

## Administrative Record

FORT WINGATE DEPOT ACTIVITY, GALLUP, NEW MEXICO

# Document No. 95-3

*Fort Wingate Depot Activity,  
Restoration Advisory Board (RAB) Meeting,  
February 7, 1995*

Paul Baca Professional Court Reporters

February 1995



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FORT WINGATE DEPOT ACTIVITY  
RESTORATION ADVISORY BOARD AGENDA  
OCTAVIA FELLIN LIBRARY

February 7, 1995

7:00 p.m.

COPY

## I N D E X

## SPEAKER

## PAGE

LARRY FISHER, TEAD

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MARY JANE STELL, ERM

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TIM ALEXANDER, AEC

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STEVEN EGNACZYK, ERM

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KARL BLANKINSHIP, Army Corps, Huntsville

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RON ROBERTS, Army Corps, Huntsville

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## TRANSCRIPT OF PROCEEDINGS

MR. FISHER: I'd like to get started with the Advisory Board meeting tonight. I'd sure like to welcome everyone here and appreciate your coming. I see a lot of new faces, and we sure welcome you here.

The Restoration Advisory Board has been formed because, of course, Fort Wingate has closed out there, and we are required to clean up certain sites that have been dirtied out there, you might say, from past operations. And this is basically the meeting that we discuss what we're doing out there and what we're proposing to do to clean up these sites before it's actually turned over to anybody that leases the property or whatever.

So anyway, this is what the meeting is about tonight. Just to give you -- oh, another thing, if at all possible, if you have any questions or would like to speak, I have somebody taking, Margo up here, taking minutes of the meeting and everything will be recorded. So if you have a question or would like to make a statement, if you'd just state your name first if you will, please. That's going to be kind of hard to remember because I'm not used to it myself, but we'll try it.

What I'd like to do is I have an agenda here at

1 the table. I didn't make enough. This is amazing  
2 because we've never had this many people here before. So  
3 this is kind of poor planned. I don't have that many  
4 agendas, but I'll basically go down the agenda.

5 I'm just going to give an activity update myself.  
6 And I'm Larry Fisher. I work at Tooele Army Depot in  
7 Utah, and Fort Wingate is under Tooele Army Depot. We do  
8 have a caretaker for us out there, four gentlemen that  
9 basically take care of it and make sure the fences are  
10 mended and there is no other problems out there.

11 But I'm basically what they call a BRAC  
12 Environmental Coordinator for Fort Wingate, and I'm  
13 responsible to make sure that we work with the state and  
14 the EPA in cleaning up the sites out there at Wingate.

15 Now, I'll give you a little bit of an activity  
16 update. And then I was going to talk a little bit about  
17 a RAB charter. Just what I'll do is instead of spending  
18 a lot of time discussing that, I'll just pass it out to  
19 the members here of the board.

20 I am the co-chair for the Army side. The  
21 co-chair representing the public or everybody here in the  
22 Gallup area is Steve Foreman. And he was supposed to be  
23 here tonight, so I hope he will show up.

24 Then after myself, I'll turn the time over to  
25 Ms. Mary Jane Stell. She's a contractor, E.R.M., that's

1 doing a lot of work out there at the Army, Fort Wingate.  
2 And she'll be talking about the geology and hydrogeology  
3 of the Zuni Watershed.

4 And then we'll go into the Fort Wingate  
5 Feasibility Study, basically, the sites we've been  
6 looking at, and we'll discuss that a little bit and some  
7 other things.

8 We have the Army Huntsville Corps of Engineers  
9 with us here, and they're going to be talking about some  
10 work that they'll be doing off post up there on the west  
11 side of the depot just west of where they used to  
12 detonate a lot of their bombs and everything.

13 And then we'll have a -- you're welcome to ask  
14 questions as we go. Feel free to, you know, raise your  
15 hands and ask questions.

16 Okay, what I'd like to do is give a little bit of  
17 background here or activity update. From 1949 to 1967,  
18 Fort Wingate demilitarized munitions. Munitions  
19 transported to the installation had broken down and hot  
20 water was used to flush the contents of the munitions.

21 The wash water containing explosive compound was  
22 pumped into a storage and drying, tank and overflow from  
23 the tank was drained into a leaching bed. Soil from the  
24 bottom of the leaching bed was occasionally removed and  
25 burned in an open burn and open detonation areas.

1           Fort Wingate's mission to transport and manage  
2       explosives and ammunition ceased in January of '93. Past  
3       waste handling practices resulted in large volumes of  
4       operational residue and debris being deposited in on-site  
5       arroyos.

6           Areas of environmental concern at Fort Wingate  
7       include a former firing range; an unexplored ordinance  
8       area; PCB's and pesticides spill areas, these are small  
9       areas; And a former what we call TNT washout facility,  
10      which I just talked about just a few seconds ago; what we  
11      call open burning open detonation areas; and an old  
12      deactivated furnace area. And this furnace was used to  
13      destroy small articles, munitions, bullets, basically.

