

1 KIRTLAND AIR FORCE BASE
2 ENVIRONMENTAL PUBLIC FORUM

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10 TRANSCRIPT OF PROCEEDINGS

11 Tuesday, June 28, 2011
12 6:00 p.m.

13 Cesar Chavez Community Center
14 7505 Kathryn, Southeast
15 Albuquerque, New Mexico 87108

16 REQUESTED BY: KIRTLAND AFB PROGRAM SUPPORT

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18 REPORTED BY: CHRISTOPHER R. SANCHEZ, CCR, CSR
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<p>1 A P P E A R A N C E S Page 2</p> <p>2</p> <p>3 The Facilitator:</p> <p>4 KRISTEN SKOPECK, ARMY CORPS OF ENGINEERS</p> <p>5 Representing Kirtland Air Force Base, 377th Air Base Wing:</p> <p>6 COLONEL ROB MANESS</p> <p>7</p> <p>8 Representing The New Mexico Environment Department:</p> <p>9 SECRETARY DAVID MARTIN</p> <p>10 Representing the Office of the State Engineer:</p> <p>11 MR. JEFF PETERSON</p> <p>12</p> <p>13 Representing the City of Albuquerque:</p> <p>14 MS. MARY LOU LEONARD</p> <p>15 Representing the Albuquerque Bernalillo County Water Utility</p> <p>16 Authority:</p> <p>17 COMMISSIONER MAGGIE HART-STEBBINS</p> <p>18 Representing the Environmental Protection Agency, Region 6:</p> <p>19 MS. LAURIE KING</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 P R O C E E D I N G S Page 4</p> <p>2 MS. SKOPECK: Good evening, ladies and gentlemen, and</p> <p>3 welcome to tonight's meeting. My name is Kristen Skopec from</p> <p>4 the Army Corps of Engineers and I'll be your facilitator for</p> <p>5 this evening's event. Before I introduce our panel members,</p> <p>6 I'd like to review the ground rules for tonight's meeting which</p> <p>7 are necessary in the interest of time.</p> <p>8 Each panel member will be given the opportunity</p> <p>9 to provide a two- to three-minute opening statement. Public</p> <p>10 attendees will present questions/comments at the microphone</p> <p>11 located in front of the panel members and limit their comments</p> <p>12 or questions to three minutes. Panel members will address</p> <p>13 public participants' questions and comments. One</p> <p>14 question/comment per turn at the microphone. Audience members</p> <p>15 who choose to speak can't yield the remaining amount of their</p> <p>16 time, if they don't use it all, to another person.</p> <p>17 Public participants will sign in for</p> <p>18 documentation. Comments will focus on the bulk fuel activities</p> <p>19 and associated remediation. All questions from the audience</p> <p>20 will be addressed to the panel. Participants should specify</p> <p>21 which panel member the question is for. Other panel members</p> <p>22 may provide related comments or answers whether called upon or</p> <p>23 not. Subject matter experts may be called upon only by their</p> <p>24 panel reps to assist in the answers and should identify</p> <p>25 themselves, and they will not take any direct questions from</p>
<p>1 I N D E X Page 3</p> <p>2 TRANSCRIPT OF PROCEEDINGS PAGE</p> <p>3 Opening Statement by Colonel Maness 5</p> <p>4 Opening Statement by Mr. Martin 7</p> <p>5 Opening Statement by Mr. Peterson 9</p> <p>6 Opening Statement by Ms. Leonard 10</p> <p>7 Opening Statement by Ms. Hart-Stebbins 11</p> <p>8 Opening Statement by Ms. King 12</p> <p>9 Opening Statement by Mr. Richter 12</p> <p>10 PUBLIC COMMENTS 13</p> <p>11 REPORTER'S CERTIFICATE 69</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 the audience. Page 5</p> <p>2 So let me introduce our panel members.</p> <p>3 Representing Kirtland Air Force Base, the Commander, 377th Air</p> <p>4 Base Wing, Colonel Robert Maness.</p> <p>5 Representing the New Mexico Environment</p> <p>6 Department, Secretary David Martin.</p> <p>7 Representing the Office of the State Engineer,</p> <p>8 Mr. Jeff Peterson.</p> <p>9 Representing the City of Albuquerque, Ms. Mary</p> <p>10 Lou Leonard.</p> <p>11 Representing the Albuquerque Bernalillo County</p> <p>12 Water Utility Authority, Mr. Mark Sanchez.</p> <p>13 Representing the Environmental Protection Agency</p> <p>14 Region 6, Ms. Laurie King.</p> <p>15 And representing the Veterans Administration,</p> <p>16 Mr. Ron Richter.</p> <p>17 Thank you. Colonel Maness will now make a brief</p> <p>18 statement.</p> <p>19 COLONEL MANESS: Thank you, Kristen. First of all,</p> <p>20 I'd like to welcome everybody here tonight and give a special</p> <p>21 thanks to our panel members here with us. They represent the</p> <p>22 larger effort that we've told you about that we now have in</p> <p>23 place to ensure we accomplish our shared objective to remove</p> <p>24 the fuel and its dissolved constituents from the ground and</p> <p>25 groundwater as quickly, safely and effectively as possible.</p>

<p style="text-align: right;">Page 6</p> <p>1 You spoke and we listened. You asked for a meeting with 2 representatives from all the agencies involved with the 3 remediation of this fuel plume, and we are all here to answer 4 your questions and concerns.</p> <p>5 Before we begin the Q and A session and go on to 6 the other panel members' statements, I'd like to give you a 7 brief update on where we're at. As of today, 31 of the 35 sole 8 vapor monitoring wells have been completed. That's at 86 9 percent, the total. And 63 of the 78 groundwater wells have 10 also been drilled. That's at 78 percent. These wells will 11 enable complete characterization of the fuel plume horizontally 12 and vertically so that the best final remediation method or 13 methods can be employed to clean up the plume. Of course, 14 while we're concurrently characterizing, we are concurrently 15 executing interim vapors to continue remediating the plume. To 16 date, we've removed a little bit over approximately 400,000 17 gallons from the soil.</p> <p>18 The Air Force continues to have weekly team 19 meetings with the Air Force team from the Washington senior 20 leadership staff levels down to the contractor, Shaw 21 Environmental, and are on track with the drilling schedule 22 which should be completed in August.</p> <p>23 Additionally, the establishment of a task force 24 working group with representatives from all agencies has been 25 instrumental in streamlining the various processes associated</p>	<p style="text-align: right;">Page 8</p> <p>1 don't know who else might be here. And I think Steve Reuter 2 from the Joint Storage Tanks Bureau is here. That may be it, 3 but if not, they can introduce themselves later.</p> <p>4 As I said, the Hazardous Waste Bureau will be the 5 lead program that oversees the characterization, the interim 6 measures and the final remedy. They will modify the existing 7 permit for the treatment of hazardous waste and remedial action 8 plan. The Groundwater Quality Bureau will manage the discharge 9 permit for the discharges of water. And the Petroleum Storage 10 Tank bureau has expertise in cleaning up petroleum spills from 11 underground or above and storage tanks.</p> <p>12 So the idea is to bring this team together to 13 work with the other technical members to share information and 14 try to come up with the best solution possible to address this 15 problem. And also, we want to work with everybody else on this 16 panel up here and share information and try to work 17 collaboratively to share information and, as I said, come up 18 with the best solution possible.</p> <p>19 The contaminated water that's treated will be 20 treated to meet or exceed the more stringent groundwater 21 standards due to the Water Quality Control Commission for the 22 maximum containment levels established by the Federal Safe 23 Water Drinking Act. The cleanup level is consistent with 24 Kirtland's current hazardous waste permit. We will continue to 25 provide data and information to the public and other entities</p>
<p style="text-align: right;">Page 7</p> <p>1 with this project. It's important to emphasize that the City, 2 Veterans Administration and base water production wells remain 3 safe and we intend to keep it that way. As always, 4 transparency and public participation are crucial, and we 5 continue to post every test result and piece of information 6 relevant to plume characterization and concurrent remediation 7 on our website. Again, thank you all for being here and thank 8 you all panel members for participating.</p> <p>9 MS. SKOPECK: Secretary David Martin will now make a 10 brief statement.</p> <p>11 MR. MARTIN: Thank you. Good evening. For the New 12 Mexico Environment Department, this is a top priority project. 13 It's very, very important. And along those lines we recently 14 formed a tiger team representing different bureaus in our 15 department, the Hazardous Waste Bureau, the Groundwater Quality 16 Bureau and the Petroleum Storage Tank Bureau. This is to take 17 advantage of the expertise that resides in these different 18 departments and bring that expertise together so that you can 19 address this complex and very important project.</p> <p>20 The composition of the team may change over time. 21 This is flexible. For example, we may bring somebody in from 22 our Groundwater Quality Bureau later on. But right now, the 23 Hazardous Waste Bureau will continue to lead the program, and I 24 think a number of those people are here. I saw John Kieling. 25 John is back here. And I saw William Moats back there. I</p>	<p style="text-align: right;">Page 9</p> <p>1 at a meeting such as this, and also we will be providing 2 information and continue to provide information on our website. 3 We will continue to participate in these public meetings and we 4 will continue to public information on our website.</p> <p>5 MS. SKOPECK: Thank you, sir. Mr. Jeff Peterson will 6 now make a brief statement.</p> <p>7 MR. PETERSON: Good evening, everybody. I would like 8 to extend a greeting from John D'Antonio, New Mexico State 9 Engineer. And it's certainly good to be here tonight sitting 10 at the table. My experience so far with the state Engineer 11 Office is in matters concerning water quality and remediation. 12 My agency is quite often left off the list of stakeholders that 13 involve regulatory agencies which have caused problems in the 14 past. So it's certainly good to be here tonight.</p> <p>15 You may be wondering why is the state Engineer 16 Office even here. You know, it's a federal matter. Not only 17 federal, but it's Air Force and it's a water quality issue. 18 Well, we took jurisdiction over Kirtland Air Force Base water 19 right back in the '70s. And as such, the cleanup will 20 require -- and I think we heard tonight -- some groundwater 21 monitoring wells. Those were permitted by our office. In 22 matters of divergence of groundwater, we're involved. That 23 requires a permit from the state Engineer Office. And so the 24 administration of water rights fits nicely with something like 25 this when you have so far a couple of extraction wells that</p>

