, in case you've 16 17 forgotten, in February of 2015 there was a six million 18 gallon spill of untreated wastewater that ran down 19 through Isleta Pueblo. I learned about it that 20 morning from a representative of the Pueblo before it 21 was public knowledge. There was an EPA settlement 22 that included some money. I think that's accurate from the FOIA documents that I got, it might have 23 changed. And what's called a supplemental 24 25 environmental project. That project was approved in

March of 2016, I believe, and includes a 3.4 mile 1 2 nonpotable pipeline to the -- from the wastewater 3 treatment plant to the refuge for two lagoons and a wetland, which is incorrect, and for landscaping on 4 5 Second Street. EPA mandated that the Water Utility Authority spend at least \$400,000 on that project and 6 7 complete it by June of next year, and they are 8 required in everything that they put out, including in 9 the notice that they are presenting tonight, this 10 language saying that this is mandated by a settlement agreement with the EPA, and they haven't done that. 11 12 There are a lot of issues with this that I can't even begin to get into, but the EPA had concerns with not 13 14 only the use of that required language, but if \$400,000 is really going to be spent. And there are 15 some serious conditions on that that have an impact on 16 17 how this is being done now. It's being lumped in with 18 the provision of water service to the refuge. And I think some really, really careful accounting is going 19 20 to have to be done to make sure that money from the 21 SEP isn't underwriting the cost of providing the water 22 service or vice versa. I'm also sort of concerned about their statement that the fiscal impact to 23 providing this is none when there's a \$400,000 cost of 24 25 And I'm also concerned that they say that in the SEP.

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their document that the Fish and Wildlife Service is 1 2 going to have to pay this utility charge, but maybe that's just for the water, but they don't just 3 aggregate in their document between the water service 4 5 and the nonpotable service. So once again, I think a really close eye needs to be kept on how these two 6 7 projects are going to intertwine with each other and to assure the EPA when they look at this, that the 8 9 money, that \$400,000 was spent the way it was supposed 10 to be spent. And if I may, I just have one more point 11 that was really important to the EPA in the settlement 12 and that is that the Water Utility Authority is not supposed to make a profit from that supplemental 13 environmental project. So one way of that is that the 14 Fish and Wildlife Service isn't supposed to be paying 15 for any of this, which I think includes their 16 17 connecting to the nonpotable pipeline, which is written into this document, that they have to do that. 18 19 But also in the charges that the Water Utility 20 Authority makes for the cost of the water in the long 21 term, which again is something that needs to be looked 22 at. That's all. I just want to add, I really am in favor of using nonpotable water. It's not about the 23 project itself. It's about all of this peripheral 24 25 stuff about how it's managed and implemented. Thank

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1 you.

2 (Commissioner Hart Stebbins not present)
3 MS. CARREON: Elaine Hebard followed by
4 Philip Salazar.

5 MS. HEBARD: Good evening. My name is Elaine Hebard, and I quess I got a frog. I have four points 6 7 that I would like to make very quickly. The first one is on growth and water. A lot of questions have been 8 9 rising about is there enough water to supply growth 10 and I think that's a really important question. It's not just about Santolina obviously. Given that there 11 12 will be new Board members next month and next January, 13 it seems to me a great time to have a study session and discuss where that water for growth is going to 14 come from. So the 2021 plan and the current water 15 report would be very good items to have at such a 16 17 study session. I would also suggest other opinions be 18 included so that you have a well-rounded presentation 19 of those issues.

20 My second point is on no-net expense, that's 21 also an important issue to consider. That we have 22 spent a lot of money for the existing infrastructure, 23 we customers, for the existing infrastructure and 24 water rights, but we also have a backlog of \$450 25 million in infrastructure needs. In fact, there's a

billion dollars of infrastructure needs over the long 1 2 period, according Mr. Sanchez's memo to the Board in 2015. And so, with the debt as well being \$830 3 million, including interest, those kinds of issues 4 5 cannot be ignored when looking at no-net expense. And I suggest a finding similar to what the County and 6 7 WALH entered into finding 21, making sure that we are 8 not -- any new development cannot add to the unfunded 9 amount of infrastructure backlog.