14          Soil samples taken in 1981 from the former TNT  
15      washout facility contained TNT explosives, basically, and  
16      metal cabochon. In addition, unexploded ordinance has  
17      been discovered both on the site and off site on an  
18      adjacent Indian land.

19          Residual contamination at the site has affected  
20      soil and surface water; however, the degree of  
21      environmental impact is minimal. To date, selected  
22      interim remedial actions have been conducted including  
23      the removal of six hundred ground storage tanks from a  
24      former fueling station at Fort Wingate and done in  
25      January of 1993.



1           An on-site investigation to determine the nature  
2           and extent of petroleum contamination at and around the  
3           former fueling station is still ongoing. And we're doing  
4           this to determine the extent of the contamination. We'll  
5           be doing some soil gas surveys out there to determine the  
6           location for future wells.

7           Our FY94 clean-up progress at Fort Wingate  
8           generally has taken a proactive approach to expediting  
9           the clean-up process. For example, in anticipation of  
10          the upcoming revision of what we call a BRAC Closure  
11          Clean-up Plan, the Army environmental personnel conducted  
12          a detailed review of the evacuation plan and prepared  
13          comments and recommendations.

14          Basically, it's a plan that's been put together  
15          to see, you know, what areas we're going to clean up and  
16          what the contamination was that was found and everything  
17          like that. And, also, this information will be included  
18          in what we call a Remedial Investigation and Feasibility  
19          study.

20          There has been a draft out, and I believe it's  
21          still located here in the library. There is a section in  
22          the library that has a lot of the plans and things that  
23          we're doing at Fort Wingate. And you're welcome to go  
24          check out and review and take a look at it.

25          Now, we have we call a BRAC clean-up team, and

1       that was formed February 23rd, 1994, and we basically  
2       meet every three months. The team kind of improves  
3       communication among the members and has -- it helped in  
4       accelerating the clean-up process by expediting a  
5       document to review with all these reports and studies and  
6       everything.

7               And, of course, this is the Restoration  
8       Advisory Board, and this was formed, this board was  
9       formed on August 9th, '94. And this is to insure the  
10      community representation on the RAB reflects the  
11      diversity of state -- state membership nominations are  
12      solicited through letters sent to various community  
13      leaders. Notice in the local newspaper is advertised,  
14      the RAB formation, and invited interested community  
15      members to participate.

16             And, of course, like I said earlier, the RAB will  
17      stress the environment and clean-up work in progress at  
18      Fort Wingate. The remedial investigation, when they  
19      looked at all these sites, has identified, working with  
20      the state and EPA, have indicated five of the forty-eight  
21      areas that were investigated will require remediation  
22      because of health concerns.

23             They do risk assessments and things like that.  
24      Five of these sites. There are other sites that we are  
25      going to clean up and we are taking a look at

1        investigating that didn't come out on this, out in the  
2        investigation as far as being areas that were really  
3        maybe of health risk to anyone.

4                Cultural resource investigations have also been  
5        going on at Fort Wingate, and they're continuing under  
6        the provision memorandum of agreement between the Army  
7        and the Department of Interior, the Advisory Council on  
8        Historic Preservation, the New Mexico State Historic  
9        Preservation Officer, the Navajo Nation and the Zuni  
10       Tribe. To date, more than five hundred and twenty  
11       prehistoric and historic cultural properties have been  
12       discovered on Fort Wingate.

13               Environmental restoration activities are, of  
14        course, coordinated with cultural resource investigation  
15        activity which will continue through the year '95. The  
16        Army plans to prepare public notices and scheduled public  
17        meetings to address the proposed remedial actions;  
18        basically, the clean-up of these sites.

19               So when we get to that point and we work with  
20        the state EPA and how we're going to approach clean-up of  
21        these areas, all this information will be public and we  
22        will have public meetings on it.

23               We are still working on a draft version of what  
24        we call a remedial investigation identifying all these  
25        sites and a feasibility study, which is recommending how

1       these sites can be cleaned up. And we do have a draft  
2       copy, like I said, that's located in the library. And  
3       once the final copy comes out. it will also be put in the  
4       library and the draft copy taken out.

5               That kind of gives us a little bit of an update.  
6       As we go along in the meeting, we, of course, will talk  
7       about some other things that we are doing out there and  
8       give a little bit better insight.

9               I also have a sign-up sheet I'd like to pass  
10      around and have everybody sign. I didn't bring a pen. I  
11      do have one, but it's a gift and I don't want to lose it.  
12      I am very selfish. I'll pass this around, and if I could  
13      have everybody sign it. And everybody that does sign it,  
14      I will, if you leave your phone number and something, I  
15      can call you and get your address and give you a copy of  
16      the minutes, if you would like, so you will have a record  
17      of everything that goes on here tonight.

18              Also, what I'd like to do right now is I'd like  
19      go ahead with the meeting because we do have to be out of  
20      here at a quarter to nine. I want to make sure I don't  
21      get the librarian mad at me. They were nice enough to  
22      let us meet here.