<p style="text-align: right;">Page 10</p> <p>1 have been proposed and an injection well that's been proposed. 2 And so we certainly do have jurisdiction in a matter such as 3 this, and it's not uncommon for District 1. I can only speak 4 for that and the cases I've been involved in, mining activities 5 out in the Bluewater and Gallup basin to underground storage 6 tanks sites the state Engineer Office is involved. 7 So I'd like to report that, you know, all levels 8 of my agency have been involved clear from John D'Antonio and 9 John Romero, who is our water resource allocation program 10 director, have been invited and we've been working very closely 11 with both the Kirtland Air Force Base and the environmental 12 group under contract in the process of permitting and which 13 applications are required, et cetera. So thank you. 14 MS. SKOPECK: Thank you, sir. I'd like to welcome 15 the Albuquerque Bernalillo County Water Utility Authority 16 Commissioner Ms. Maggie Hart-Stebbins. At this point, Ms. Mary 17 Lou Leonard will now make a brief statement. 18 MS. LEONARD: Thank you. Greetings to all of you and 19 thank you so much for coming out on a hot summer evening. I 20 wanted to just say briefly that Mayor Barry and the city 21 administration are very committed to seeing that this cleanup 22 happens. We're very committed to protecting the public health 23 and environment for the city of Albuquerque. And we do 24 appreciate the efforts so far that Kirtland Air Force Base has 25 made, and we're certainly committed to working with all of the</p>	<p style="text-align: right;">Page 12</p> <p>1 Ms. Laurie King will make a brief statement. 2 MS. KING: I'm glad you-all are here. I just wanted 3 to say on behalf of the Environmental Protection Agency we take 4 remedial engagement very seriously, and it's good to see 5 you-all here. The New Mexico Environment Department is the 6 lead regulatory agency here, and we're here to oversee that and 7 to ensure that all the state standards are met and the federal 8 standards are met, and that the community gets their questions 9 answered. So thank you. 10 UNIDENTIFIED FEMALE: Some of the mikes need 11 adjusting. I couldn't hear the first person at all. And also, 12 some people just don't speak into the microphone. 13 MS. SKOPECK: Thank you for telling us. At this 14 point, Mr. Ron Richter will now make a brief statement. 15 MR. RICHTER: Thank you. Hello, folks. I'm your 16 chief engineer at your VA Hospital and I've been in that 17 capacity for the past 30 years. The VA has an excellent 18 working relationship with Kirtland and the rest of the agencies 19 represented here tonight. We too for our veterans, staff and 20 public need to ensure that our water is always safe to drink. 21 Thank you. 22 MS. SKOPECK: Thank you, sir. Okay. At this point, 23 we're going to open up the floor to questions. We ask that you 24 please step up to the microphone. We ask that you state your 25 name. And as a reminder, only one question per person and</p>
<p style="text-align: right;">Page 11</p> <p>1 partners here to make sure that an efficient cleanup takes 2 place. So thank you so much for your interest. 3 MS. SKOPECK: Thank you, ma'am. Commissioner Mary 4 Hart-Stebbins, are you ready to make a brief statement? 5 MS. HART-STEBBINS: I'm ready. Thank you. My name 6 is Maggie Hart-Stebbins, and I am a member of the Bernalillo 7 County Commission and also a member of the Albuquerque 8 Bernalillo County Water Utility Board. And we're really 9 delighted to be here and part of this discussion about the jet 10 fuel cleanup. 11 The water utility really does share the same goal 12 as everyone at this table to get this fuel spill cleaned up 13 quickly and effectively and completely. The cleanup goal for 14 the site is to return the aquifer to the same condition it was 15 prior to the spill. This level of cleanup, we believe, is 16 important to maintain public confidence in the quality of the 17 water we provide. 18 The water utility is a part of this discussion 19 because we feel that we need to protect our ratepayers and the 20 people who use the water from the aquifer. And again, we 21 really appreciate the partnership with Kirtland Air Force Base, 22 with the City of Albuquerque, with the state Engineer's Office 23 the, Environment Department, and we're looking forward to being 24 a really active partner in this endeavor. So thank you. 25 MS. SKOPECK: Thank you, ma'am. At this time,</p>	<p style="text-align: right;">Page 13</p> <p>1 limit your question or comment to three minutes. I have a 2 stopwatch. 3 MR. STEVE OVERMAN: Good evening. Steve Overman. 4 I was wondering if you could explain the purpose of the 5 drilling activity that's occurring in my area on two sites. 6 The first one was on San Pedro just north of Gibson, and the 7 other one is occurring right now at approximately Ross and 8 California, Southeast. And I'd like to know what that drilling 9 activity is about. 10 COLONEL MANESS: Sir, those wells are the groundwater 11 monitoring wells that the Air Force was asked to put in place 12 by the New Mexico Environmental Department in response to one 13 of our work plans, and we are installing them now. And just to 14 go back over what the status is, we're almost complete with 15 this drilling activity. They will be finished approximately 18 16 August. But we've accomplished 63 of those 78 required 17 groundwater wells and that's the activity you're seeing. The 18 purpose of that is to continue to characterize the fuel leak 19 both vertically and horizontally. So as we build that picture, 20 we can develop the final remediation method or methods and 21 actually activate that plan so we're no longer doing interim 22 measures but we're actually acting on the facts as we know 23 them, and those will help us build the factual picture of the 24 data is what the purpose is. 25 MR. STEVE OVERMAN: Does that mean the plume has</p>

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1 actually reached those locations, then, or are you just trying
2 to be preventive and you're ahead of it?

3 COLONEL MANESS: Some of the wells are over the
4 location where we know the plume is at. Some of the wells are
5 over the locations where we estimate that the dissolve phase is
6 at. But they're going to help us build that picture and fill
7 in those gaps. And some of them are over locations that are
8 known to not have any contaminants yet.

9 MR. STEVE OVERMAN: Thank you.

10 MS. SKOPECK: If you would like to form a cue, you're
11 welcome to do so or come up individually.

12 MS. CARLA BLOOM: I'm Carla Bloom. And regarding
13 that same location at California and Ross, is that complete on
14 that block or are there going to be continued wells drilled on
15 that block?

16 COLONEL MANESS: Diane, could you address that,
17 please?

18 MS. DIANE AGNEW: I can tell you that there are three
19 wells that will be installed at that location and we finished
20 one of those three wells. So we'll be at that location
21 approximately two more weeks. And they're going to stop for
22 the holiday weekend, so you won't see any drilling until the
23 6th of July, and then it will be roughly two weeks after that.

24 MS. CARLA BLOOM: Thank you. Could you also provide
25 to the residents of that area what days you will be doing the

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1 specific drilling? Because that is quite annoying to all of
2 the residents there. So it would help us plan our day and our
3 scheduling if we knew what your schedule is.

4 COLONEL MANESS: Diane, go ahead.

5 MS. DIANE AGNEW: The drilling schedule is posted on
6 the Kirtland Air Force website. So if you to the Kirtland -- I
7 think there's link in the card, they update drilling schedules
8 and it tells you exactly what days we'll be drilling and what
9 days we'll be off. The only thing that that doesn't tell you
10 is when they'll be hammering and the most obnoxious. That's a
11 function of how long it takes us to drill the holes. Because
12 some days it will be quiet and some days will be obnoxiously
13 hammering, and there's no way to know that ahead of time.

14 COLONEL MANESS: Diane is from Shaw Environmental,
15 who are working for the Air Force.

16 MS. MICKY ARANOFF: I'm Micky Aranoff. On the same
17 topic, I was happily surprised when they were about to start
18 drilling right in front of my house, but because a lot of our
19 neighbors who had a lot of issues that couldn't be resolved for
20 a while, they decided to wait and drill in July. We have some
21 really specific air pollution problems. Coming from Los
22 Alamos, we've had fires from other directions as well. And I
23 want to get greedy and ask for a little more consideration for
24 everybody with windows that have to be closed to keep out the
25 noise. Our houses are just going to become ovens for people

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1 older than me. So I just -- if you could just lick your finger
2 and, you know, test the wind and the smoke and take our health
3 into consideration, we would really appreciate it. I live
4 right in the middle of Dakota between Ross and Eastern. Older
5 Homestead is the name of the area.

6 MS. SKOPECK: Thank you, ma'am. Would another person
7 like to ask a question?

8 MR. DAVE MCCOY: I've got a few comments. Dave
9 McCoy, Citizens Action. What we've got here is basically an
10 environmental crime scene. It happened a long time ago. There
11 may be victims. And the public has been kept in the dark for a
12 long time about this.

13 Now, you're holding technical meetings, and
14 myself and others have asked repeatedly to at least be able to
15 monitor these technical meetings. You come here, you make a
16 couple of 30-second statements, maybe two minutes, at the most,
17 and the public has no clue about what the disagreements are,
18 about how to proceed, about whether this can even be cleaned
19 up. It's a massive spill. They never finished cleaning up the
20 Alaskan spill. The Gulf spill is still out there. You know,
21 this is the Exxon Valdez of Albuquerque underground.

22 And it makes sense to allow the public, or at
23 least a member of the press, to sit at a technical meeting and
24 at least monitor what's being said, what's going on, what the
25 differences of opinions are, what the differences and

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1 conclusions are.

2 Now, one of the issues that we're concerned about
3 is this injection well business, pump and treat. I've read
4 numerous articles by the "National Academy of Science" and they
5 say pump and treat is ineffective, extremely expensive, and it
6 brings a question as to, well, why don't we have more vapor
7 extractors operating out there. Now, I wrote an editorial
8 about this. It was in the Journal a couple of weeks ago -- I
9 don't know if you saw it or not -- and I asked the question why
10 is it that NMED ordered numerous more extractors out there.
11 Kirtland didn't put them in. And NMED said, well, they didn't
12 put them in, forget it. Now, that just doesn't make any sense.
13 Extractors are the quickest way that you can be sucking some of
14 these vapors off. You're not going to get all these vapors.
15 And that's another question that the public has. Can you even
16 clean this spill up.

17 I mean, there's been other spills at Lemoore,
18 California, at the military base back in Massachusetts.
19 They've been smaller spills, much smaller in magnitude. And
20 it's taken an enormous commitment of money and equipment, much
21 more than has been dedicated here, much more than is in use
22 here.

