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

CHAIRWOMAN O'MALLEY: Good evening, everyone, and welcome. I call the November 16,2017 meeting of the Albuquerque Bernalillo County Water Utility Authority to order. Let the record show Chair Pena and Trustee Rael are excused.

We're going to begin with the invocation and Pledge of Allegiance led by outgoing CEO Rob Perry.
(Invocation/Pledge of Allegiance)
CHAIRWOMAN O'MALLEY: Thank you. We go next to Item 3, which is the approval of minutes. I move to approve the October 18,2017 minutes.

COUNCILOR JONES: Second.
CHAIRWOMAN O'MALLEY: There's a motion and a second. All those in favor say aye.

MEMBERS: Aye.
CHAIRWOMAN O'MALLEY: All oppose say no. The motion carries.

We go next to proclamations and awards. So there's an award here.

So this is in recognition of longevity for Member Perry for endurance, longevity, all this sort of thing, for serving on the Albuquerque Bernalillo County Water Utility Authority for seven years representing Mayor Berry. So we have a gift for you. I don't know what it is. You should open it and share

1 it with everyone.
(Opening of gift)
MR. PERRY: It's very nice.
CHAIRWOMAN O'MALLEY: Oh, very nice. It is kind of a watch.

MR. PERRY: Oh, that's great. I'll point that out. It's a beautiful plaque with a picture of some guy I've never seen before, and a clock.

I want to say thank you so much to the Board and to staff for this. It's a real honor and a treat and it's been great being on this Authority Board. I think you guys serve the interest of your constituents in a amazingly competent, professional and ethical way. And the issues of water are so critically important to a multitude of things for this community and every community and it's just been an honor and a treat and privilege to work with such professionals. And the employees of the Water Utility Authority that are out there are some of the best I've ever worked with.

My son actually had the opportunity, he's an engineering student at the University of Louisville, and he had the opportunity to work, and Mark said, "Do you want him to come in and do inside work in the engineering office," and my son said, "No, I want to

1 work out in the field." He had worked on the ground on utility work before and he would tell me stories about these guys and how hard they work. And he never missed a day. He said they went in, start their day at 7, worked until 4, then overtime, the full-time employees, and it was amazing, you know, what they did for our consumers and our public and our citizens and that's what makes it successful, and the management and the folks, and the citizens that are involved, all make it a very, very successful endeavor, organization, something to be proud of.

So thank you so much, Madam Chair, all the Board Members, all the employees, and Mark and his staff. Wonderful people.

CHAIRWOMAN O'MALLEY: Well, thank you. We wish you well and your family well.
(Applause)
CHAIRWOMAN O'MALLEY: So I just want to recognize someone who probably doesn't want to be recognized, but so what. Her name is Patti Jenkins. There she is. Hi, Patti. And she's retiring from the Water Authority. She was one of the few employees to start when the Water Authority was created and she will be missed. Thank you for your service. (Applause)

CHAIRWOMAN O'MALLEY: Do $I$ have to make a motion to move up Item 10A? Okay, I would like to make a motion to move up Item 10A.

COUNCILOR JONES: Second.
CHAIRWOMAN O'MALLEY: There's a motion and a second to move up Item 10A. All those in favor say aye.

MR. PERRY: Aye.
COUNCILOR DAVIS: Aye.
COMMISSIONER HART STEBBINS: Aye.
CHAIRWOMAN O'MALLEY: Aye.
COUNCILOR JONES: Aye.
CHAIRWOMAN O'MALLEY: All those oppose say
no. Motion carries. This is on the water report.
Welcome.
MR. SHEAN: Good evening, Madam Chair,
Members of the Board.

Tonight we're having Intera Incorporated, our environmental contractor, to provide you with a recent review they did of one of the Air Force's documents related to the work, the corrective action, occurring on bulk fields facility spill that you have been aware of for a few years now.

But briefly, before we go over our comments, just sort of a status report from staff's perception.

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

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

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

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

With that said, let me introduce Eileen

1 Marcillo of Intera.

CHAIRWOMAN O'MALLEY: Thank you. Welcome.
MS. MARCILLO: Good evening, Madam Chair and fellow Board Members. Like Rick said, we performed a review of the RCRA facility investigation report, the RFI report, submitted by the Air Force. And through our review we found four key findings that we feel are really important to be addressed in these addendums that the Air Force are going to be submitting as part of their report. So I just want to walk you through the four key findings that we identified.

The first key finding is that there is insufficient soil data to estimate vadose zone source mass. So what that is, the vadose zone is the unsaturated region in the subsurface that extends from the ground surface to about 450 feet below ground surface, where the water table is. And so really the data that they currently have is not -- we need more data so that we can understand where the mass is located both laterally and vertically within that vadose zone. We also need to understand, well, how is that mass being transferred from that unsaturated zone to the aquifer that's most at risk. That's what we call mass flux. So that was our first key finding.