23              So what I'd like to do now is to turn the time  
24      over to Mary Jane Stell, and she's going to talk about  
25      the geology and hydrogeology of the Zuni Watershed and

1 give us an update of what they found.

2 MS. STELL: I've got a handout that we want to  
3 give people to present some of the basic information that  
4 I'm going to talk about and then what Steve Egnaczyk will  
5 talk about next for the feasibility study.

6 We were thinking that we might have an overhead  
7 here, but what I have got is -- some of them won't be  
8 clear without having an overhead, so you'll want to look  
9 at some of these figures while I'm talking to you, and it  
10 will make some of what I say make more sense to you, I  
11 think.

12 Included in your handout first is a two-page  
13 write-up that presents what I'm going to tell you, so you  
14 can take it back and take a look at it, digest it a  
15 little bit more; but I'll hit the highlights for you  
16 here.

17 And in a past RAB meeting, there was concerns  
18 expressed that some of the past activities at Fort  
19 Wingate could potentially impact the water supply of the  
20 Zuni Tribal land. So I am the project geologist, and  
21 they asked me to come and present this information to you  
22 about the geology of the site which is included in the  
23 remedial investigation report that Larry Fisher just  
24 mentioned. It's here in the library.

25 And I'm going to talk to you more particularly

1 about the geology of the Zuni Tribal land and the  
2 relationship between Fort Wingate and the tribal land.

3 So if you look at the first figure in the handout  
4 that we just passed out, it is entitled "Locations of  
5 Fort Wingate Depot Activity and Zuni Tribal Lands." And  
6 there you can see that we have the State of New Mexico up  
7 on the left, the two-county area, and then the location  
8 of Fort Wingate and the Zuni Tribal land within there.

9 And just for your reference, we put on some of  
10 the major roads, the major routes. And the little orange  
11 dot is the Zuni Pueblo. They are approximately five and  
12 a half miles apart, Fort Wingate and the Zuni Tribal  
13 land, at the nearest point. So they're not in real  
14 adjacent locations. There is a considerable distance  
15 between them.

16 The next thing I'm going to talk about is the  
17 basic principles of geology, surface water and  
18 hydrogeology. If you look at the next figure, it's a  
19 block diagram. This is the hydrologic cycle, how water  
20 moves from the atmosphere to rain to surface water and  
21 ground water and then back up into the atmosphere.

22 This describes the basic process of how we get  
23 surface water and ground water. Rain falls on the land,  
24 and a certain amount of it runs off the surface below,  
25 turns into streams. Streams flow to the ocean, back by

1        evaporation into the atmosphere.

2                There is a portion of that water that  
3        infiltrates or seeps into the ground. When there is a  
4        sufficient volume of that that is pulled down by gravity,  
5        saturates the ground, that's what we call ground water.

6                And there are what we call unsaturated or  
7        unconfined ground water, which is ground water that is  
8        basically just right down beneath the ground surface.  
9        There is no less permeable bed that is what we call  
10        confining that layer of ground water.

11               And a lot of these terms are defined in the back  
12        of that handout when you get a chance to take that home  
13        and look at it. And it's this lower aquifer in this  
14        little diagram. It's called a confined aquifer, that is  
15        a body of water that has a less permeable layer on top of  
16        it. And we call that a confined aquifer.

17               Many of the aquifers out in this region are  
18        confined. They're in sandstone and limestone units  
19        within a rock unit within the ground. And there is often  
20        a shale over top of it, which is a much less permeable  
21        unit, and that is the access to that confining layer.

22               So those are the basic principles about ground  
23        water and where it is occurring in this area. Now, if  
24        you look at the next figure, this one shows you again the  
25        same location of Fort Wingate and the Zuni Tribal land.

1           And the blue line on here is the boundary of the  
2       Zuni River Drainage Basin. That is all of the area that  
3       drains into the Zuni River. And this is divided by  
4       topographically or high elevation areas which are called  
5       drainage divides.

6           From that high point, drainage moves in two  
7       directions away from that location. And on the inside of  
8       this blue line, all of the drainage would come into the  
9       Zuni River. And on the outside of it, it would flow the  
10      other direction.

11          And you can see based upon this line that any  
12      surface water flow from Fort Wingate would go away from  
13      the Zuni Tribal land and not towards it. So surface  
14      water flow from the base could not impact the Zuni Tribal  
15      land. It's in a different drainage basin.

16          And then when you look at the next figure, this  
17      is one of the geologic beds or formations that is a major  
18      source of ground water in this area. And what the  
19      blue-shaded area here is is what's called an outcrop area  
20      or an area where the rocks are exposed at the surface.

21          Rainfall, snow melt get into the aquifer in this  
22      location. They seep in here, and then the water moves  
23      through this bed or this aquifer in the direction of  
24      the -- that the beds are laid down in. And that's what  
25      these arrows show you here.