23 MS. SKOPECK: Sir, thank you for your time. That was
24 three minutes.

25 MR. DAVE MCCOY: Well, a lot of people didn't use

<p style="text-align: right;">Page 18</p> <p>1 their three minutes. And that's another problem with these 2 meetings. 3 MS. SKOPECK: We just want to make it fair to 4 everybody. 5 MR. DAVE McCOY: I understand. 6 UNIDENTIFIED FEMALE: He can have my three minutes. 7 MS. SKOPECK: No. Actually, we're not yielding. 8 We're allowing everybody individually to make comments. 9 MR. DAVE McCOY: This just shows the weakness of the 10 interaction between the public and the technical group and the 11 structure of this situation. 12 MS. SKOPECK: Thank you. Anybody else? 13 UNIDENTIFIED FEMALE: I think several of us would 14 like for this gentleman to continue because he has some 15 pertinent information that we would like some answers to. And 16 unfortunately, you are only assigning him a certain amount of 17 time. We all agreed on that he would like him to represent us. 18 He has some valid questions, and we feel that he should be able 19 to have that right. 20 MS. SKOPECK: Okay. 21 MS. JILL FRAWLEY: I want to ask this panel, how 22 stupid do you think the public really is? Do you think that we 23 believe when you sit up there so dignified and all that, that 24 you're telling us the truth? I don't think so. We know 25 there's a spill. We don't have the information. We get patted</p>	<p style="text-align: right;">Page 20</p> <p>1 distress and the sounds, the vibrations that we're suffering. 2 And I think that it's going to in the long-term affect a lot of 3 people. What are the responsibilities that we have? Because 4 all I'm getting is a little orange earplugs that are very 5 ineffective. We are all enduring these extreme noises and 6 extreme vibrations. We don't know what the long-term effects 7 are. Does somebody have to die from it? And how are we going 8 to be able to prove that we've been affected by it? What are 9 the established norms? And I'm not believing that this is a 10 standard thing. 11 One man told me that he found it in the 12 directions of using his lawn mower, that it was extremely 13 dangerous to his hearing. Hearing those pounding noises every 14 three seconds, that is extremely detrimental to our bodies, and 15 I feel that we should be able to be protected from that beyond 16 our little orange earplugs, because they are ineffective. 17 MS. SKOPECK: Panel members, would you like to 18 address the noise issues? 19 MS. LEONARD: Noise and vibration. I can tell you 20 that the city of Albuquerque has gone out and monitored the 21 noise. You're right, it's at a fairly high level. We've 22 really tried along with Kirtland to work with the neighborhood 23 and alert the neighbors specifically where the drilling is 24 being done in the neighborhood. 25 The bottom line is they really do have to do the</p>
<p style="text-align: right;">Page 19</p> <p>1 on the head, "Don't worry. It's safe." 2 MS. SKOPECK: Ma'am, would you please give us your 3 name? 4 MS. JILL FRAWLEY: Jill Frawley, registered nurse 40 5 years, 68 years old, and pissed off, okay? Because I've been 6 to these meetings. Everybody sits, I'm so-and-so and 7 so-and-so. We don't believe you. I need to speak for myself. 8 Maybe you can get a show of hands. We are not stupid. We are 9 not technical people, we're not hydrologists, we're not 10 chemists. And when you cut off somebody who does have some 11 knowledge, you're manipulating us. At some point we're going 12 to be mad as hell and we're not going to take it anymore. So 13 I've got to tell you, I'm nobody. You don't care whether I 14 live or die. I don't drink this water because I think it's 15 toxic. I get reverse osmosis, ultraviolet, filtered water. I 16 don't want cancer. 17 So I can't get up here and be all technical. But 18 this man knows what he's talking about, and there are other 19 people who have technical backgrounds. I really hate these 20 meetings because they don't serve us. They pretend to serve 21 us. 22 MS. SKOPECK: Would anyone else like to make a 23 comment? 24 MS. CARLA BLOOM: May I, please? I'm concerned about 25 this Environmental Protection Agency. There's quite a bit of</p>	<p style="text-align: right;">Page 21</p> <p>1 drilling and the pounding to identify where the plume is and to 2 get the data they need so that they can design a cleanup for 3 the plume. And you're right, the drilling is loud, the 4 pounding is very aggravating. It is on a short-term basis, and 5 I think that's the key. But we do understand that the 6 neighborhood is going through some significant hardship, and 7 we're getting this investigation underway. 8 COLONEL MANESS: We share your concerns and that's 9 why we asked the city to come in and take a look at the noise 10 levels. We also heard concerns at the last meeting with the 11 health effects and concerns about not getting answers to that 12 question. I would just like to let you guys know that the Air 13 Force has asked the Centers for Disease Control, a third party, 14 specifically the Agency for Toxic Substances and Disease 15 Registry, to conduct a specific review. And there are 16 representatives of the ATSDR with us this evening. Ms. Katie 17 Hue and Ms. Jessica Bates are here, and they are going to 18 conduct a study on the contaminants themselves. This agency is 19 based in Atlanta, Georgia. It's a federal public health 20 agency. It's part of the CDC, as I said. It serves the public 21 by using the science, taking responsive public health actions 22 and providing trusted health information to prevent these 23 harmful exposures and diseases related to toxic substances. 24 That was a question that I couldn't answer for you guys last 25 time, so we sought out a third party agency from the Air Force</p>

<p style="text-align: right;">Page 22</p> <p>1 to take a look at the contaminants themselves regardless of the 2 maximum contaminant level, just what's going into the water so 3 that they can answer those questions for you. 4 MS. CARLA BLOOM: Are we going to have access to that 5 report on the Internet? How are we going to get that report? 6 COLONEL MANESS: Let me just confirm that with them. 7 MS. BATES: I'm Jessica Bates. I work for ATSDR. We 8 have not initiated any investigations yet, but as we do, we 9 make it a mission to make sure that the entire community 10 remains informed of everything that we're doing. And there 11 will be some community engagement involved with that as well. 12 MR. DAVE McCOY: The problem is, we don't want to 13 just remain informed. We want to hear what the actual 14 discussion is, the actual technical discussion that's ongoing 15 between the experts. Now, without that, you've got a public 16 that doesn't even know what questions to ask you. They don't 17 have enough information. So by this exclusory, secretive type 18 of process that's ongoing here, they can't learn what's really 19 happening. 20 MS. SKOPECK: Thank you, sir. Panel members? Would 21 anybody else like to make a comment? 22 MS. CARLA BLOOM: If we collectively designated an 23 individual, would you allow that to happen? 24 MS. SKOPECK: I think she's asking if everyone in the 25 room would like one person to speak for the room, would that be</p>	<p style="text-align: right;">Page 24</p> <p>1 will take. It is in the several months time frame. 2 MS. MICHELLE MEADERS: So different kinds of soil 3 need to be dealt with in different ways? 4 MR. SHAW: Right. And we need to determine what 5 soil exceeds the cleanup criteria and what soil doesn't. 6 COLONEL MANESS: And those FAQs will be posted on our 7 website and those dates will be updated as we determine them. 8 MR. PAUL ROBINSON: Good evening. My name is Paul 9 Robinson. It's always interesting to see what kind of meeting 10 someone structures, what kind of efforts are made to 11 communicate. This is unique in some way. 12 One valuable bit of information I'm interested in 13 knowing is what's the new information about the extent of 14 contamination found since the May meeting, which was quite 15 informative. There's been no briefing on what's been found, so 16 that, of course, leads people into the dark and they don't know 17 anything to ask questions about. So hopefully that won't 18 happen in all the meetings. 19 I notice there's a three-dimensional chart there 20 that goes beyond the scale my glasses can handle from where I 21 was sitting. Since there was comments that there were no 22 three-dimensional drawings last time, this is perhaps a very 23 useful and interesting thing to see. There were a number of 24 wells that were drilled and the extent of the plume goes 25 vertically and horizontally that were presented last time.</p>
<p style="text-align: right;">Page 23</p> <p>1 allowed. 2 MS. CARLA BLOOM: To monitor the technical meetings. 3 MS. SKOPECK: We have our subject matter experts up 4 here. Do we have a response to the request? 5 MS. MICHELLE MEADERS: In reading over the handout 6 tonight, which is terrific and answers a lot of questions, on 7 page 6 -- the pages aren't numbered, but how is the Air Force 8 planning on taking care of this fuel spill problem? I notice 9 there's a performance milestone there of June 30th, 2011. 10 That's just a few days from now. And I don't think anybody 11 mentioned if that had been achieved or not. Removal of 12 contaminated soils by June 30th, 2011. Is that happening? 13 COLONEL MANESS: Yes, ma'am. That is happening. 14 Tom, do you have the specifics on that issue? 15 MR. SHAW: Tom Shaw. At this point the investigation 16 to identify what soil is contaminated is ongoing right now. So 17 the date of having that completed by June 30th, there were 18 several scheduled delays that occurred and that didn't get 19 reflected in this. But that activity is going on right now. 20 We are actively collecting soil samples to identify what soil 21 does require to be excavated. 22 MS. MICHELLE MEADERS: Do you have a new date? 23 MR. SHAW: I don't have a new date right now because 24 until we complete the soil sampling and identify what soil 25 needs to be removed, we don't know how much and how long that</p>	<p style="text-align: right;">Page 25</p> <p>1 There have been quarterly reports that could be summarized that 2 would describe that. In my preparation for the meeting today, 3 I noted that the Environment Department has approved some of 4 the reports they've received. They've issued some notices of 5 deficiency, identified 30 or 40 different deficiencies in 6 different reports. 7 So it's valuable to hear what are the specific 8 technical concerns of the agencies involved rather than hear a 9 summary of many people involved that could provide that 10 information. I think it's very important to hear Ms. Stebbins 11 reiterate the Authority's goal of restoration which is a very 12 important goal and a very high standard to set and attain. As 13 I understand it, it sets a baseline for performance that 14 doesn't require the re-thinking of the standards for any of the 15 individual contaminants that have been released. Since removal 16 is the goal, identifying the relative health effect or how much 17 would be left in the aquifer, in which conditions. I think all 18 those are important to just have the panelists or their 19 technical representatives address. 20 I noted in the most recent quarterly report that 21 the water level in some of the city wells have risen four to 22 five feet, and that is attributing to the changes in the way 23 the city is supplying water. That's an interesting artifact to 24 hear. There's something like 100 feet of drawdown between the 25 pre-extraction water levels in the current condition. So four</p>