Our second key finding is similar, is that

1 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.

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

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

So the following slides kind of provide more detail for each of these key findings that we found.

So the first one that we found that needs to be addressed is that the mass within the vadose zone. So how much fuel is actually in the vadose zone. To be able to implement corrective measures you really need to know how much fuel and where it's located to implement an effective corrective measure and reduce risk to the aquifer. So really, how much mass is in the vadose zone. And then, once again, how much of that mass is moving down. You know, talked a lot about mass, but what about the composition of the fuels. Is EDB in the fuel that remains in the vadose zone? I mean, EDB is a particular concern to the Water Authority because that's what's impacting the

1 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.

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

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

What we've done here is we've looked at groundwater concentrations and so we know fuels and a mixture of a bunch of different chemicals. How each of these chemicals dissolves into the groundwater, you can call effective solubilities. You can take a look at groundwater concentrations that have been -- at each monitoring well and compare it to effective solubilities of, let's say, benzene or total petroleum hydrocarbons. So if your groundwater concentration exceeds that effective solubility that's an indicator that, hey, there's mass there, there's fuel there, that's still an issue. Just because it's not in the well doesn't mean it's gone and doesn't need to be treated.

So here's an image. We took data from 2015 for the four quarters of sampling and looked at groundwater concentration. So each of these dots and

1 yellow squares corresponds to groundwater
2 concentration that exceeded the effective solubility. So there was a known LNAPL in there, but it exceeded the effective solubility. Line of evidence that there is fuel in or near this monitoring well. And what's interesting is, if you were to look at, you know, the LNAPL footprint from historical reports, it's exactly similar to the footprint of where these wells are located.

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

The fourth finding was that there's an

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

To go on with delineation is that inadequate vertical definition of the northernmost part of the plume. So on the right here is -- and from the recent report is the EDB plume. And this red box is where we took a cross-section, a slice, and that's the picture on the left-hand side. And the picture on the left-hand side, the north is on the right and the south is on the left. So each of these vertical lines is significant of a well. And it might be hard to see, but the blue boxes are where the well screens are. And then behind that, actually, you have yellow
coloring, is coarser grain sediments, sands. And then the gray is the finer grain sediments, silts and clays. And so, the two deep wells that had consistent detects of EDB, the most northern two deep wells, are the ones on the left. And so, we have questions about, well, you know, the monitoring wells that you have north of these two wells are not screened in the proper place. So we could be missing, you know, that deep EDB plume, that northern extent of that deep EDB plume. So it's really important that a monitoring well is installed so that it's intercepting, you know, the depth of this coarse grain could be driving the EDB.

So in summary, we feel as though the RFI is not currently adequate for evaluating corrective measures. We feel as though, you know -- we hope that these data gaps can be addressed in the RFI addendums.

And so, in summary, it's just, where is the mass located in the vadose zone, as well as the saturated zone. So where is that fuel located? You know, we need the data to estimate migration rates. How is it transferred from the vadose zone into the saturated zone? That's really important for the plume longevity, basically. And then, just to find the 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.

CHAIRWOMAN O'MALLEY: Councilor Davis.
COUNCILOR DAVIS: Thank you, Madam Chair. Thanks so much for that. Let me just come back really quickly to do a follow-up question on sort of the second finding related to the RFI. You mentioned a couple of times that there's some other data points that are also out there. My question is, are there other data points that we can reasonably point to that might help us compensate for the drowned screening devices that gives us some data or that the RFI could use in lieu of or do we truly need to recommend that we start over with new wells that can be vertically 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.

MS. MARCILLO: Because you have to monitor those. And so, that's just another part of the dissolve phase. As far as source area and mass in the vadose zone, $I$ mean, $I$ think we calculated, it's like six percent of the vadose zone has been sampled and a lot of those samples were collected at kind of like predetermined depths. And so, it needs to be -- you know, I do feel as though, like, it's important to have some continuous from the ground surface to, you know -- I mean, I can't say a certain depth. COUNCILOR DAVIS: Sure.

MR. MARCILLO: But there needs to be some continuous collection of soil core to understand where the mass is.