1           The purple lines are based upon wells that have  
2       been drilled into this aquifer. We've gotten known water  
3       levels from them. And from that, we can estimate the  
4       direction of ground water flow.

5           So the ground water flow follows these arrows,  
6       and it is basically in a westerly and then northwesterly  
7       location throughout the Zuni Tribal lands. And if the  
8       flow off of Wingate follows in a similar pattern, it  
9       would not come down into the region of the Zuni Tribal  
10      land.

11          This blue area is where the water is generated.  
12      This is the recharge area or the area where the water  
13      gets into the aquifer. And there is a minor portion of  
14      that on the Fort Wingate facility, but this is in the  
15      very southern portion of the property where none of the  
16      depot's activities were conducted.

17          So based upon the surface water map that I just  
18      showed you and the drainage basins being they're  
19      different drainage basins and the recharge area being the  
20      majority off of the base in a portion of the base where  
21      there was no activity conducted, we feel that there is no  
22      way that the activities at Fort Wingate could impact  
23      either the surface water or the ground water on the Zuni  
24      Tribal land. Okay?

25          MR. SHELTON: The blue outcropping, that's the

1 outcropping in the San Andreas-Glorieta?

2 MS. STELL: Yes.

3 MR. SHELTON: What kind of drift or what kinds  
4 of dip does it take after that direction? Is it in  
5 fairly rapid access of three or four degrees?

6 MS. STELL: I really wish I had an overhead  
7 because I have a -- what I have, and I will have  
8 to -- I'll just come up here in front of the group, here  
9 I have a -- this is from one of the geologic documents of  
10 the area.

11 This cross section line, if you can cut a knife  
12 through the earth and you could look at the side view,  
13 what he's talking is what is the dip or what is the angle  
14 that the bed goes down from the surface of the ground.  
15 And this line A to A Prime is what this cross section is.

16 So here at the boundary of the Zuni Tribal  
17 land, at this point is where he's talking about. And  
18 this is the hogback. I'm sure you're familiar with it.  
19 It's a very upturned bed. That is right here.

20 And there is a very steeply dipping or steeply  
21 angled bed coming off of the area of the hogback. And  
22 this PS and the TRC here, that is the San  
23 Andreas-Glorieta Aquifer.

24 And that is what it would look like if you  
25 could cut a knife through this portion of the Zuni Tribal

1 land and look at the side and the bed. There's quite a  
2 steeply dipping bed, and then it comes out and it's  
3 fairly flat.

4 And ground water flow does generally follow the  
5 direction of these beds in the ground. And again, as I  
6 think I mentioned initially, there is a confining shale  
7 bed over it that doesn't allow the water to just come up  
8 through. It confines it and flows down along these  
9 beds.

AUDIENCE MEMBER: All this information  
10 was taken from the U.S. Geological Survey Water Supply  
11 paper that was referenced in this document that you all  
12 used for this information?

13 MS. STELL: Yes.

AUDIENCE MEMBER: So all the information  
14 that's been published by the Federal Government is based  
15 upon evaluations that were done in the area.

16 MS. STELL: Right. And I believe we're  
17 putting one here in the library tonight. I have an extra  
18 one for you.

AUDIENCE MEMBER: From the U.S. Geological  
20 Survey Water Supply Report?

21 MS. STELL: Right. This was from the U.S.  
22 Geological Survey Water Supply Report.

23 MR. WINKLER: Joe Winkler, New Mexico  
24 Environment Department. Would you say your research then  
25

1 was more in terms of looking at documents as opposed to  
2 going out and doing a physical boring?

3 MS. STELL: Yes. Yes, at this point, that's  
4 true though we did have some boring data from on the  
5 facility, but none from this area.

6 MR. FISHER: Thank you, Mary Jane. Now, we'd  
7 like to hear from Tim Alexander from the Army  
8 Environmental Center and Steven Egnaczyk from ERM. They  
9 are going to discuss the Fort Wingate Feasibility Study.  
10 It's a work we've been doing out there at Fort Wingate.  
11 I'll just introduce them real quick.

12 MR. ALEXANDER: I am Tim Alexander, and I'm  
13 with the Army Environmental Center. We've only got about  
14 an hour or so left that we can occupy the room, so I  
15 don't want to take up much time. So I'll introduce  
16 Steve.

17 We talked about a Remedial Investigation  
18 Feasibility Study that came up again and again and again  
19 tonight. And what that's all about, and we talked about  
20 it in our previous RAB meeting. We went into a lot of  
21 detail about the process, the clean-up process.

22 And it's essentially driven by the Comprehensive  
23 Environmental Response Compensation and Liability Act.  
24 It's a mouthful. That pretty much directs all the work  
25 that we do.

1           Where are we with that particular process?

2           There was a draft document that came up about a year,  
3           came out about a year ago. It was put on file here at  
4           the library, and folks were given the opportunity to  
5           review it.