10 My next point is on objectives. And I would 11 again suggest a study session. The Performance Plan 12 that was recently released has not been presented to the Board. It was for the FY18, so it's six months 13 after the objectives were selected. The Board and the 14 Public do not know whether or not the current 15 objectives or the past year's objectives have been 16 17 met, that would be a good presentation, as well as 18 looking at the effective utility management framework, 19 which we have not updated since it has been updated by 20 the group, the national groups that have done that, to 21 include such things as climate variability and 22 resource recovery. So again, that could be another study session. 23 My final point is on vulnerability analysis 24

24 My final point is on vulnerability analysis 25 assessment and that is something you're looking at

Page 51 tonight. I'm not sure that it includes it, but one of 1 the major issues in our basin is that water rights 2 3 have not been adjudicated. That means that the ownership and the quantity and the priority dates have 4 5 not been resolved, nor have the ownership and the quantity for the pueblos has been managed. And so 6 7 those water rights have not been actually assessed for their vulnerability. And so as you're looking at the 8 9 vulnerability assessment and/or in your update of the assessment management plan, I would suggest that the 10 11 vulnerability risk of your water rights also be 12 assessed. Thank you very much. 13 CHAIRWOMAN O'MALLEY: Thank you. 14 MS. CARREON: Our last speaker, Philip Salazar. 15 16 CHAIRWOMAN O'MALLEY: I think Mr. Philip 17 Salazar must have left. Okay, thank you. That ends 18 public comment. 19 So there's an announcement. The next 20 scheduled meeting for the Water Authority is 21 December 22nd, in these chambers. 22 We're going to go to Item 7, which is the introduction of first reading of legislation. 23 However, this is an item that they're asking for 24 immediate action on it, and this is authorization of 25

Page 52 agreement for water service. 1 2 So the first thing is to make a motion to 3 place this item on the agenda for immediate action. MR. PERRY: Second. 4 5 CHAIRWOMAN O'MALLEY: There's a motion and a second to place this item on the agenda for immediate 6 7 action. This is A, R-17-22 authorizing an agreement 8 for water service to the Valle De Oro National Wildlife Refuge Headquarters/Visitors Center. 9 10 There's a motion and a second. All those in 11 favor say aye. 12 COMMISSIONER JOHNSON: Aye. 13 COUNCILOR JONES: Aye. 14 CHAIRWOMAN O'MALLEY: Aye. 15 COUNCILOR DAVIS: Aye. 16 MR. PERRY: Aye. 17 CHAIRWOMAN O'MALLEY: All oppose say no. The 18 motion carries. So that brings it up for discussion. 19 If someone would come up to speak to this issue. 20 Thank you. 21 MR. CADENA: Hello, Madam Chair, Members of 22 the Board. I present to you a development agreement for the Valle De Oro, it's a Fish and Wildlife project 23 for a headquarters and a visitors center on the 24 25 property. The property is located west of Second

Street just north of where I-25 crosses the river, in
 that part of the area. It's an unincorporated area of
 Bernalillo County.

Now, the project is seeking potable water 4 5 service and the developer in this case, U.S. Fish and Wildlife, would be extending potable waterline from 6 7 existing infrastructure along the property frontage 8 and they will connect to that line for their potable 9 service. Also, as previously stated, the Water 10 Authority is installing a nonpotable waterline in which, in fact, the U.S. Fish and Wildlife will 11 12 connect to upon its completion.

In terms of sewer service, there is no sewer service proximate to the area. So this property will take sewer service via an on site septic system.

16 The developer in this case, U.S. Fish and 17 Wildlife, will be responsible for paying utility 18 expansion charges, as well as water supply charges.