COUNCILOR DAVIS: And, Madam Chair, if I
could follow that up really briefly. I realize we're not writing the RFI here, but just making recommendations. But in your professional experience, if the RFI were crafted in order to gather the data that you think is necessary to really give us that picture, how much more work or how much more infrastructure is that going to take? And I think part of the question is from the neighborhood there that we hear from. Obviously they endured a whole lot of the initial wells and it's frustrating now for a
lot of folks to hear now that so many, 85 percent or so of some of the monitoring wells, you know, have been drown and essentially those wells are no longer usable. There's some fear that they have to sort of go through all this again, as they just got settled. I mean, what's your professional experience on how much more infrastructure is it going to take to get us to the place where we get the right data the next time? A little or a lot, maybe is what I'm asking. MS. MARCILLO: I mean, it's hard to -- it depends on what you find in the source area, I guess. I mean, it's a really iterate process. It's really hard to put, you know, an end point. Until the data, you know, in the source area, in that vadose zone, starts to be collected. I mean, when you design corrective measures, I mean, your infraparameters, you need to know where it's located and what the mass is and those are two key parameters that there are still -- there's some uncertainty. Sorry. COUNCILOR DAVIS: We have to have the data. We just want to be sure. Thank you.

CHAIRWOMAN O'MALLEY: Mr. Perry.
MR. PERRY: Madam Chair, I just have a couple of questions. I would also like to express my appreciation for coming down and giving us an update.

1 After hearing all of the presentation, I'm trying to

MR. PERRY: That you would have to continuously try to identify locations and character of the major pollutant area within the underground water plume.

MS. MARCILLO: What currently has been installed is an interim measure.

MR. PERRY: Right.

MS. MARCILLO: The purpose is to collect more data so that the Air Force and their contractors can install permanent solutions. So I think in this process, yeah, it would be -- I mean, typically you want to have a full understanding of the situation before you implement a remediation system, or whatnot. But you can always put pilot test systems or interim measures while you're concurrently collecting data so then you can build out to a full-scale system.

MR. PERRY: Got it.
MS. MARCILLO: Does that answer your question?

MR. PERRY: It does to a certain extent. It certainly hones it down and I appreciate your efforts. My question wasn't very precise and clear. But in plumes of this nature, and I understand probably no two plumes are the same. I'm assuming TAT this type of data effort is pretty common. I mean, does it take five, ten years to really probably do a lot of that data so that you can, you know, put permanent measures that are confirmed to be at least close to high level of efficiency with remediation efforts in place?

MS. MARCILLO: Any field effort, yes, it's going to take -- I mean, it's a lot of energy and time, because you have to secure permits and whatnot.

1 And I also think it's an iterate process. You can't just, you know, sit and be like, hey, we're going to put a hole here, here, here or here, you know. So, I mean, the Air Force has gone out and done it. You know, they've put, you know, a lot of monitoring wells in, definitely, you know. Unfortunately, some of the data may be previously in the source area could have been collected at the time those wells had put in and, you know, don't feel like there was sufficient data collected. Some data was collected, but we feel as though, you know, there's still some -- obviously some data gaps. So unfortunately, since when those wells were being put in, that data was not collected.

MR. PERRY: Sure. I understand. I think I understand. And let me express my appreciation, because I think they have some -- the Air Force is committed to it to start with. They have the resources and they put resources towards it. Very high capital cost of those resources. They've listened to the community, probably most importantly, try to do a good job with keeping the community in the loop of what's going on and transparency related thereto. You come down and told us it's not perfect, we still have work to do. I mean, that's what you're telling us tonight in plain, simple English. And I

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

CHAIRWOMAN O'MALLEY: Commissioner Stebbins. COMMISSIONER HART STEBBINS: Thank you, Madam

Chair. I have a couple of questions. If you were to say, like what's the most significant shortcoming in the RFI, what would that be?

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

1 But it's just really important to get an understanding 2 of where the fuel is located in the vadose zone within the source area so that it can be remediated and the risk can be reduced to the potable water supply.

COMMISSIONER HART STEBBINS: And I hope I ask this the right way. So several years ago, I think it was either Shaw or CB\&I did a test well that was supposed to measure how water and contaminants move through the soil there at the site of the fuel spill. How much of this RFI is based on that, I think it was called a pump test. How much of the RFI that was just recently presented is based on that pump test? A lot of the estimates of like how things are moving are based on that or something else?

MS. MARCILLO: I do not recall off the top of
my head. I mean, I do know, the RFI, it's a culmination of like all the data. And so it's based on, you know, from the first soil sample was taken to, you know, present day. So I don't think a lot -- I mean, that test won't tell us about the mass or anything like that. That's just going to tell us about the aquifer parameters, which -- the aquifer characteristics, which is a huge parameter for designing pump and treat systems. Yeah, I don't recall.