6           In the past year, we've been gathering actually  
7           more information and gone back and even re-evaluated some  
8           of the work that was done. And perhaps we evaluated some  
9           of our conclusions. And that's what Steve Egnaczyk is  
10          going to talk about tonight.

11          So our intent is to get this information out to  
12          the RAB and the members of the community, make them  
13          sensitive to, you know, where we are in the process, when  
14          documents will be made available, give an opportunity to  
15          ask questions in a formal way like this tonight because  
16          what we want to do in the near future is to finalize this  
17          document.

18          So now's the time we are going to crank it up so  
19          we bring the whole process to a conclusion hopefully  
20          within the next four or five months. What that means is  
21          that the government must generate what we call a -- it's  
22          a Record of Decision. And that is a decision about what  
23          sites we're going to clean up and how we're going to go  
24          about doing it.

25          So if you missed the last RAB meeting, probably

1       this is a good one to be present at. It's going to be  
2       moving pretty quickly for the next few months or so.  
3       With that I'll pass it onto Steve Egnaczyk. Steve  
4       Egnaczyk is our Project Manager from ERM out of Exton,  
5       Pennsylvania.

6               MR. EGNACZYK: Thank you, Tim. Just to regroup  
7       a little bit, and I won't take a lot of time, also, is  
8       basically the way the closure of Fort Wingate is being  
9       done under BRAC, we're following a CIRCLA process. Many  
10      of you may be familiar with the Super Fund Program or the  
11      Hazardous Waste Program that gets in the news a lot.  
12      Well, even though this isn't a Super Fund site, the Army  
13      follows the same process that we would under a federal  
14      Super Fund site.

15             So the buzz words that we're throwing around  
16      today and the acronyms, the RIFS, Remedial Investigation  
17      Feasibility Study, were all the same documents that would  
18      be prepared as part of the Super Fund site that was  
19      undergoing clean-up.

20             So what Tim mentioned before is the NCP process  
21      basically dictates for us the procedures that we do  
22      follow in evaluating a site. And two parts of that  
23      document, the remedial investigation, is basically going  
24      out and evaluating or characterizing all the areas that  
25      have been identified on Fort Wingate as possibly having

1 environmental contamination.

2           Once all that information is gathered, we then  
3 go back, analyze the data, summarize the data and then go  
4 into a RIFS assessment process, which is the process of  
5 evaluating the data against known RIFS issues and RIFS  
6 numbers.

7           The part that then comes is called a feasibility  
8 study, which is the engineering evaluation of these  
9 remaining sites. Basically, you know, there is an  
10 ongoing discussion between scientists and engineers.

11           We basically feel we can go out and solve the  
12 problems on the site when we look at it, and a geologist  
13 will tell us or a scientist will tell us that they  
14 probably need to study it five times longer than I ever  
15 think we would need to.

16           So that's the balance that happens in that, and  
17 that's the balance that happens in any site like this is  
18 it is from two different perspectives. And that's why  
19 there is kind of a unique balance in this kind of a  
20 document format.

21           So the feasibility study has been summarized in  
22 the handout you have. There was a little colored breaker  
23 page at the end of Mary Jane's presentation. And then on  
24 the back half of that, we have a little bit of just a  
25 summarization of the three key points.

1                   No. 1, the objective of the Remedial  
2           Investigation/Feasibility Study is to gather information  
3           sufficient to support an informed RIFS management  
4           decision regarding the most appropriate remedy for a  
5           given site. Basically, to gather information, look at  
6           what contamination may or may not be there, look at what  
7           alternatives that are available to deal with that  
8           contamination if there is any, and then recommend to the  
9           public and to the government what approach should be  
10          taken on that site.

11                   The feasibility study then serves as a  
12          mechanism to develop and screen potential remedial  
13          alternatives. For example, should we just leave the site  
14          as is? A classic site back east, just to throw a back  
15          east scenario at all of you, is that we have a large  
16          industrialized area and that we have a site that we are  
17          evaluating in a large industrial area, does it make sense  
18          to clean that site up to a more -- to a cleaner level  
19          than what might be existing around that site? That's  
20          certainly not the case we have here, but it's just an  
21          example of the kind of balance that you take in looking  
22          at different alternatives.

23                   A remedial action is then recommended for each  
24          site that is then documented in a Record of Decision.  
25          And as Tim and Mary Jane have all said, a Remedial



1 Investigation Feasibility Study report, the draft  
2 document that now exists, is available in the public  
3 information library here on site and will be updated as  
4 we go through each step of the CIRCLA process.

5 Two areas were identified in the FS for  
6 evaluation, a pistol range that was a former firing area  
7 on the northeastern location of the facility. It  
8 basically was a bermed area they used for target practice  
9 and would fire into the side of the berm. And,  
10 basically, the lead shot from that firing basically  
11 created a situation where lead contamination levels were  
12 above acceptable levels and required evaluation.