<p style="text-align: right;">Page 26</p> <p>1 to six feet still leaves the drinking water wells attracting 2 groundwater. There is a radiant flow towards them. And so the 3 way in which the use of those wells draws contaminants to them 4 and how contaminants can be removed while characterization 5 occurs, which is an important balancing act, it is beyond the 6 level of detail provided at the initial presentation. 7 MS. SKOPECK: Thank you for your comments. 8 MR. PAUL ROBINSON: Those are very valuable and may 9 provide some information that people would learn from. 10 MS. SKOPECK: Thank you, sir. 11 MR. MARTIN: John, do you want to make some comments 12 on some of the technical aspects they just asked about? In 13 future meetings, my feeling is that we will have more technical 14 information available as we gather it. The purpose of this 15 meeting wasn't necessarily to do that. But, John, if you want 16 to come up and address some of the -- 17 MR. MOTES: I'll give the status on some of the plans 18 that we have. 19 MS. SKOPECK: Sir, please give us your name so we can 20 note it. 21 MR. WILLIAM MOATS: I'm William Moats. I'm with the 22 New Mexico Environment Department Hazardous Waste Bureau and 23 the technical lead for this particular project. 24 And so there were several plans that have been 25 submitted in support of this project. The groundwater</p>	<p style="text-align: right;">Page 28</p> <p>1 data perspective. 2 MR. COOPER: Tom Cooper with Shaw Environmental. The 3 chart on the right is what we would call, as it's titled, a 4 conceptual site model, and that was done sometime back before 5 this current round of investigation was initiated, and that was 6 developed based on the information that was known at that time. 7 And essentially what we try to do with the conceptual site 8 model is you try to put in all of the information you know 9 about the geology, the hydrogeology, the contaminants, where 10 the suspected release might have happened, what the receptors 11 are. It's a graphical representation of essentially the state 12 of what is known at this time. But what it also does is it 13 identifies data. It identifies what information we don't have 14 right now. 15 And so with this new round of investigation, 16 Mr. Moats described the three work plans, two of which were 17 designed primarily to collect information to fill the data 18 gaps. So moving to the cross-section on the left, this is a 19 work in progress. And in the most recently submitted quarterly 20 report, this is a cross-section from that. As new wells get 21 installed, the information from those wells gets added to this 22 cross-section. Each one of those vertical lines -- I know it's 23 kind of hard to see back here -- represents the natural boring 24 that was drilled, the geology information, the geophysical 25 information that's along there. And we're building back up to</p>
<p style="text-align: right;">Page 27</p> <p>1 investigation and interim measures work plans have now been 2 reviewed by NMED, or actually the revisions thereto, and we are 3 just about in a position to take a final action on those plans. 4 The Dumbapple containment plan was reviewed by 5 the New Mexico Environment Department, and we provided Kirtland 6 Air Force Base with comments on that plan. Those are posted on 7 our website. Recently, we also conducted a fairly rigorous 8 review of the February quarterly report for the project, and we 9 have provided Kirtland Air Force Base with comments on that 10 report. And again, all of that information is on the website. 11 So soon to be posted on the website when we 12 finally get to finalizing our decisions on the three work 13 plans, soon enough that will also be posted on the website when 14 we get that done and that's going to be happening hopefully any 15 day now. 16 MS. SKOPECK: Thank you. 17 MR. PAUL ROBINSON: Do you have new data for the 18 explanation of the progress and what might have been learned or 19 what that represents? 20 COLONEL MANESS: I'll have Tom Cooper from Shaw 21 Environmental come up and give us an update on where they're at 22 from a data perspective. Just so you know, for your 23 information the chart on the far right is not new. We just 24 didn't have it with us at the last public meeting. The chart 25 on its right is new, and Tom can speak to both of those from a</p>	<p style="text-align: right;">Page 29</p> <p>1 a conceptual site model on the right but with the data gaps 2 filled in. So what we're working towards right now is the 3 skeleton, the geology, the hydrogeology. And then as we 4 collect additional soil analyses, soil vapor analyses, 5 groundwater analyses, that information will get put onto that 6 cross-section and there will be more than just this one in 7 these quarterly reports. There will be multiple cross-sections 8 that will allow all the geology, hydrogeology, the contaminant 9 concentrations and the various contaminants and concerns will 10 all get built onto that as we complete our investigation, with 11 the end result being an updated conceptual site model. It may 12 be more than one figure. It may have to be several to sort of 13 wrap our heads around the big picture. 14 But as of now, it's a work in progress. And so 15 each quarterly report you'll see more and more data populate in 16 those cross-sections and also plume maps, too. So, again, it's 17 a work in progress. 18 MR. PAUL ROBINSON: So looking at that map, it shows 19 where Bullhead Park is, but it doesn't extend further north 20 into the area where they're drilling. So I want to know what 21 the conceptual site model in the current report reflects the 22 newest drilling. 23 MR. COOPER: Right. The conceptual site model 24 essentially has to encompass in a broad sense from source to 25 potential receptor. It's got to move the whole distance. So,</p>

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1 again, that was the initial one based on what was known at the
2 time. Obviously as more and more wells get installed farther
3 to the north and more data gets collected, it will expand and
4 include all the way to the extent to where it extends to.

5 MS. SKOPECK: Sir, would you please give your name?
6 In the future, if you could please come to the microphone so
7 everybody could hear.

8 MR. PAUL ROBINSON: Thank you. Paul Robinson. I
9 appreciate your explanation very much. So I'm wondering if in
10 the wells that have been drilled in the last three months and
11 in the re-sampling, whether you are detecting rising or falling
12 trends in the contaminants that are found in the groundwater in
13 the neighborhood.

14 MR. COOPER: Right. The most recent quarterly
15 report -- understand that when a quarter -- it takes some time
16 to get the analyses back from the laboratory. There's a data
17 validation process that it goes through and quality control
18 process. It's very complicated and has many, many steps. So
19 each quarterly report contains data that's been through that
20 whole process when that report was made.

21 And so the most recent quarterly report has some
22 data from newer wells, but again it's a work in progress yet.
23 So as each quarterly report gets submitted in the future, more
24 and more of the new wells will return data. So at this point
25 we don't have more than one-quarter of data at maximum in the

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1 new wells. So with one data point it's difficult to determine
2 whether trends are rising. From the existing wells where we
3 have longer data series, it doesn't appear that there are
4 any -- and again, this is a generalization, anything
5 inconsistent with previous quarters of data.

6 MR. PAUL ROBINSON: So some of the new wells they've
7 had detections of contaminants where they hadn't been found
8 before, to your knowledge?

9 MR. COOPER: Well, understand, as was stated before,
10 numerous new wells are installed where we expect to see
11 contamination. They're not all out at the perimeter. Some are
12 within the body of -- you know, we had wells on base that had
13 contamination. There were wells off base that had
14 contamination. Many of the new wells are installed in between
15 there. So we would full well expect to see contamination. So
16 we don't have a lot of data from the wells that are on the
17 perimeter yet where we might expect them to be on the border of
18 where we would expect to see or not see.

19 MR. PAUL ROBINSON: Does that area map illustrate
20 some useful information in this regard?

21 MR. COOPER: The area map illustrates all the
22 locations of the new wells that are being installed. It does
23 not have any chemistry data on it. It's just a location.

24 MR. DAVE McCOY: I have a question for Shaw
25 Environmental or anybody else technical. Several plumes of

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1 EDB, Ethylene DiBromide, were discovered at locations that were
2 totally unexpected at other spill sites of the Air Force. Now,
3 you're saying putting wells in where you expect to find
4 contamination. But putting wells in where you're not expecting
5 to find contamination at far distant points -- EDB is very
6 soluble. It travels very far. It contaminates a lot of water.
7 You don't know how much EDB you have except there was about a
8 half teaspoon in every gallon of aviation fuel. You don't know
9 how much aviation fuel there was versus jet fuel. So how far
10 has the EDB traveled in all this time? They were using that
11 from the 1920s in aviation fuel. Kirtland came on board when,
12 around 1950 or so? So you've had a lot of time for EDB
13 contamination to travel to strange places that you might be
14 unaware of. How are you going to find out just where that
15 stuff has gone? That's one of the most toxic contaminants
16 there. It's a hundred times more toxic than the benzene.
17 We're talking parts per trillion with an EPA goal of zero parts
18 per trillion. So how are you going to look for these unknowns?

19 COLONEL MANESS: Shaw, would you take that on,
20 please?

21 MR. COOPER: So, yes, EDB is a very highly toxic
22 compound and it's pretty persistent in the groundwater. For
23 this particular project, some of the characterization wells
24 that are part of this current drilling campaign, the locations
25 for those were selected specifically hopefully to identify

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1 locations where the EDB has not spread to. And I can say with
2 respect to this particular project, that we know that
3 groundwater has been contaminated with EDB up to a distance of
4 about a half mile from the source.

5 MS. SKOPECK: More questions?

6 MR. STEVE CABANISS: Steve Cabaniss. I guess this is
7 more of a request than a technical question. The way this
8 meeting is being put together does seem to me like it has a few
9 drawbacks. One, the publicity -- it was in the newspaper,
10 which is a good thing because even though I left my E-mail
11 address here the last time I came, I didn't get any E-mail
12 about it. And it was kind of hard to find on the Internet. In
13 fact, some of the websites that you might expect this to be
14 announced, it's not announced. I think it would help if that
15 would improve. I think a lot of the people that were here last
16 time may not even know about this.

17 Secondly, we've got some pretty technically
18 sophisticated people here. We're not that far from Sandia
19 Labs. We almost have some people who also have almost no
20 technical background. And to just plunge straight into a Q and
21 A question without bringing people up to speed isn't really
22 fair. I think we would be better off with a 15-minute show.

23 Some of these questions actually came to be
24 answered in the quarterly reports which are on the web. They
25 are posted. There's an 86-page quarterly report. There's a