19 CHAIRWOMAN O'MALLEY: So I have a few
20 questions. Is there a trunk line that's being
21 installed along Second Street to reach Valle De Oro?
22 MR. CADENA: Correct, there currently is. I
23 believe it's a 36-inch transmission line which runs
24 east and west and that supplies water for what's
25 knowns as the Hubbell trunk in the pressure zone 1E.

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Page 54 So this project is taking what's called a distribution 1 2 line. Distribution lines are used for connections for 3 water services. They will be installing a waterline from the existing transmission line and going south, 4 5 pretty close to Second Street, covering that property 6 frontage. 7 CHAIRWOMAN O'MALLEY: So the Water Authority, 8 are they responsible for the cost of the line up to 9 the Valle De Oro? 10 MR. CADENA: No, the Water Authority does not 11 install infrastructure for the development. It's the developer's sole responsibility. 12 CHAIRWOMAN O'MALLEY: That includes the trunk 13 line to the Valle De Oro? 14 MR. CADENA: For the potable waterline, 15 16 correct. 17 CHAIRWOMAN O'MALLEY: So this is a distribution line. So that means it could be tied 18 19 into the existing landscaping and/or it could also be 20 available if someone wants to develop along Second 21 Street. 22 MR. CADENA: Exactly. 23 CHAIRWOMAN O'MALLEY: But they have to pay the expansion charges. 24 25 MR. CADENA: Correct. Yeah, development pays

Page 55 for itself and the developer is responsible for the 1 2 utility expansion charges and water supply charges as 3 well. 4 CHAIRWOMAN O'MALLEY: Are there any 5 questions? COUNCILOR DAVIS: Madam Chair. Could you 6 7 just address very quickly sort of the questions we 8 heard earlier about resolving these sort of unresolved issues out of the EPA settlement and how this all 9 10 connects with that so that we can resolve that without 11 getting into too much legal detail there? 12 MR. SANCHEZ: Madam Chair, Councilor Davis. Charles Leder should be able to address that. 13 14 COUNCILOR DAVIS: Thank you, sir. MR. LEDER: Good evening, Madam Chair, or 15 Vice Chair. Charlie Leder. I manage the plant 16 17 operations group for the Water Authority. 18 I took part in the negotiations between EPA 19 Region 6 staff and the Water Authority when the 20 Supplemental Environmental Project was developed. То 21 the best of my knowledge, that project specifically 22 addresses the installation of a nonpotable waterline that will be used for landscape irrigation on the 23 site. Again, with nonpotable water and for the use of 24 that line also to fill some of their wetlands given an 25

initial fill and if they need a supplemental fill.
 But, again, the purpose of a nonpotable line is to
 take care of those needs.

Apparently since the project has developed 4 5 further, and it's been a couple of years since I've been in any discussions with the County and 6 7 representatives of the National Fish and wildlife 8 service, apparently the plan to take care of potable water needs and wastewater infrastructure using on 9 site facilities, apparently that has progressed into 10 11 something else. It's a fairly easy matter to keep the 12 piles of being separate. That is, what is needed for 13 domestic water supply service and sewer service, it's 14 easy enough to keep that separate from the cost of the nonpotable line. 15

The good news is, I believe a contract has 16 17 been awarded. Construction is about to start. The 18 Water Authority received very good pricing on that 19 line. It will be installed and complete in time in 20 accordance with the timetable set by the supplemental 21 environmental project. So some of those details I 22 hope will be of value to you as you consider this development agreement. 23