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

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

MS. MARCILLO: I believe it's installed already and I think we're putting it on line, yes. COMMISSIONER HART STEBBINS: How comfortable are you that those wells are going to capture the EDB 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

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

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

COMMISSIONER HART STEBBINS: And the reason I ask that question. Again, $I$ recognize that this is an interim measure. Several years ago Deputy Assistant Secretary Mark Correll was here. He had a meeting with many of us elected officials, where he made a commitment to eight wells. I absolutely agree that there's no need to do eight, given the cost of eight, if it's not necessary. But $I$ guess $I$ just always go back to that original commitment, is eight what we need and maybe it's too early to tell. Right now in your evaluation, three or four, doing the job?

MS. MARCILLO: We're further evaluating it.
I mean, I think we need to run more simulations, you know, put that fourth well in. Confirm how much each of these wells is actually pumping, to make sure that

1 we're modeling the system correctly. Really then, you 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.

COMMISSIONER HART STEBBINS: Thank you. Madam Chair, just one more quick question. Can you explain the complexities of the rising water table?

MS. MARCILLO: With respect to additional source mass or just altogether?

COMMISSIONER HART STEBBINS: Well, just the remediation. If the water table were where it was ten years ago, that would be one circumstance. I continually hear that the rising water table is just going to create more complexity in the remediation process.

MS. MARCILLO: Well, I think, yes. I think you're going to have -- two-fold. I mean, it's easier to treat the unsaturated zone, basically, instead of just pumping and trying to dewater and then treat the soil. There's other ways that you can do it, by air sparging, you can heat it up. But I think also, I think what's -- you know, we're seeing wells, you know, the expensive wells that are being put in are now being submerged and so they're going to have to put more wells in. And additionally, what's really
important is that we have this mass in that vadose zone and so as it's rising up it's just, you're adding mass to that plume. And so your plume is getting thicker and thicker and thicker. But I think just overall, it complicates things when water is involved. Did that answer...

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

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

COMMISSIONER HART STEBBINS: Thank you, Madam Chair.

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

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

1 wanting to scream, we need to get rid of all of our 2 water conservation programs because obviously it's 3 messing up the whole --

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

1 this report. But I also see there's some folks here from the 377 th 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.

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

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

The purpose of an RFI report is to characterize the nature and extent of the contamination. I think what got a little confusing, and I can see it more clearly now based on Intera's review and other people's review of the report, is that we also summarized the progress of the interim measures to date in that report. But keep in mind, these things are ongoing. I think it led to the impression that we thought we were done and ready to go to the corrective measures evaluation, but the report actually clearly states that is not the case. In fact, the report, if you look at the conclusions and recommendations, says that additional characterization was needed on the ethylene dibromide plume, the one that's gone off base, as well as coring and other characterization activities in the source area that was just being discussed. And that coring work plan, you know, will do just that. And we're working on the locations with the State.

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

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

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

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

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, we had extraction that ran for 12 years that took out, between that and some bioslurping, which is one of my favorite things to say, which is getting free product at the top of the water table, removed about 750,000 gallons of fuel, equivalent of fuel to vapor. And we had to let that system shut off because it kind of reached the end of its useful life. We were putting more propane to run the system than vapors we were taking out. So we had to let that rest and come back to equilibrium so we can go back and look in the vadose zone, were cleaned up by the soil vapor extraction. What areas are left. And that's one of the things that the coring that we're going to do next 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

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

And to go to your point, Commissioner Hart Stebbins, yes, my boss Deputy Secretary Mark Correll promised up to eight wells, that is still there. But as you know, we do things in phases. Intera addressed that iterate process that we have. And so we'll put this fourth well in. We'll see how it works. We do further aquifer tests. We do further modeling. We're going to have a second plume capture meeting with Intera and USGS and the City and NMED in the very near future, probably early December, to talk about that as well, to continue to refine how we calculate that capture, because we have lost some of our water table wells and we need to look at other lines of evidence, where our data gaps are and how to continue to address
this.
So are we still committed to up to eight wells? Absolutely we're still committed to up to eight wells if it's necessary. But we haven't even seen how the fourth well is going to work yet because it's coming on line in January.

So I hope that helps put it in a little bit of context and I'd be happy to answer any questions.

COMMISSIONER JOHNSON: Thank you. I don't have any additional questions. Thank you for all the work that you have done and I want to thank everybody for being here today.

MS. LYNNES: Well, thank you for the opportunity. I appreciate it.

CHAIRWOMAN O'MALLEY: Mr. Shean, do you have anyone else who wanted to speak to this issue?

MR. SHEAN: I do believe the State representatives are here from the Environment Department, if they want.

CHAIRWOMAN O'MALLEY: Is it just if we have any questions or did they want to make comment? I guess not.

MR. SHEAN: Diane Agnew from New Mexico Environmental Department.

CHAIRWOMAN O'MALLEY: Welcome.

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

CHAIRWOMAN O'MALLEY: Commissioner Stebbins has some questions.