<p style="text-align: right;">Page 34</p> <p>1 746-page data appendix and then there's another 98 pages. 2 Well, okay. I'm an environmental chemist. I guess it's my 3 job. I'm supposed had to go through those. But there are a 4 lot of people for whom that would be a burden. 5 I think if you put together a 10-page executive 6 summary with a few relative figures, that would make people 7 feel a lot better about their level of technical understanding. 8 I mean, you've got statements in here about how far the EDB has 9 gone, and in fact it's gone further than the others, these 10 maps. But I've got pretty good vision and I still can't read 11 those graphs from here. 12 Finally, I know Mr. McCoy ran over his time, but 13 he did, I think, ask a good question that no one attempted to 14 answer I suspect because it's a difficult question to answer. 15 But the question is some sort of monitoring or observer for 16 some of the technical meetings. I haven't noticed you having a 17 lot of technical meetings. This is not practical to have 18 observers there for all of them. But it seems to me like it 19 would make sense. And if there is a good reason that it cannot 20 be done, I think the people here would like to know why there 21 can't be an observer at some of the technical meetings just to 22 try to facilitate communication. 23 MS. SKOPECK: Thank you, sir. 24 MS. CARLA BLOOM: I am not a technical person. These 25 people -- several of these people are. They know what they're</p>	<p style="text-align: right;">Page 36</p> <p>1 are there to observe, to make sure that it meets our concerns, 2 that they are addressing our concerns. We have our technical 3 experts who attend those meetings. And I think that's a great 4 idea. Again, but we are not in charge. I think that really is 5 left to the Air Force and those people. But again, my 6 interest -- I think the Water Utility's interest has been to 7 make sure that the remediation plan does address our concerns, 8 does protect our ratepayers, does protect the water users. And 9 again, I apologize that I don't respond to some of these 10 questions, but I don't really feel that I, as a member of the 11 Water Utility Board, really have a lot of authority over who 12 attends those meetings. 13 COLONEL MANESS: I just want to correct the record. 14 The technical meeting term that you-all have been using has not 15 been used by the interagency meeting task force. The meetings 16 I think you're referring to are working group meetings, and 17 working group meetings generally are not open to the public. 18 However, the Air Force is just as concerned with being 19 transparent and open. As I've said many times -- and many of 20 you have been in the public meetings with me -- that's why we 21 put everything, whether it's technical or non-technical, on the 22 website so those that have the background can take a look at 23 it, and those that don't have the background, we try to put 24 information out there on that website and put information out 25 in these meetings. Because these are public meetings that we</p>
<p style="text-align: right;">Page 35</p> <p>1 talking about, and we would like to have a representative, I 2 feel. I'm not hearing any responses from you folks up here in 3 the front. This is my first meeting here. And I am seeing a 4 happy-go-lucky greeting from these two ladies. I'm seeing a 5 gentleman with a beautifully ribboned suit and some other suits 6 up here that have not responded to these people. It just goes 7 on to the next person without any responses. Am I wrong for 8 expecting for somebody to stand up and say, "That sounds like a 9 great idea. Why don't you-all get together and we'll discuss 10 having somebody represent you." What's the problem with that? 11 MS. SKOPECK: We'll have a transcript available. 12 MS. LAURIE LEWIS: I'm Laurie Lewis. I'm with the 13 Nob Hill Main Street Association, the Nob Hill Neighborhood 14 Association and the Parkland Hills Association. And I would 15 suggest, Commissioner, that maybe what you would do would be to 16 call your neighborhood associations and your business 17 associations and stuff together and let them decide between 18 themselves who might be those observers, who might have the 19 technical skills or ears to hear what was going on and be able 20 to report back as an official observer of what's going on, and 21 that might help with the situation. 22 MS. HART-STEBBINS: Thank you, Ms. Lewis. I do 23 appreciate that. And I think it's something we can consider. 24 I feel that the Water Utility, to some degree, is that 25 observer. I mean, we're not planning the remediation, but we</p>	<p style="text-align: right;">Page 37</p> <p>1 promised and that we need to do to ensure that you're getting 2 the opportunity to ask both technical and non-technical 3 questions. I would encourage you, ladies and gentlemen, to 4 please pass us feedback on the FAQs. Those are brand new. And 5 the intent is to get away from so technical to more of the 6 non-technical answers to some of the questions that we've 7 gotten. So we look forward to your feedback. If you would 8 pass that through our public affairs office on base we would 9 appreciate that. And we'll continue to improve those. And if 10 you find any incorrect information, we'll be glad to take that 11 on and put the correct information in. 12 MS. SKOPECK: Further questions? 13 MR. DAVE MccOY: EPA is here tonight. They have an 14 oversight capacity. This is a RCRA process, the Resource 15 Conservation Recovery Act. Under the Federal Register, 56710, 16 the public is entitled to have information at the earliest 17 possible opportunity. Early, frequent, okay? Now, we're not 18 getting that and you're dodging us on the technical group 19 meetings. I don't care what you call them, task force or 20 technical group, whatever euphemism you want to describe it as. 21 This is a RCRA process. The public is being shut out of a 22 portion of this RCRA process. 23 So my question is, is the EPA going to do 24 anything about this at any point? Because you've never helped 25 us out before on the public participation aspect. In fact,</p>

<p style="text-align: right;">Page 38</p> <p>1 you've hidden reports from us; for example, the mixed waste 2 landfill. You wrote a report. You didn't give it to us. The 3 EPA and the Inspector General said you can have the report. 4 You didn't give it to us. You still haven't given it to us. 5 I'm an attorney. How much longer do you think we're going to 6 sit around without getting some of these reports? I filed 7 Freedom of Information Act requests and I haven't gotten this 8 stuff. 9 Now, this is just another example of a shutout, a 10 shutout of the public. Somebody needs to hear what the actual 11 technical discussions are. I don't care if it's Paul Robinson 12 or the chemical engineer from one of the neighborhoods, but 13 somebody needs to hear these discussions. 14 So my question is, what is the EPA going to do to 15 support the public in this? I mean, we've got this dodgeball 16 game going on where Ms. Stebbins says, well, we don't have 17 authority. NMED hasn't stepped up to the plate and said well 18 we're going to ask for a monitor to be there. The Air Force 19 base hasn't said, "Sure, we're going to let someone come." I 20 was offered early on. They told me that, and then they backed 21 out, said, "Oh, well, you can't get security clearance." 22 Couldn't get ahold of anybody to get security clearance. What 23 is the big deal? You know, what is the big deal for some 24 member of the public to sit there and listen to the experts 25 talk about this situation? What is it you intend to keep from</p>	<p style="text-align: right;">Page 40</p> <p>1 be a monitor only and it would be at a technical meeting. So 2 we'll have to work through that and the details of that and 3 then figure out how to do that after we discuss the idea and 4 see if it has merit. 5 MR. DAVE MCCOY: Well, I received an E-mail from 6 Mr. Berardinelli today informing me that the request had been 7 turned down by that group, that they didn't want anyone from 8 the public there. I have that as an E-mail from your top 9 civilian official at Kirtland Air Force Base. So that's 10 contrary to what you're telling me. 11 But my question was directed to the EPA about 12 what they are going to do, if anything, to support the public. 13 COLONEL MANESS: I just took on the part that I 14 thought the Air Force should answer for you. So that's our 15 answer. We're not hiding anything from the public, to answer 16 that question. And we will take it under advisement as a group 17 to look at the suggestion to have a monitor. There again, as 18 you said, we have discussed it and came to a different 19 decision. But you know what? This is a process run by human 20 beings, and we're here because we care about what the public 21 knows about the issue just as you guys have expressed your 22 concern, and we're sincere about that and we'll take it on and 23 we'll get it in. 24 MS. KING: I was just going to say we're not hiding 25 any reports. And you and I have a technical difference of</p>
<p style="text-align: right;">Page 39</p> <p>1 the public at these meetings? This has gone on for years with 2 regard to Sandia and Kirtland, you know. And I want to mention 3 one more thing as long as I'm standing at this -- 4 MS. SKOPECK: Actually, sir, it's three minutes. 5 MR. DAVE MCCOY: I'm still going to make this 6 mention. You can have the bailiff throw me out if you want. 7 You've got hundreds of sites out there that were contaminated 8 and a lot of them have had very poor monitoring or they've had 9 monitoring which was -- the public was told it was legitimate 10 monitoring when, in fact, everybody in the agencies knew that 11 it wasn't legitimate monitoring, okay? You've got more than 12 just this problem with the jet fuel spill out there. 13 MS. SKOPECK: To be fair, would the panel like to 14 address the comments? 15 COLONEL MANESS: I'll take on the question of what's 16 being kept from the public. From the Air Force perspective, 17 nothing. Nothing is being kept from the public. 18 MR. DAVE MCCOY: Well, you're in agreement we can 19 have a monitor at the meeting? 20 COLONEL MANESS: We're in agreement that the 21 leadership panel, the task force will take that on as a 22 suggestion and we'll discuss it some more. Because it wasn't 23 decided just by the Air Force. So we'll take that one on and 24 we'll look at it, and we'll also go out and look for the 25 volunteer, a technical expert to be the monitor. And it would</p>	<p style="text-align: right;">Page 41</p> <p>1 opinion on the IG report. So we're not hiding anything. The 2 EPA is here. We're providing program oversight not necessarily 3 site specific, but I think this is a good thing. 4 MS. SKOPECK: Ma'am, please state your name. 5 MS. ROSAMUND EVANS: I'm Rosamund Evans. I've come 6 to almost all of these meetings. I have worked in the 7 bureaucracy. I understand some things about the way 8 Bureaucracy works over a period of time. I think what's 9 missing here -- and I don't know if I can express it as well as 10 I would like to, but it's a very large issue. 11 When the colonel says they are concerned about 12 what the public knows and what the public perceives about their 13 transparency, I believe that. But I definitely do not believe 14 that any of the bureaucrats working here or, for that matter, 15 anyplace else, are really open to being truthful and open about 16 what's going on. I have experienced some of that both in 17 Washington and in other places. 18 When I say it's a very big issue, we have 19 experienced here in Albuquerque what I consider to be not only 20 immoral, and it is beyond my comprehension that people can so 21 contaminate where they live without even considering the 22 precautionary principle that would say what am I doing here, to 23 hide what they've done for a long time in order to protect 24 whatever they see is important. But when we have taken sacred 25 water -- and it is sacred, as far as I'm concerned. I grew up</p>