13 Now, the secondary was mentioned by Larry a  
14 little bit earlier, the TNT leaching bed, a washout area  
15 where washouts from the demilitarization operation were  
16 discharged into a leaching bed that over time had  
17 residual explosive concentrations that required us to  
18 perform an evaluation of that area.

19 So those are the two areas that were evaluated  
20 distinctly within the feasibility study. We had several  
21 other areas that pretty much didn't require any  
22 evaluation. One was a small soil area of PCB  
23 contamination.

24 Basically, there was a set of -- there was a  
25 transformer up on poles that basically had leaked a

1        little bit down on the ground. And that area was  
2        identified as such a small area, and under the  
3        regulations, it was just required to excavate and remove  
4        that soil.

5                There was really no evaluation required there.  
6        It's above the regulatory limit. It's a small amount of  
7        soil. We clean it up. We move it off the site. That  
8        really wasn't evaluated in detail in the feasibility  
9        study.

10               The next sheet kind of summarizes the range of  
11        alternatives that we looked at briefly in the few areas.  
12        For the pistol range, we looked at three alternatives.  
13        We looked at no action. In other words, if we left that  
14        soil there, what would be the hazard or the risk to the  
15        environment, to the public and to the ecology if that was  
16        left as is?

17               The second one is to excavate the soil, to do  
18        solidification and stabilization of the soil to control  
19        the lead, and then to remove the soil to an off-site  
20        disposal facility. The reason we are doing the  
21        solidification and stabilization there is there are  
22        certain regulatory requirements that if lead is above a  
23        certain concentration or is leachable, it's not allowed  
24        for land disposal directly.

25               The land disposal restriction, as some of you

1 might hear about, is just getting rid of some waste  
2 impacting this area. So we would be required to do some  
3 treatment to control that lead to make sure it's not  
4 leachable, that it can't get out of the soil before it's  
5 allowed to go in the landfill.

6 The third option then would be off-site  
7 disposal reclamation. In other words, take it to a  
8 disposal facility that would then do some reclamation of  
9 the lead shot, which is one standard alternative that is  
10 being implemented in a lot of the old pistol ranges and  
11 firing ranges now, and then disposing of residual soils  
12 after that.

13 On the next page, we have the alternative TNT  
14 leaching beds. This is a little bit more of a complex  
15 area because of the size of the soil. For example, the  
16 TNT leaching bed area, I believe, or the pistol range  
17 area, I believe, is about seven hundred and fifty cubic  
18 yards while the TNT leaching bed areas are about forty  
19 thousand cubic yards.

20 So a lot of times the alternatives you look at  
21 are all going to be dependent on the volume of soil  
22 that's there as well as the contaminants that might be  
23 present.

24 The five alternatives that made it through the  
25 screening process and the feasibility study for this area

1 include no action. Once again, what would be the impact  
2 of the area if that was left as is; in-place capping,  
3 covering the whole area over right now and minimizing any  
4 potential surface water infiltration into the soil;  
5 excavation and on-site disposal, removing that soil and  
6 placing it in some kind of an on-site disposal facility  
7 that meets the technology requirements and the regulatory  
8 requirements for a landfill for that waste as it's  
9 categorized; excavation and on-site low temperature  
10 thermal desorption.

11 What this is is a form of thermal treatment.  
12 It's not an incinerator. It's a form of heating the soil  
13 up to volatilize any contaminants in a controlled  
14 environment and then breaking down those contaminants,  
15 and then you can return the soil either to the surface at  
16 that location or to an on-site or off-site disposal  
17 facility depending on what residual contaminant levels  
18 are left.

19 The key point there is to try -- it's much more  
20 applicable in a volatile situation, for example, an  
21 underground storage tank area with hydrocarbons where you  
22 could get rid of the volatile organics that are within  
23 the soil. We think that might also be applicable to  
24 explosives.

25 That might work in this kind of a site, but in

1       this case, we'd have to do some pilot studies of this  
2       technology to see if it would work. The last alternative  
3       is once again excavating all that soil and then removing  
4       it to an off-site disposal facility that's permitted for  
5       that characterized nature of soil.

6               So those are the alternatives that are currently  
7       under evaluation for the two areas in the feasibility  
8       study.

9               We are also looking at two other areas of concern  
10      that add up to the five areas that Larry mentioned  
11      earlier in his presentation, Building 5 of the former  
12      vehicle maintenance building area has pesticides in  
13      certain locations in the front of the building  
14      principally from the use of control of weeds over time.

15              There is also the former deactivation furnace  
16      area that was -- had some kind of a metal finishing  
17      process that was basically decommissioned before we  
18      started doing the investigation activities that resulted  
19      in cadmium metal being in concentrations that required  
20      further evaluation.

21              That in a nutshell is where we stand right now in  
22      the feasibility study. These areas all now are currently  
23      undergoing final evaluation. And at the point in time  
24      that we come to concurrence with both the regulatory  
25      agencies and the folks within the Army, then the document

1 will be finalized.

2 And the next stage of that document will then be  
3 presented in the public information library here. Are  
4 there any questions that I can answer for anyone?