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

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

PAUL BACA PROFESSIONAL COURT REPORTERS

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.

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

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

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

COMMISSIONER HART STEBBINS: Thank you.
Thank you, Madam Chair.
CHAIRWOMAN O'MALLEY: Thank you very much.

1 Are there any other questions? I do have a question. I guess this is for staff. Of course, this came to the surface, literally. So it was mentioned that there was anticipation that the water level would rise, it's risen quite a bit. Is that because of the recharge efforts, the water recharge efforts? What is causing that? Apparently it's making things worse.

MR. SHEAN: Madam Chair, that is actually part of both the move to dependence on surface water as the primary drinking water supply, so we're not pumping as much in the old basin, so that does allow us some more water recharging in and to replace the dry soil now with saturated soil where it had not been, since we have been pumping down below. Also I would say conservation has also led to that.

CHAIRWOMAN O'MALLEY: So what is the plan? I mean, that's a Water Authority issue, right, in terms of pumping and what sources it uses. So what is our plan to do with this issue or is that out of our hands? What is the deal?

MR. SHEAN: Madam Chair, one, we're still patting ourselves on the backs, seeing this water rise and to increase the groundwater supply for the community. As Eileen mentioned, across the state they're usually dealing with issues of a drop of water

1 supply when you're at a contamination site. And in those cases the responsible party for the contamination are having to adjust their technologies. There are technologies to deal with both drop in water table and a rise in water table at these spills.

CHAIRWOMAN O'MALLEY: It just sounded like it 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 with new technology or just relook at the whole thing? MR. SHEAN: That's correct.

CHAIRWOMAN O'MALLEY: I was just curious about that. I don't have any questions. Commissioner Stebbins.

COMMISSIONER HART STEBBINS: Thank you, Madam Chair. And I want to thank everybody that has come here tonight. I specifically want to thank the individuals who have come from Kirtland Air Force Base. I think I saw the Vice Base Commander, Colonel Nickell. I want to thank you for being here, Ma'am. And the Commander of the 377 th Mission Support, Colonel Michael Harner. So I just want to say thank you to you for being here tonight and being part of this conversation.

CHAIRWOMAN O'MALLEY: So that ends that particular item. We're going to go to public comment.

1 Ms. Carreon, would you tell us how many people we have 2 signed up to speak.

MS. CARREON: We have seven speakers.
CHAIRWOMAN O'MALLEY: So each speaker will have three minutes, and then at about two-and-a-half minutes you'll get a little bell that says if you would start to think about closing up your comments. If you will call the first speaker, please.

MS. CARREON: Becky Gutierrez followed by Phil Hern.

CHAIRWOMAN O'MALLEY: Welcome.
MS. GUTIERREZ: Good evening, Madam Chair, Board Members. I'm speaking in support of Bill R-17-20. Now with the rapid Albuquerque growth, it's so important to regionalize and combine smaller water and wastewater systems. Albuquerque Water Authority has the means and the smarts to run these systems. Carnuel Mutual Domestic recognized this back in 2008 and asked Albuquerque Water Authority to partner with us and to represent us to run our systems. This turned out to be very valuable not only to the community, but New Mexico in general. By using the Albuquerque Water Authority there's now one less community competing for funds and, in turn, that helps with priorities and regionalization. Small

PAUL BACA PROFESSIONAL COURT REPORTERS

1 communities tend to waste funds given by NMFA by overpriced planning engineers who end up pocketing most of the money of the grants and the loans and building these systems themselves. I know this because that happened to Carnuel Mutual Domestic. We're asking the Albuquerque Water Authority to continue to help Carnuel in our request to a water and wastewater system due to poor water quality and aging septic tanks. They have done, especially Frank Roth, has done a wonderful job in the past in getting us funds and we are hoping that they will continue to do so. Thank you.

CHAIRWOMAN O'MALLEY: Thank you.
MS. CARREON: Phil Hern followed by Pete English.

CHAIRWOMAN O'MALLEY: Welcome.
MR. HERN: Hello. My name is Phil -- well, first I want to say, Madam Chair, thanks for letting me speak. Madam Chair and Board Members, my name is Phillip Hern. I'm the Union President of the Management Employees of the Water Utility. The reason we are here tonight is to ask this Board why they supported the imposement of the contract on the $M$ series employees without getting input from the Union. Also, why would the Water Authority and this Board

1 choose to impose this contract even though the Water 2 Authority knew that in 2013 Judge Fry, Judge Fry's 3 decision in the Court of Appeals in AFSCME versus The

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

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

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

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

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

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

1 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?