<p style="text-align: right;">Page 42</p> <p>1 in arid land. I know from the time I was a very small child 2 somehow that you don't destroy water and you don't waste it and 3 you have a great deal of respect for it and that it moves. 4 It's a living thing. 5 So Albuquerque had this huge blessing of water 6 that was pristine and protected, and we have destroyed it. And 7 I think it's time -- I say "we" because we're all involved in 8 this. We allow the military to do whatever. They are not good 9 neighbors. They've never been good neighbors. We ignore the 10 purpose of why they're there, and we continue to do that. And 11 as long as we're allowing industries to use chemicals that they 12 know nothing about, that are polluting the land, the air, the 13 water, our bodies, how can I really say, yes, I think you're 14 operating in our best interests to do all of this technical 15 stuff that we're paying for and will be continuing to pay for a 16 long, long time. 17 MS. SKOPECK: Thank you for your comments, ma'am. 18 Thank you. 19 MS. ROSAMUND EVANS: I'm not really through. 20 MS. SKOPECK: I'm sorry. We're being equitable to 21 everyone in the room. Would the panel like to respond to these 22 comments? 23 MS. ROSAMUND EVANS: It's not equitable to anybody in 24 the room, really. And that's what you're missing. 25 MS. SKOPECK: We can actually be here -- we have the</p>	<p style="text-align: right;">Page 44</p> <p>1 pollution and we really resent this maturity attitude that you 2 guys know what's best for us. So I don't think you do, and 3 it's not playing out very well. 4 MS. SKOPECK: Would anyone else like to make a 5 comment? 6 MR. PETERSON: I'd like to address sort of the files 7 and things that are available to the public as a representative 8 of the state Engineer Office. Well, let me back up. There is 9 a lot of moving parts to this thing, right? You know, there's 10 history. There's what is happening with contaminants and 11 contaminant transport. My agency administers water rights. 12 And what we've received so far have been applications in 13 response to some solution that's been presented here before the 14 Environment Department and USEPA and the Air Force. Any of you 15 can come into my office over at 5550 San Antonio between the 16 hours of 8:00 and 12:00 and 1:00 and 5:00 and review any of the 17 water rights files, anything that's been filed with our office. 18 You know, we don't have -- unless it's in litigation. That 19 stuff is kind of off limits. 20 But water rights files, any of you can come in 21 and I will gladly sit down and go page by page for the 22 Kirtland's water rights files. I can present all the 23 groundwater monitoring wells that our office has issued and the 24 supporting documentation that went with that. You know, we 25 also realize that the state engineer that as a response --</p>
<p style="text-align: right;">Page 43</p> <p>1 room till eight o'clock and we can rotate the comments and 2 questions for the entire time so everybody can be heard. 3 MR. SHERMAN McCORKLE: My name is Sherman McCorkle. 4 Like everybody here, I've come to listen and learn. But my 5 voice would say that I do know many of you personally. I 6 respect your integrity. And I think there needs to be a voice 7 heard in these sessions that talks about people of integrity 8 who go about their life trying to do the right thing. And for 9 the people on this panel, you deserve our respect. You are 10 providing leadership. From a different perspective, I believe 11 that Kirtland has in fact been a very good neighbor to 12 Albuquerque, and that voice needs to be heard as well. 13 I think that too often in these sessions half the 14 room is quiet while the other half of the room condemns and 15 speaks of evil motives and evil desires and people who wish to 16 harm other people. And it's important that the other voice be 17 heard as well. And there are many of us who appreciate your 18 leadership and respect your integrity. Thank you. 19 MS. SKOPECK: Further questions? 20 MS. JILL FRAWLEY: No one is accusing anybody of 21 being evil. What we are saying is, is this water poisoning us? 22 It's been going on for years. I don't want this to be this 23 polarizing for and against. I don't think you're bad people. 24 I don't think you wake up in the morning and say, "How bad can 25 I be to the public today?" But we are very aware of the</p>	<p style="text-align: right;">Page 45</p> <p>1 that's the way that I see it, that whatever comes out of this 2 remediation -- and right now what we've permitted as 3 assessment. 4 I've been contacted by the consultant that a lot 5 of their remediation hinges upon some deep test wells. So 6 we've began -- we're in conversation right now about what those 7 look like and how would we permit them and how are they going 8 to be constructed. Our office also has a lot of moving parts 9 in this and we're just one of those. We also conduct technical 10 evaluations of the distribution of pumping of that water. 11 So, you know, I just want to offer that as of -- 12 I work for you guys. I work for a state agency, and I make 13 that available that our files are open. You can come down and 14 see what's been filed with our office, keeping in mind that 15 those are likely going to change. I mean, we're still waiting, 16 also. We've had pending applications to drill wells and add 17 the area around the VA Hospital as a place of use in Kirtland's 18 permit and to add environmental remediation as a purpose of 19 use. Those haven't been advertised yet. They're still pending 20 with our office until there's a consensus about which way is it 21 going it go. They're most likely going to see amendment before 22 they're published, so before we can conduct any of our 23 technical analysis as well, looking at issues of impairment and 24 public welfare and conservation, the way we evaluate any 25 application that comes into the state engineer office. Thank</p>

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1 you.

2 MS. SKOPECK: Thank you, sir.

3 MS. HART-STEBBINS: And I'd also like to offer --

4 maybe invite our expert Rick Shane to talk about what resources

5 the Water Utility has to offer, your observations about the

6 monitoring characterization.

7 MR. RICK SHANE: My name is Rick Shane with the Water

8 Utility Authority. I'm the technical lead for this project. I

9 guess maybe one thing, to put it all into perspective, the

10 water that's being served to our ratepayers, it's being

11 monitored on a regular basis. There are several constituents

12 in addition to what's -- and that's regular compliance, and the

13 reports are submitted to the EPA on a regular basis and they're

14 also reported to you in the water quality report on an annual

15 basis. There's also a monthly sampling that's being done above

16 and beyond compliance at the wells surrounding this point. So

17 we are up-to-date on sort of where we're coming from in this

18 area.

19 And just as Mr. Peterson pointed out, the state

20 engineer files are open. You can also contact the Water

21 Authority and come and review our monitoring, of course. So

22 you're welcome to do that.

23 MR. JOHN HAWLEY: I'm John Hawley. I'm right now a

24 consulting hydrogeologist in the area. But from 1991 to 1997

25 till when I retired from New Mexico Tech, I headed up a team of

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1 geologists and other engineers with the office of the state

2 geologist, and we were retained by the Albuquerque Public Works

3 Department at that time and we worked directly under the

4 supervision of Norman Gowell and at the end of my term I worked

5 with John Stumm.

6 But we built them -- this is in the public record

7 and it follows up on the previous comments just made. There's

8 a wealth of information out there from the state engineer, from

9 the U.S. Geological Survey and the upstate geologist. The

10 latter two are nonregulatory agencies, and they are they have

11 an office on Central that I used to manage years ago. And we

12 put out reports. We built a three-dimensional model with a

13 cross-section going down Gibson and going down Wyoming. I

14 personally was there when they drilled Ridgecrest five blocks

15 down the road here, which is the big straw that's sucking in

16 our area that we're all concerned about.

17 But I was there when Kirtland 15, 16 would drill

18 the VA Hospital wells contracted to Metric Corporation. We

19 collected all that information, Borehole Geophysics. Nothing

20 that we did was as detailed as the stuff that's being done now

21 site specific. It was more of a base and scale model. But the

22 basic conceptual model was built and published by the state in

23 a summary in 1998. So this information is available. And the

24 bottom line, we're sitting on a world class aquifer here and we

25 hope we can keep it world class.

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1 MS. SKOPECK: Thank you for your comments.

2 MR. BRUCE THOMPSON: My name is Bruce Thompson. I

3 happen to have a couple of roles, but most immediately is I

4 live just west of here. Not over the plume. I live in the

5 area of town that served by the Ridgecrest well. So if anybody

6 is going to be exposed, it's me; I'm the first person.

7 At the same time, I know the people. I know the

8 folks in the Environment Department. I know the folks with the

9 county and city environmental health. Some of these folks are

10 my ex-students. And I want to say this, that I do not question

11 their integrity, their truthfulness, their honesty one bit.

12 And when they tell me that my drinking water is not in

13 immediate danger, I believe them.

14 And so there are lots of fingers to point.

15 There's inattention that I wish had not happened. But I'd like

16 to speak again. I'm mostly speaking to the public here, not to

17 the assembled board. I have a high degree of confidence in

18 those people, and I encourage you to provide vigilance over

19 this problem.

20 MS. SKOPECK: Thank you, sir. Additional questions?

21 MR. CARL GOODWIN: My name is Carl Goodwin. I'm a

22 resident of Albuquerque. I'm new to all of this. I just saw

23 the ad in the paper. But in looking at this, as I go to the

24 website it talks about the second vapor extraction and it has a

25 big picture with a second vapor extraction unit able to extract

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1 up to 300 gallons of fuel a day operating 365/24.

2 And I noticed in this handout it looks like the

3 first one went into service in 2004. And then as I look back

4 here, it says between eight million and three million gallons

5 of fuel. And if I take the average of that, which is 5.5

6 million gallons and I divide that by 600 gallons a day --

7 because I'm assuming the first one does 300 a day as well --

8 then I get 50 years. So I'm just wondering -- I think this

9 gentleman also asked are there other vapor extraction units

10 planned to go in.

11 COLONEL MANESS: Sir, there are actually four vapor

12 extractors that are currently being used. The first one, which

13 was put in place when the characterization of the leak in the

14 plume was vastly different than what it is today. And again,

15 there are four total that are an interim measure that are being

16 operated. They're not all operated at once right now because

17 we're in the process of setting them up so that they can

18 operate at their peak performance and extract as much soil

19 vapor as possible between all four of them. But that is what

20 is currently happening.

21 MR. CARL GOODWIN: So there's four on the website?

22 COLONEL MANESS: There are four currently. As far as

23 I'm aware, yes, they're all the same thing. Mr. Wilson from

24 the civil engineer's office.

25 MR. WILSON: The first one that was put in in 2004

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1 has a capacity of about 120 gallons a day. The subsequent ones
2 have the capacity of about 300 gallons a day. What we found as
3 we put them in there is there is some overlap and some
4 interference between the ones that are there based on the
5 placement of the wells. So they all have not been operating at
6 optimum 330 gallons per day. There is an optimization in plan
7 in process to try to figure out the best placement. In the
8 interim, we are operating them on a continuous basis and moving
9 them from well to well to extract as much as we can as quickly
10 as we can.

11 MR. CARL GOODWIN: Are there sort of plans for more
12 units or is that --

13 MR. WILSON: The soil vapor extraction systems are
14 considered an interim remediation methodology that we are doing
15 while the characterization is ongoing. The characterization
16 that the New Mexico Environment Department demands before we
17 put the final remediation in place will take some time and the
18 completion of all of these monitoring wells that you have been
19 hearing about and then some readings and information out of
20 those to build a site conceptual model that Tom told you about.
21 And then a final remediation methodology will be proposed to
22 the New Mexico Environment Department, and once approved it
23 will be put in place. Now, that may include additional SDE
24 units. It may include other technologies that are available to
25 address the information or address the plume and the soil vapor

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1 that we find after we understand and characterize the plume.
2 That information just is not there. Tom talked about it.

3 We're continuing to understand the model what's
4 in the ground as we go down. This is a very decontamination
5 situation. We're 500 feet down. Each of these wells is
6 costing a-hundred-plus thousand dollars to put it in place. So
7 it's important that we pick a right place and we get as much
8 information out of every hole that we put in the ground as we
9 can. And completion of the characterization is the key to
10 coming up with the long-term solution for remediation.

11 MR. CARL GOODWIN: Are the San Pedro maps involved in
12 that at all?

13 MR. WILSON: The Air Force has the responsibility for
14 the plume and the cleanup. Sandia National Laboratory is a
15 part the National Nuclear Surety Administration. The
16 Department of Energy is not engaged or involved in this and it
17 does not have a responsibility.

18 MS. SKOPECK: Thank you for your questions, sir.
19 Does that stimulate other questions from someone else?

20 UNIDENTIFIED MALE: My dad used to work at the
21 weapons lab. Do you guys have some kind of lab working on this
22 stuff, then?

23 COLONEL MANESS: I'm not sure I understand the
24 question.

25 UNIDENTIFIED MALE: Like who within the Air Force

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1 works on things like this?

2 COLONEL MANESS: The Air Force Civil Engineering and
3 environment agency, AFCE, is the Air Force oversight agency,
4 and the expert at the technical level are Shaw Environmental.

5 MS. SKOPECK: Anybody who hasn't asked a question.

6 MR. DAVE MCCOY: The optimization plan, I believe,
7 was called for back in March by the New Mexico Environment
8 Department. It still hasn't been furnished and I don't know
9 why that is. I'd like an answer to that.