24 CHAIRWOMAN O'MALLEY: Councilor Davis, does
25 that answer your question?

Page 57 COUNCILOR DAVIS: I appreciate that very 1 I think that's good background. And just to 2 much. 3 clarify, I think we're moving forward and satisfying those conditions in doing all this work. 4 MR. LEDER: 5 Thank you. MR. SANCHEZ: Madam Chair, Councilor Davis. 6 7 We meet with the EPA periodically to give them a 8 status report. 9 CHAIRWOMAN O'MALLEY: Well, to get a clearer picture. I know that particular corridor, 10 Mr. Manager, that particular corridor is also a 11 12 potential for, I think enhancement, in terms of the --I think that's important for people to know, that's a 13 corridor to the wetlands or this area and I think 14 there's some opportunity actually for enhancement in 15 terms of development along that corridor. I think 16 17 we've been looking at that for a long time. And this 18 would add that opportunity. Is that a fair 19 assessment? 20 MR. SANCHEZ: That's correct. In fact, we 21 will be installing a landscape buffer in front of the 22 reclamation plant to begin the improvements along that corridor. 23 24 CHAIRWOMAN O'MALLEY: I move approval. 25 COUNCILOR JONES: Second.

Page 58 CHAIRWOMAN O'MALLEY: There's a motion and a 1 second to approve A, R-17-22. All those in favor say 2 3 aye. 4 MR. PERRY: Aye. 5 COUNCILOR DAVIS: Aye. 6 CHAIRWOMAN O'MALLEY: Aye. 7 COUNCILOR JONES: Ave. 8 COMMISSIONER JOHNSON: Aye. 9 CHAIRWOMAN O'MALLEY: All oppose say no. The 10 motion carries. 11 We don't have any items on the consent 12 aqenda. But we do have some items for approval. We'll being with Item 9A, which is R-17-20, which is 13 authorizing and approving submission of a completed 14 application for financial assistance and project 15 approval to the New Mexico Finance Authority for the 16 17 Carnuel Wastewater System Improvement project. 18 Mr. Roth, thank you. 19 MR. ROTH: Madam Vice Chair, Members of the 20 The purpose of this application is to obtain Board. 21 local government planning funding in the amount of 22 \$50,000 to help plan and design the gravity sanitary sewer system for the Carnuel Community. The focus of 23 this funding will be in the high priority area between 24 25 New Mexico 333 and Interstate 40. The sanitary sewer

Page 59 system would replace in about 125 homes those old 1 2 septic systems. The Water Authority is submitting 3 this application as a fiscal agent on behalf of the Carnuel Community. Those residents would be customers 4 5 of the Water Authority. And based on input from the community, they would greatly appreciate your support 6 7 in this resolution and submitting this application. 8 CHAIRWOMAN O'MALLEY: Commissioner Johnson. 9 COMMISSIONER JOHNSON: Thank you, Madam 10 Chair. And just a quick comment. Thank you very much 11 for all of your work. This has been a very long project that predates me out there in Tijeras and 12 13 Carnuel. And, Becky, it's good to see you. It's been 14 a while since I've seen you. Madam Chair, with that I would move approval. 15 COUNCILOR JONES: Second. 16 CHAIRWOMAN O'MALLEY: There's a motion and a 17 18 second to approve 9A. All those in favor say aye. 19 COMMISSIONER JOHNSON: Ave. 20 COUNCILOR DAVIS: Aye. 21 CHAIRWOMAN O'MALLEY: Aye. 22 MR. PERRY: Aye. 23 COUNCILOR JONES: Aye. 24 CHAIRWOMAN O'MALLEY: All oppose say no. The 25 motion carries.

1 We have 9B, which is R-17-21, supporting an 2 inventory of known and potential groundwater 3 contamination sites within and near the Albuquerque 4 Bernalillo County Water Utility service area including 5 potential threats to the regional aquifer.

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Rick Shean.

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7 MR. SHEAN: Madam Chair, Members of the This resolution will ask staff to hire a 8 Board. 9 consultant to prepare an inventory and threat 10 assessment of the known and potential contamination 11 sites that are within and nearby the Water Authority 12 service area. We would ask the Water Protection Advisory Board to help develop the scope of this 13 project and to prioritize sites to be considered by 14 the chosen contractor. And information from this 15 report would actually help with the implementation of 16 17 the groundwater management as passed in the Water 2120 18 Water Resources Management Strategy approved by this 19 Board in September of last year, as well as augment 20 the water quality protection policy and action plan 21 that is currently being updated. The project would be 22 performed and reported by June of 2018. 23 I stand for questions. 24 CHAIRWOMAN O'MALLEY: Thank you. Any 25 questions?