MR. AUH: Yes. Madam Chair, Councilor Davis. The status is that we have filed what's called a Petition for a Writ of Certiorari with the Court of Appeals. The Union has responded. It is now up the Court of Appeals to decide whether to grant the petition, that is even consider the case, because they can just deny it and say, "we don't even want to get into the merits of the matter." So we are waiting the Court of Appeals decision on that threshold issue. Sometimes these things can take a little while, sometimes they pop up suddenly out of nowhere.

COUNCILOR DAVIS: If it please the Chair, I would like to request we just do an executive session at the next meeting for members who would like to attend.

CHAIRWOMAN O'MALLEY: Is that possible? Thank you very much. The next speaker, please.

MS. CARREON: Pete English followed by Dave

1 McCoy.

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

MS. CARREON: Dave McCoy followed by Michael Jensen.

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

1 years ago and that there were air bubbles and that 2 they didn't have accurate sampling data at that time. 3 You know, this is not something that all of a sudden
just look at that area as water that's unavailable to the City now. Now, how much of your water is being wiped out by this? Don't let the Air Force get away with this soft shoe routine where they come up and they tell you, "yeah, you know, we're going to get it done and everything and we're considering this." This is a walk in the park for them. This is not aggressive remediation. It's not aggressive protection.

CHAIRWOMAN O'MALLEY: Thank you.
MS. CARREON: Michael Jensen followed by
Elaine Hebard.

CHAIRWOMAN O'MALLEY: Welcome.

MR. JENSEN: My name is Michael Jensen. I'm going to be talking about that provision of water services to Valle De Oro. So, in case you've forgotten, in February of 2015 there was a six million gallon spill of untreated wastewater that ran down through Isleta Pueblo. I learned about it that morning from a representative of the Pueblo before it was public knowledge. There was an EPA settlement that included some money. I think that's accurate from the FOIA documents that $I$ got, it might have changed. And what's called a supplemental environmental project. That project was approved in

1 March of 2016, I believe, and includes a 3.4 mile 2 nonpotable pipeline to the -- from the wastewater 3 treatment plant to the refuge for two lagoons and a

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

1 you.
(Commissioner Hart Stebbins not present)
MS. CARREON: Elaine Hebard followed by Philip Salazar.

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

My second point is on no-net expense, that's also an important issue to consider. That we have spent a lot of money for the existing infrastructure, we customers, for the existing infrastructure and water rights, but we also have a backlog of $\$ 450$ million in infrastructure needs. In fact, there's a
billion dollars of infrastructure needs over the long period, according Mr. Sanchez's memo to the Board in 2015. And so, with the debt as well being $\$ 830$ million, including interest, those kinds of issues cannot be ignored when looking at no-net expense. And I suggest a finding similar to what the County and WALH entered into finding 21, making sure that we are not -- any new development cannot add to the unfunded amount of infrastructure backlog.

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

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

1 tonight. I'm not sure that it includes it, but one of 2 the major issues in our basin is that water rights have not been adjudicated. That means that the ownership and the quantity and the priority dates have not been resolved, nor have the ownership and the quantity for the pueblos has been managed. And so those water rights have not been actually assessed for their vulnerability. And so as you're looking at the vulnerability assessment and/or in your update of the assessment management plan, I would suggest that the vulnerability risk of your water rights also be assessed. Thank you very much.

CHAIRWOMAN O'MALLEY: Thank you.
MS. CARREON: Our last speaker, Philip Salazar.

CHAIRWOMAN O'MALLEY: I think Mr. Philip Salazar must have left. Okay, thank you. That ends public comment.

So there's an announcement. The next scheduled meeting for the Water Authority is December 22 nd, in these chambers.

We're going to go to Item 7, which is the introduction of first reading of legislation. However, this is an item that they're asking for immediate action on it, and this is authorization of
agreement for water service.
So the first thing is to make a motion to place this item on the agenda for immediate action.

MR. PERRY: Second.
CHAIRWOMAN O'MALLEY: There's a motion and a second to place this item on the agenda for immediate action. This is A, R-17-22 authorizing an agreement for water service to the Valle De Oro National Wildlife Refuge Headquarters/Visitors Center.

There's a motion and a second. All those in favor say aye.

COMMISSIONER JOHNSON: Aye.
COUNCILOR JONES: Aye.
CHAIRWOMAN O'MALLEY: Aye.
COUNCILOR DAVIS: Aye.
MR. PERRY: Aye.
CHAIRWOMAN O'MALLEY: All oppose say no. The motion carries. So that brings it up for discussion. If someone would come up to speak to this issue. Thank you.