10 But as these different wells are put in, my
11 understanding is that if the well screen is somewhat above the
12 water table, you can insert the vapor extraction equipment.
13 And the only thing that's been doing remediation out there is
14 the vapor extraction units. I mean, you know, you can
15 characterize the way, but you need to get with it on the
16 remediation. And NMED asked for that equipment to be put in
17 months and months and months ago. So I don't know who's doing
18 all the foot dragging here, but it seems to me they could have
19 a lot more vapor extractors working out there right now and
20 they still haven't got that optimization plan that NMED called
21 for. Where is it?

22 COLONEL MANESS: Mr. Wilson, what is the status of
23 the optimization plan?

24 MR. WILSON: The optimization plan is en route to the
25 New Mexico Environment Department as we speak. As we looked at

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1 the soil vapor extraction units, that problem that we saw
2 between the four that we initially put in where they interfered
3 with each other gave cause to the idea of putting in a massive
4 additional amount of soil vapor extraction systems Helter
5 Skelter across all of these wells that are there.

6 And in an attempt to go look as we spent dollars
7 to move forward in remediation methodology, to make sure we
8 were spending the bucks very efficiently and effectively. So
9 the four soil vapor extractions that are in place interfered
10 with each other and we couldn't get the maximum efficiency out
11 of each he have those. So that is the clear intent of the
12 optimization plan. Again, as we get additional wells in place
13 across the entire spectrum of the area to optimize where the
14 soil vapor extraction will be an effective technology and how
15 we get the most bang for the buck in this remediation
16 process.

17 COLONEL MANESS: So just to wrap that question up, as
18 Mr. Wilson pointed out, characterization is ongoing. Interim
19 measures are ongoing. Those are the current soil vapor
20 extractors. They are operating, while not optimized yet. But
21 the plan is on the way to NMED. But the end stage of the final
22 recommendation as we continue to characterize is likely to be a
23 mixture of technologies that are currently available. That's
24 the way I understand it from the experts which, as Mr. Wilson
25 stated, may well include more SEDs. And we've already talked

<p style="text-align: right;">Page 54</p> <p>1 about the Dumbapple containment plan that has extraction wells 2 and the potential pump and treating system.</p> <p>3 MR. STEVE CABANISS: I guess I have a technical 4 question for our representatives from the CDC, if that's fair. 5 I'm not a toxicologist, but I can read a website. And in 6 looking at the MCLs it seems like Ethylene DiBromide, EDB, is a 7 hundred times more dangerous than benzene. But the CDC website 8 seems to imply there's some disagreement in the literature 9 about just how toxic or how dangerous EDB is, some studies 10 giving very toxic results and other indicating they don't see 11 it. Could you comment on the state of the science there?</p> <p>12 MS. KATIE PUEHL: I'm Katie Puehl. I'm an 13 environmental health scientist with the Agency of Toxic 14 Substances and Disease Registry. I think a lot of the 15 difference in toxicology -- and I can't really speak 16 specifically to EDB, but in general sometimes you've got animal 17 studies. Sometimes you've got human studies. You've got 18 different end points, different health effects. So it really 19 kind of depends on what system and what study you're looking 20 at.</p> <p>21 MR. STEVE CABANISS: Well, I guess that's what I was 22 picking up on. It seems to me like the animal studies 23 indicated it was a really nasty carcinogen, and the 24 epidemiological results were that, well, people were exposed to 25 it and they don't seem to have any problems. But it's a big</p>	<p style="text-align: right;">Page 56</p> <p>1 last public meeting probably sometime around March. Has there 2 ever been any successful removal of the chemical that we just 3 talked about from any kind of water source, but especially have 4 we ever returned a water source to drinkability that has been 5 contaminated with this carcinogen? And I don't think there was 6 an answer given and I don't know whether anyone has one now. 7 But I would certainly like to know if it's ever been removed.</p> <p>8 MS. SKOPECK: Would anyone on the panel like to 9 address that?</p> <p>10 MR. STEVE REUTER: Good evening, ladies and 11 gentlemen. My name is Steve Reuter, and I am the technical 12 lead for the remediation group of the Petroleum Storage Tank 13 Bureau. We are currently looking over approximately a thousand 14 sites and we have conducted successful remediation at many of 15 those, including EDB. EDB will respond to remediation 16 techniques. Typically benzene is a driver. And as we review 17 the benzene and EDB together, they do respond and by the time 18 we're done the benzene and EDB typically disappear with it.</p> <p>19 MS. ROSAMUND EVANS: How many -- months, weeks?</p> <p>20 MR. REUTER: Typically, three to seven years. With 21 these problems, they tend to be smaller problems. It's 22 obviously a very large problem with Kirtland Air Force Base. 23 It's going to be more than three to seven years.</p> <p>24 MS. ROSAMUND EVANS: More than that.</p> <p>25 MR. STEVE REUTER: For the remediation to be</p>
<p style="text-align: right;">Page 55</p> <p>1 concern here because not only is the MCL much lower, but at 2 least according to the last quarterly report, the benzene, 3 which is the number two problem, seems to be degrading in 4 place. And the Ethylene DiBromide is not degrading and it's 5 moving faster than anything else. So granted there isn't any 6 being pumped out of the drinking water wells yet, but you 7 should add to that what's going to be first. Would it be EDB. 8 So that's the one people worry about. So I guess it would be 9 nice to have more insight into that.</p> <p>10 MS. PUEHL: And that's the one that we're going to be 11 worried about, too. We haven't received any data yet, but as 12 we do receive data that's going -- I would say that will be our 13 main contaminant concern, the EDB, and then also the jet fuels. 14 We'll be looking at those as well when we get data.</p> <p>15 COLONEL MANESS: I would just add that from the 16 tactical level, EDB is the constituent that we track most 17 closely. And when you see distance lines on charts to the 18 dissolve phase, EDB line that you're seeing us track most 19 closely. And I must also add to what Mr. Shane said that the 20 closest production wells to this site are the Kirtland Air 21 Force Base production wells and the VA Hospital production 22 wells, and we monitor those at the same rate that the Water 23 Utility Authority monitors the Ridgecrest wells and the other 24 well that's close to it.</p> <p>25 MS. ROSAMUND EVANS: I believe I asked this at the</p>	<p style="text-align: right;">Page 57</p> <p>1 complete, yes, ma'am.</p> <p>2 MS. ROSAMUND EVANS: So my other question had to do 3 with, you know, the time that is passing by, with all of the 4 agencies involved and all the careful work that's being done, 5 I'm wondering if we don't really have a public policy problem 6 for the city of Albuquerque that needs to be focusing ahead, 7 because I have real concern that this aquifer will ever be able 8 to serve as drinking water for the city of Albuquerque. That's 9 my frustration and my fear for this whole problem. And that's 10 why I get very passionate about it.</p> <p>11 MS. SKOPECK: I understand. Thank you. Please do 12 speak at the microphone so we can capture -- so over people can 13 hear your comments.</p> <p>14 MR. PAUL ROBINSON: I appreciate the gentleman who 15 just offered a time scale for a discussion. My name is Paul 16 Robinson. I'm looking at the Air Force's questions and 17 answers, and I see a time scale that doesn't provide for seven 18 years. It talks about complete act of removal of the pure 19 product. So I appreciate the years to decades nature of a 20 remediation certainly of this scale. I was very surprised to 21 see this very aggressive schedule described here. And since I 22 finally recognized that the first deadline at the end of the 23 month isn't being met, I'm wondering what the basis for that 24 kind of statement is, recognizing the characterization is still 25 ongoing and the scale of the problem. Thank you.</p>

<p style="text-align: right;">Page 58</p> <p>1 MS. SKOPECK: Thank you, sir. Anyone else? 2 MR. TOM SHAW: I believe I can speak to that, is that 3 there are some dates that are in here, and I believe it's the 4 one you're referring to. And I think that one of the things 5 that I guess I'd like to stress here is that we're using the 6 same terminology. And I understand that it's difficult when we 7 all have different understandings and vocabularies. 8 But when we're conducting a RCRA corrective 9 action like this, there is specific terminology to be used, 10 like final remedy and response complete and things like that, 11 and those have very definite technical definitions. And so 12 this was trying to be a little bit more of a generalist type 13 fact sheet. And so when we talk about selection of a final 14 remedy for achievement of cleanup standards, that may not mean 15 removal of a hundred percent of the fuel from the ground. It 16 may mean achievement of the maximum contaminant levels. 17 And again, I kind of want to go back to the fact 18 that at this point, you know, you don't want -- the drinking 19 water that's been supplied has met requirements so that there's 20 no completed pathway yet. There is no receptor beyond what the 21 regulations require. So when I say -- when there are dates 22 here, I just want to make sure that we're talking the same. 23 And so I'm not going to sit here and say that I can guarantee 24 the product will be removed by this date. But we expect to 25 have a final remedy in place by that date, likely sooner. And</p>	<p style="text-align: right;">Page 60</p> <p>1 till you have the problem defined, and right now the problem 2 isn't defined sufficiently until we know what the final 3 solution will be. These are estimates, I guess, is what I'll 4 try to tell you. 5 MS. BETTY OSBORNE: This might be a grammatical 6 problem or issue. My understanding on this complete active 7 removal of the pure product, to eventually achieve the maximum 8 contaminant level, what I understand is that they are going to 9 complete the active removal which is the process to achieve 10 just the maximum level that will allow it to be within, say, 11 drinking limit. It's not -- I don't perceive this as a 12 complete removal of the product. 13 So I think it is a grammatical sentence structure 14 issue. Because the way it says there, it's really subject to 15 different interpretation. But my interpretation here is that 16 they are going to complete the process of the active removal of 17 the pure product from the ground and groundwater sufficient to 18 eventually achieve the maximum contaminant levels -- that's the 19 MCL -- to the drinking water limits. It's not -- I don't 20 perceive that as they're completely going to take away all of 21 the pure contaminants. So it's the sentence structure. That's 22 my take. 23 MR. STEVE CABANISS: When the benzene breaks down, 24 it's being eaten by microbes and it's being loosely -- when the 25 benzene breaks down, it's probably breaking into various</p>
<p style="text-align: right;">Page 59</p> <p>1 that will mean that the cleanup objectives are being attained 2 and the human health and environment is being protected. I 3 don't know if that's a direct answer, but that's the best one I 4 can give you now. 5 MR. PAUL ROBINSON: Complete accurate removal. What 6 you mean is that there won't be anymore floating jet fuel. 7 MR. TOM SHAW: Well, what I want to say is that all 8 that can be removed will be removed. It may not be possible 9 through all techniques that are known today to remove all of 10 the pure product, but what can be done is it can be prevent 11 anyone from being exposed to it. 12 So, again, without getting too technical or not, 13 the cleanup objectives are based on protection of human health 14 and environment. So that's what the goal is. Just like we all 15 have gallons of this very similar stuff in the tanks of our 16 cars everywhere we drive around, we're not being exposed to it 17 because it's contained in the tank. And so you've got to weigh 18 both sides of that. 19 MR. PAUL ROBINSON: So determining what eliminating 20 vapor intrusion and complete removal mean, those will determine 21 the length of time? 22 MR. TOM SHAW: Correct. It's safe to say that -- the 23 phrase that -- we talk about data gaps. Right now we have more 24 gap than data, and so this whole process is focused on 25 collecting the information you need. You can't fix the problem</p>	<p style="text-align: right;">Page 61</p> <p>1 harmless molecules like CO2 and water, because that's how 2 microbes get energy out of it. If they were to break down the 3 Ethylene DiBromide, it might be something that's still toxic. 4 But my understanding from this afternoon and glancing through 5 the hundreds pages of the report is that that's not what we're 6 seeing. 7 The other thing to remember if you think about 8 these evaporative removers trying to pull out the solvent 9 extraction is it's actually not pulling out the most toxic 10 material preferentially. It's actually pulling out some of the 11 least toxic material preferentially. So the Ethylene DiBromide 12 is not removed very effectively that way. 13 A lot of the other things are -- and that's 14 great. We get 300 gallons. That's fine. But we're not 15 getting 300 gallons out of the same stuff you put in. We're 16 doing what in the chemistry lab would be called disfractional 17 distillation and we're pulling off the lightweight gasoline 18 range organic materials and not so much the really heavy stuff. 19 And unfortunately, some of the heavy stuff is Ethylene 20 DiBromide. 21 MS. SKOPECK: Please give us your name. Because when 22 we create a transcript, it's very hard for someone else to 23 read. 24 MR. STEVE CABANISS: Steve Cabaniss. 25 MR. GARY WEISSMANN: My name is Gary Weissmann. This</p>