5 MR. WINKLER: Joe Winkler, Environmental  
6 Department. When would you project that, from where you  
7 are right now, that action would actually start on the  
8 selected actions?

9 MR. EGNACZYK: I hate to put that over to Tim,  
10 but I believe that should be an Army answer in the  
11 schedule right now.

12 MR. ANDERSON: What we're doing, I'm with the  
13 Army Environmental Center, and what we're doing now and  
14 what we've been doing, we actually started doing some  
15 pre-design work on some of the areas that Steve  
16 identified.

17 And it was actually, some of that pre-design work  
18 and the results that, you know, there was actual chemical  
19 analyses taken at Building No. 5, the pesticides and the  
20 deactivated furnace, which basically warranted us going  
21 back and revisiting our conclusion about some action  
22 needed to be done at those areas.

23 On the other areas, for example, the pistol  
24 range, we've also gone out there most recently and taken  
25 additionally soil samples basically to get a better

1 handle on the volume that we're talking about removing.

2 So we're starting to move out on designs right  
3 now. We're hoping we can get a Record of Decision  
4 designed this spring. We have actually programmed into  
5 our budget activities this year design, and hopefully the  
6 jobs will be done, I guess, at the latest, the beginning  
7 of the next federal fiscal year to be in '96. That's  
8 what we're shooting for.

9 MS. NOE: On this soil removal, where will it  
10 go?

11 MR. ALEXANDER: Well, that would be -- I guess  
12 what happens is that if the design required a project, I  
13 guess a removal project, what we do is put that out for  
14 bid, okay? Any facility, basically, that had the permit  
15 to accept that waste could actually bid on receiving that  
16 material.

17 So, really, it's a competitive process, and we  
18 couldn't identify at this point in time where that soil  
19 would go.

20 MS. NOE: Where do they take it now?

21 MR. ALEXANDER: There is a lot of facilities,  
22 frankly.

23 MS. NOE: Are there any in the state?

24 MR. ALEXANDER: I don't think there are any --  
25 actually, what happens is -- okay, that's a tricky

1 question because, for example, the pistol range, okay?  
2 Once you treat that -- Steve talked about treating that  
3 soil below a certain standard.

4 In New Mexico, once that waste is treated, and  
5 that waste being lead-contaminated soil, is treated below  
6 certain thresholds, regulatory thresholds, the waste is  
7 no longer hazardous.

8 In New Mexico they call lead contaminated soil  
9 that's been treated as special waste. So, frankly, the  
10 law wouldn't even require that that go to a hazardous  
11 waste facility.

12 So, you know, there is a lot of places it could  
13 go, but any place that it would go would be required to  
14 be, No. 1, in compliance with the state and federal laws  
15 and would have to have a permit to receive that waste.

16 MS. NOE: Well, once it's treated, it won't stay  
17 out there? I mean, I'm not saying the soil is sacred,  
18 but it won't stay out there at all or will it be removed  
19 for treatment?

20 MR. ALEXANDER: That's a possibility. But,  
21 really, what we're talking now, what Steve has done is  
22 he's outlined a number of alternatives or, talking about  
23 the pistol range soil, the lead-contaminated soil, Steve  
24 outlined a number of alternatives for that soil.

25 We haven't selected an alternative yet. We will



1 not select an alternative until we go through a process  
2 where we'll finalize a document, okay, put it out to the  
3 public for review, okay, and the public can then comment  
4 on it. Once we receive all the public comments, et  
5 cetera, then a decision will be made as to what exactly  
6 will happen to that soil.

7 So it's certainly premature to say what's going  
8 to happen at this point, but I think Steve has outlined  
9 the alternatives that have passed through the screening.  
10 And again, one of the alternatives is the no action  
11 alternative. And the reason you consider a no action  
12 alternative is because the law says you have to consider  
13 a no action alternative. That's part of the law.

14 The second alternative that passed through  
15 screening is to excavate it, stabilize it or maybe not  
16 stabilize it, but essentially it was an on-site disposal  
17 scenario.

18 And the third alternative was to treat it and  
19 leave it on site, okay? And there is a lot of  
20 requirements that go along with that particular  
21 alternative.

22 MS. NOE: Have you come up with the figures  
23 parts per million contaminants?

24 MR. EGNACZYK: Right. What we have right now is  
25 the area that is defined for excavation if it's activated

1 is dependent on a certain agreed-upon or negotiated or  
2 level or clean-up level, the infamous clean-up level that  
3 is basically the crux of all these decisions, how far you  
4 clean up the soil or at what point do you stop. So  
5 basically that would define how much soil is then cleaned  
6 up and removed from that area.

7 And then depending on the waste classification  
8 it's dependent on where the soil would go. For example,  
9 if it's classified as a special waste, it would then go  
10 to a special waste landfill right in the State of New  
11 Mexico, a permitted landfill for the special waste  
12 landfill.