MR. CADENA: Hello, Madam Chair, Members of the Board. I present to you a development agreement for the Valle De Oro, it's a Fish and Wildlife project for a headquarters and a visitors center on the 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 service and the developer in this case, U.S. Fish and Wildlife, would be extending potable waterline from existing infrastructure along the property frontage and they will connect to that line for their potable service. Also, as previously stated, the Water Authority is installing a nonpotable waterline in which, in fact, the U.S. Fish and Wildlife will 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.

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

CHAIRWOMAN O'MALLEY: So I have a few questions. Is there a trunk line that's being installed along Second Street to reach Valle De Oro?

MR. CADENA: Correct, there currently is. I believe it's a 36-inch transmission line which runs east and west and that supplies water for what's knowns as the Hubbell trunk in the pressure zone 1E.

So this project is taking what's called a distribution line. Distribution lines are used for connections for water services. They will be installing a waterline from the existing transmission line and going south, pretty close to Second Street, covering that property frontage.

CHAIRWOMAN O'MALLEY: So the Water Authority, are they responsible for the cost of the line up to the Valle De Oro?

MR. CADENA: No, the Water Authority does not install infrastructure for the development. It's the developer's sole responsibility.

CHAIRWOMAN O'MALLEY: That includes the trunk line to the Valle De Oro?

MR. CADENA: For the potable waterline, correct.

CHAIRWOMAN O'MALLEY: So this is a distribution line. So that means it could be tied into the existing landscaping and/or it could also be available if someone wants to develop along Second Street.

MR. CADENA: Exactly.
CHAIRWOMAN O'MALLEY: But they have to pay the expansion charges.

MR. CADENA: Correct. Yeah, development pays
for itself and the developer is responsible for the utility expansion charges and water supply charges as well.

CHAIRWOMAN O'MALLEY: Are there any questions?

COUNCILOR DAVIS: Madam Chair. Could you just address very quickly sort of the questions we heard earlier about resolving these sort of unresolved issues out of the EPA settlement and how this all connects with that so that we can resolve that without getting into too much legal detail there?

MR. SANCHEZ: Madam Chair, Councilor Davis. Charles Leder should be able to address that.

COUNCILOR DAVIS: Thank you, sir.
MR. LEDER: Good evening, Madam Chair, or Vice Chair. Charlie Leder. I manage the plant operations group for the Water Authority.

I took part in the negotiations between EPA Region 6 staff and the Water Authority when the Supplemental Environmental Project was developed. To the best of my knowledge, that project specifically addresses the installation of a nonpotable waterline that will be used for landscape irrigation on the site. Again, with nonpotable water and for the use of that line also to fill some of their wetlands given an

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

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

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

PAUL BACA PROFESSIONAL COURT REPORTERS

COUNCILOR DAVIS: I appreciate that very
much. I think that's good background. And just to clarify, I think we're moving forward and satisfying those conditions in doing all this work.

MR. LEDER: Thank you.
MR. SANCHEZ: Madam Chair, Councilor Davis. We meet with the EPA periodically to give them a status report.

CHAIRWOMAN O'MALLEY: Well, to get a clearer picture. I know that particular corridor, Mr. Manager, that particular corridor is also a potential for, $I$ think enhancement, in terms of the -I think that's important for people to know, that's a corridor to the wetlands or this area and I think there's some opportunity actually for enhancement in terms of development along that corridor. I think we've been looking at that for a long time. And this would add that opportunity. Is that a fair assessment?

MR. SANCHEZ: That's correct. In fact, we will be installing a landscape buffer in front of the reclamation plant to begin the improvements along that corridor.

CHAIRWOMAN O'MALLEY: I move approval.
COUNCILOR JONES: Second.

CHAIRWOMAN O'MALLEY: There's a motion and a second to approve $A, R-17-22$. All those in favor say aye.

MR. PERRY: Aye.
COUNCILOR DAVIS: Aye.
CHAIRWOMAN O'MALLEY: Aye.
COUNCILOR JONES: Aye.
COMMISSIONER JOHNSON: Aye.
CHAIRWOMAN O'MALLEY: All oppose say no. The motion carries.

We don't have any items on the consent agenda. But we do have some items for approval. We'll being with Item 9A, which is $\mathrm{R}-17-20$, which is authorizing and approving submission of a completed application for financial assistance and project approval to the New Mexico Finance Authority for the Carnuel Wastewater System Improvement project.