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1 is probably for the technical people. I'm curious how you guys
2 are handling the heterogenein site. And along with that, that
3 means the plume has a really long late tail and I'm just
4 wondering what you guys are doing to characterize that.

5 MR. TOM COOPER: Tom Cooper with Shaw. We talked
6 about 78 groundwater wells being installed. That's not 78
7 unique locations on a map. They're being installed generally
8 in clusters of three. And those clusters of three are being
9 screened at three different depth within the aquifer, okay?
10 The reason we're going to do that is that it gives us the
11 ability to understand vertical grades. So that would be one
12 direction. And then obviously the spatial distribution of the
13 locations, that's going to give us X, Y and Z. And so as we
14 move forward with this, we're doing various evaluations that
15 are going to allow us to collect measurements of hydraulic
16 properties and what not at specific well locations, pumping
17 tests, things like that, as well as drain size analysis.

18 MR. GARY WEISSMANN: Is that covered in the reports
19 that you guys are putting out as the quarterly reports?
20 MR. TOM COOPER: All of that information will be
21 presented there as it gets collected. Much of this is still
22 yet to be done. So it's all in the work plans. And then as
23 the evaluations get complete, they will all be presented
24 through the quarterly reports.

25 MR. GARY WEISSMANN: Can you talk about some of the

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1 interpolations between the wells that you may use? You know
2 information at the wells, kind of, but interpolation schemes
3 are going to control how you characterize movement of that
4 plume.

5 MR. TOM COOPER: Right. Specifically me here
6 tonight, no. But we do have technical experts that that's what
7 they do. And all of the contoured plume maps, et cetera, that
8 we provide in the quarterly reports clearly state what type of
9 interpolation schemes, computer app's were used to generate
10 this. So I can't speak in detail about them tonight, but it
11 is -- the most recently report that's on there has that
12 information in it.

13 MS. SKOPECK: I'd like to remind everybody that we
14 have about 10 minutes left for the room.

15 MR. MARTIN: Let me make one comment addressing a
16 question or comment that was made earlier. It has to do with
17 some of these work plans. We're looking at a changing work
18 plan that was considered previously -- and it might have been
19 presented at one of these public meetings -- where this
20 characterization would be done and then the extraction would
21 start next spring. Actually, the Air Force came to us and said
22 why can't we do some of this in parallel? And we said
23 absolutely we can. We know where some of the fuel is. While
24 we're doing the characterization, let's go ahead and start
25 getting some of that fuel out of there, getting it extracted.

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1 So that's something that we're looking at and something that
2 we're going to be doing as soon as practical.

3 MS. SKOPECK: Additional questions?

4 MR. DAVE MCCOY: Along those lines -- and I swore to
5 myself I wouldn't ask another question. The optimization plans
6 en route to NMED and I'd like to know what the conclusions were
7 in that optimization plan with respect to soil vapor extractors
8 being installed, how many, what time frame, et cetera.

9 MR. TOM COOPER: First off, I'd like to clarify that
10 it's an optimization plan, not report. And by that, I mean
11 it's a document that's basically describing what information
12 needs to be collected to understand where to put these. If we
13 knew the most optimal locations to move these units to, we
14 could go do that, but at this point we don't. And so it
15 describes the process of how we're going to both use the
16 systems most efficiently where they are and also what we need
17 to look for to figure out what other locations they could be
18 moved to. Because one of the things -- and this gentleman here
19 referred to that -- is through time, these units become --
20 their effectiveness changes through time because, as he
21 described, you're initially pulling out the lighter vapors and
22 then when those are gone it's the heavier vapors are left. So
23 their efficiency -- it wouldn't be unexpected to see that
24 decrease in time, and that's when you would want to -- you want
25 to make sure you use them at a given location, to their maximum

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1 effectiveness, and then when that effectiveness starts to say
2 flatline, that's when you want to be looking at moving it to
3 another location or expanding the system in some way. And this
4 optimization report is going to allow us to understand what
5 information we need to collect and how to determine when we've
6 done what we can do in any given well and move on to the next
7 one.

8 MR. PAUL ROBINSON: Are you guys using new
9 technology?

10 MR. TOM COOPER: Again, parallel to these interim
11 measures we're talking about, we're in the investigation phase.
12 And the investigation phase is followed by an evaluation phase.
13 We call it a corrective measures evaluation. And again, one
14 has to precede the other. There's a certain amount of
15 evaluation that goes along parallel with the interim measures.
16 But the RCRA process outlines -- you know, you have an
17 investigation phase that goes through an approval process and
18 then you have an evaluation phase. Again, first you find the
19 problem, then you figure out how to fix the problem. So that
20 process is being worked in parallel with the interim measures.
21 We're still defining the problem.

22 MS. MICHELLE MEADERS: When you were saying that we
23 could be remediating at the same time as we're characterizing
24 it, there's kind of a basic question that doesn't seem to
25 get -- I've thought of it and other people have mentioned it

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1 and I haven't heard it addressed. If you know there's a foot
 2 or half a foot of liquid sitting down there on top of the water
 3 table, why can't you just put in some sort of straw and suck a
 4 bunch of it out?
 5 MR. MARTIN: You're exactly right. We agree.
 6 MS. MICHELLE MEADERS: Why aren't they doing it?
 7 COLONEL MANESS: I would characterize that as we are
 8 doing that and we have been doing that since 2004 with the soil
 9 vapor extractors. And we will continue to do that when we add
 10 the extraction system. That's in the containment plan, and we
 11 will continue to do that as we continue to characterize
 12 concurrently as the NMED has allowed us to do, and we will pull
 13 more and more fuel out in larger and larger quantities as we
 14 move along, ultimately coming up with a final remediation plan
 15 once we have enough data as Mr. Cooper pointed out, to build
 16 the picture.
 17 MR. BARRY SHUPE: My name is Barry Shupe. I'm at
 18 Kirtland Air Force Base. I just wanted to clear up an omission
 19 that was made earlier. There was a question to Mr. Cooper
 20 about Shaw's removal of the contaminated soils on the base.
 21 Actually, he was referring to his own contract that he's
 22 working with. Kirtland actually has had previous contracts
 23 where other entities have removed fuel rack, the pipelines, and
 24 they've actually removed the surface layers and contaminated
 25 soils, which have been properly manifested off the base. So

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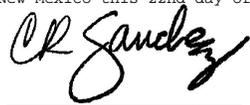
1 that process has been ongoing. It's not that Kirtland has not
 2 done anything. So I just wanted to clear that up. No one else
 3 raised that issue or follow-up question, so I wanted to do
 4 that.
 5 MR. PAUL ROBINSON: So there were a couple of
 6 questions that this gentleman started a dialogue about. He
 7 mentioned the idea of heterogenein which means mixed layers.
 8 And so that plume model that I saw -- I never got close to it,
 9 but it has these brown layers which are called clay lenses, and
 10 so the contaminants sort of drip down through the sand and go
 11 around the clay and come underneath it to the sand. So there's
 12 not just not one milkshake for the straw to suck out. There
 13 are different layers with different properties. And so the
 14 characterization challenge is to understand how many layers
 15 that it has in the sandwich and which ones have contaminants in
 16 them. And so trying to illustrate the complexity helps to
 17 describe why it's a multi-decade problem to try and resolve.
 18 And so those kinds of illustrations, when they're discussed,
 19 can be very valuable. There used to be a perception of the
 20 aquifer in the Middle Rio Grande Valley being very much just a
 21 sandbox or 1,500 feet down.
 22 Some of the complexity, of course, can be blamed
 23 on John Hawley, who admitted that he's found some of the
 24 complexity. But it's an increasingly complex aquifer based
 25 under the city and under the labs. And so that's a very poor

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1 part of the picture that I think the public would benefit from
 2 hearing more about.
 3 MS. SKOPECK: Thank you, sir. I know there's
 4 probably some questions that didn't get answered. However, the
 5 base has a public affairs staff that is there to inquire
 6 questions from you and send them to the appropriate person for
 7 response. So there is some literature here. If you haven't
 8 had a chance to take one, please do.
 9 MS. HART-STEBBINS: I think I would like to recognize
 10 the Air Force Base, Colonel Maness, Colonel Berardinelli, for
 11 inviting the Water Utility into this dialogue about the
 12 remediation process. I think it is a reflection of their
 13 commitment for transparency and cooperation with the local
 14 governments here. And we recognize that we all have the same
 15 end goal to get this remediation complete in the most effective
 16 and complete way possible. And I speak for the Water Utility
 17 that we will bring our resources to cooperate as best we can.
 18 But again, I want to thank Colonel Maness for giving us this
 19 opportunity. Thank you.
 20 MS. SKOPECK: Thank you. Thank you for coming this
 21 evening.
 22 (The hearing concluded at 7:58 p.m.)
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1 STATE OF NEW MEXICO
 COUNTY OF BERNALILLO
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 6 BE IT KNOWN that the foregoing transcript of
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 13 I FURTHER CERTIFY that I am not related to nor employed
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