Page 61 1 COUNCILOR DAVIS: I move approval. 2 MR. PERRY: Second. 3 CHAIRWOMAN O'MALLEY: There's a motion and a second to approve B, R-17-21. All those in favor say 4 5 aye. 6 COUNCILOR DAVIS: Aye. 7 MR. PERRY: Aye. 8 CHAIRWOMAN O'MALLEY: Aye. 9 COUNCILOR JONES: Aye. 10 COMMISSIONER JOHNSON: Aye. 11 CHAIRWOMAN O'MALLEY: All oppose say no. The 12 motion carries. I quess I kind of went a little too fast with 13 14 C, we already approved that. So let's move on. That takes us next to D, which is approving 15 the recommendation of award for the vulnerability 16 17 assessment. Mr. Charlie Leder. 18 19 MR. LEDER: Thank you, Madam Chair, and 20 Members of the Board. 21 We initiated an RFP to select a consultant to 22 conduct a vulnerability assessment of our entire enterprise facilities. The last one we conducted was 23 done in 2009, and it's important that these things get 24 25 updated to be a little more inclusive as the standards

Page 62 1 for conducting these assessments have evolved. 2 Anyway, what we have before us is a recommendation to award a contract to Tinwood 3 Consultants whom the Ad Hoc Advisory Committee 4 recommended a contract be entered into. 5 6 CHAIRWOMAN O'MALLEY: So the scope of this, 7 is it more -- it's physical as well in terms of vulnerability, what does that mean? What are you 8 looking for? 9 10 MR. LEDER: Madam Chair, what we're looking 11 for is an assessment of our vulnerability to man-made 12 threats and natural threats to our enterprises, what 13 are they and what measures should we undertake to 14 mitigate those threats. 15 As sadly as the recent events in Texas, Florida and Puerto Rico have demonstrated, disasters 16 17 happen and we need to be prepared to respond to those 18 disasters. And this assessment, since the last one 19 was done in 2009, we've added a lot of infrastructure 20 to our enterprise. And our participation in the vigilant guard exercise which simulated what would 21 22 happen to the Albuquerque area when hit by a massive earthquake, it shows that it's good to be prepared. 23 And this document will be an integral part in our 24 25 being prepared for such disasters.

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1	CHAIRWOMAN O'MALLEY: Any questions?
2	COUNCILOR DAVIS: I move approval.
3	CHAIRWOMAN O'MALLEY: There's a motion and a
4	second to approve the vulnerability assessment.
5	That's 9B. All those in favor say aye.
б	COMMISSIONER DAVIS: Aye.
7	MR. PERRY: Aye.
8	CHAIRWOMAN O'MALLEY: Aye.
9	COUNCILOR JONES: Aye.
10	COMMISSIONER JOHNSON: Aye.
11	CHAIRWOMAN O'MALLEY: All oppose say no. The
12	motion carries.
13	Just in closing, I want to wish everyone a
14	really wonderful Thanksgiving, you and your families.
15	And this meeting is adjourned. Thank you.
16	(Meeting adjourned at 6:24 p.m.)
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1	REPORTER'S CERTIFICATE
2	I, Kim Kay Shollenbarger, New Mexico Certified
3	Court Reporter, No. 236, do hereby certify that I
4	reported the foregoing proceedings in stenographic
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6	correct transcript of those proceedings taken to the
7	best of my ability.
8	I FURTHER CERTIFY that I am neither employed by
9	nor related to any of the parties or attorneys in
10	this matter and that I have no interest in the final
11	disposition of this matter.
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