Mr. Roth, thank you.
MR. ROTH: Madam Vice Chair, Members of the Board. The purpose of this application is to obtain local government planning funding in the amount of $\$ 50,000$ to help plan and design the gravity sanitary sewer system for the Carnuel Community. The focus of this funding will be in the high priority area between New Mexico 333 and Interstate 40. The sanitary sewer

1 system would replace in about 125 homes those old septic systems. The Water Authority is submitting this application as a fiscal agent on behalf of the Carnuel Community. Those residents would be customers of the Water Authority. And based on input from the community, they would greatly appreciate your support in this resolution and submitting this application. CHAIRWOMAN O'MALLEY: Commissioner Johnson. COMMISSIONER JOHNSON: Thank you, Madam Chair. And just a quick comment. Thank you very much for all of your work. This has been a very long project that predates me out there in Tijeras and Carnuel. And, Becky, it's good to see you. It's been a while since I've seen you. Madam Chair, with that $I$ would move approval. COUNCILOR JONES: Second. CHAIRWOMAN O'MALLEY: There's a motion and a second to approve 9A. All those in favor say aye. COMMISSIONER JOHNSON: Aye.

COUNCILOR DAVIS: Aye.
CHAIRWOMAN O'MALLEY: Aye.
MR. PERRY: Aye.
COUNCILOR JONES: Aye.
CHAIRWOMAN O'MALLEY: All oppose say no. The motion carries.

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

Rick Shean.
MR. SHEAN: Madam Chair, Members of the Board. This resolution will ask staff to hire a consultant to prepare an inventory and threat assessment of the known and potential contamination sites that are within and nearby the Water Authority service area. We would ask the Water Protection Advisory Board to help develop the scope of this project and to prioritize sites to be considered by the chosen contractor. And information from this report would actually help with the implementation of the groundwater management as passed in the Water 2120 Water Resources Management Strategy approved by this Board in September of last year, as well as augment the water quality protection policy and action plan that is currently being updated. The project would be performed and reported by June of 2018.

I stand for questions.
CHAIRWOMAN O'MALLEY: Thank you. Any questions?

COUNCILOR DAVIS: I move approval.

MR. PERRY: Second.
CHAIRWOMAN O'MALLEY: There's a motion and a second to approve $B, R-17-21$. All those in favor say aye.

COUNCILOR DAVIS: Aye.
MR. PERRY: Aye.
CHAIRWOMAN O'MALLEY: Aye.
COUNCILOR JONES: Aye.
COMMISSIONER JOHNSON: Aye.
CHAIRWOMAN O'MALLEY: All oppose say no. The motion carries.

I guess $I$ kind of went a little too fast with C, we already approved that. So let's move on.

That takes us next to D, which is approving the recommendation of award for the vulnerability assessment.

Mr. Charlie Leder.
MR. LEDER: Thank you, Madam Chair, and Members of the Board.

We initiated an RFP to select a consultant to conduct a vulnerability assessment of our entire enterprise facilities. The last one we conducted was done in 2009, and it's important that these things get updated to be a little more inclusive as the standards

1 for conducting these assessments have evolved.

Anyway, what we have before us is a recommendation to award a contract to Tinwood Consultants whom the Ad Hoc Advisory Committee recommended a contract be entered into.

CHAIRWOMAN O'MALLEY: So the scope of this, is it more -- it's physical as well in terms of vulnerability, what does that mean? What are you looking for?

MR. LEDER: Madam Chair, what we're looking for is an assessment of our vulnerability to man-made threats and natural threats to our enterprises, what are they and what measures should we undertake to mitigate those threats.

As sadly as the recent events in Texas, Florida and Puerto Rico have demonstrated, disasters happen and we need to be prepared to respond to those disasters. And this assessment, since the last one was done in 2009, we've added a lot of infrastructure to our enterprise. And our participation in the vigilant guard exercise which simulated what would happen to the Albuquerque area when hit by a massive earthquake, it shows that it's good to be prepared. And this document will be an integral part in our being prepared for such disasters.

CHAIRWOMAN O'MALLEY: Any questions?
COUNCILOR DAVIS: I move approval.
CHAIRWOMAN O'MALLEY: There's a motion and a second to approve the vulnerability assessment.

That's 9B. All those in favor say aye.
COMMISSIONER DAVIS: Aye.
MR. PERRY: Aye.
CHAIRWOMAN O'MALLEY: Aye.
COUNCILOR JONES: Aye.
COMMISSIONER JOHNSON: Aye.
CHAIRWOMAN O'MALLEY: All oppose say no. The motion carries.

Just in closing, I want to wish everyone a really wonderful Thanksgiving, you and your families. And this meeting is adjourned. Thank you. (Meeting adjourned at 6:24 p.m.)

REPORTER'S CERTIFICATE
I, Kim Kay Shollenbarger, New Mexico Certified Court Reporter, No. 236, do hereby certify that I reported the foregoing proceedings in stenographic shorthand and that the foregoing pages are a true and correct transcript of those proceedings taken to the best of my ability.

I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or attorneys in this matter and that $I$ have no interest in the final disposition of this matter.

Kim Kay Shollenbarger
CCR No. 236, RPR
License Expires 12-31-2017