13 It may go off as a hazardous waste. Then it  
14 would go to a RICRA permanent facility for hazardous  
15 waste. Depending on what the waste classification of the  
16 soil is would also dictate the type of disposal and if it  
17 would be on site. If it was special waste, it would have  
18 to meet a -- the landfill would have to meet the special  
19 waste requirements for the State of New Mexico.

20 So it's dependent on the characterization of the  
21 soil that was excavated and then where are you going to  
22 go put it on the site.

23 MS. NOE: And how far do you go down?

24 MR. EGNACZYK: That's all dependent on what is  
25 the agreed-upon clean-up. We would go down until we can

1 sample that soil and confirm that we met the agreed-upon  
2 clean-up level. And that would be part of the remedial  
3 action design is to then confirm that.

4 MR. ALEXANDER: In this case, we're looking to  
5 the national standard almost.

6 MS. NOE: Okay.

7 MR. ALEXANDER: That's what's being proposed at  
8 this time as a clean-up level.

9 MS. NOE: What is the national standard for the  
10 people here?

11 MR. EGNACZYK: Well, it varies for different  
12 contaminants, but the lead, I think, is --

13 MR. ALEXANDER: Let me interrupt. It's five  
14 hundred parts per million.

15 MS. NOE: There is a document that says four  
16 hundred parts per million, so basically that's up there.

17 MR. EGNACZYK: It's a continual state of flux,  
18 and like I said, it will all be dependent on the --

19 MR. SING CHIA: Sing Chia, EPA. One site in the  
20 City of Dallas, which we call West Dallas Lead Site, the  
21 clean-up level is five hundred PPM for the residential  
22 areas.

23 MR. EGNACZYK: I'm sorry, the gentlemen in the  
24 red shirt.

25 MR. HALE: I'm David Hale, Navajo EPA. I have a

1 question. You identified five areas of concern. And I  
2 was wondering if there were other areas of concern.

3 Three areas I'd like to point out, one being the  
4 demill range, the other being the missile launch site,  
5 the formal missile launch site. And I'm sure there were  
6 other illegal dumps out there. We know how the military  
7 is about stuff like that.

8 MR. EGNACZYK: Well, yeah, like I said,  
9 unfortunately, we're here for a last RAB meeting where we  
10 reiterated the work in the areas that had been done, but  
11 basically, we evaluated forty-five areas within the  
12 installation at the RI or the remedial investigation or  
13 site characterization phase that he talked about earlier  
14 on.

15 So these sites are the sites that after that  
16 evaluation and after evaluation of the data are the ones  
17 that warranted further evaluation in the feasibility  
18 study. So we basically collected over a hundred thousand  
19 analytical data points as part of the remedial  
20 investigation and analyzed and investigated forty-five  
21 areas including all three of the -- what, two of the  
22 three missile firing ranges that were actually used and  
23 also a third range that had been identified but never  
24 used in the southern property. And that also includes  
25 the -- I'm not sure if by the demill area you mean the

1 functional test ranges.

2 MR. HALE: No, the actual site where they  
3 detonated the mills.

4 MR. EGNACZYK: Right. That area is still  
5 undergoing evaluation right now under the Resource  
6 Conservation and Recovery Act. Tim, I don't know if you  
7 want to pick up on that area or --

8 MR. ALEXANDER: I'll just explain that basically  
9 that had not been included in the remedial investigation  
10 feasibility study because that area once had interim  
11 status, almost permanent status, to conduct the Army's  
12 activities of demilitarization of those munitions.

13 Because we're now closing out the surface, we're  
14 required by law to work with the New Mexico Environmental  
15 Department records range to close that area out.

16 MR. EGNACZYK: So that area is undergoing  
17 evaluation and closure under the Resource Conservation  
18 and Recovery Act. Okay?

19 MR. ALEXANDER: Does that answer your question,  
20 sir?

21 MR. HALE: I think so.

22 MR. ALEXANDER: Okay.

23 MR. PFEIL: Excuse me. I'm John Pfeil with the  
24 New Mexico Environment Department. To follow-up a little  
25 bit, I think that the state also recognized there was

1       some areas on the installation that were not specifically  
2       looked at in the RIFS.

3               Some of them were small dump sites up at the  
4       southern property. For instance, there was a number of  
5       more or less basically landfill type sites that were  
6       basically located in the vicinity of an arroyo, which  
7       concerned us. And, you know, we have asked, asked the  
8       Army to look at those sites and to present some sort of  
9       solutions to deal with those as well.

10              MR. ALEXANDER: And in response to those  
11       concerns, we are. And, you know, there is a master  
12       document. And it's going to be updated, and it is  
13       confusing. There is not only one path to success here.

14              And, obviously, the end point is recognizing what  
15       problems we have at Fort Wingate and addressing them.  
16       One mechanism is through CIRCLA and RIFS. And as Steve  
17       said, it's a grand undertaking.

18              You know, they went out there with the notion  
19       that we are going to investigate everything and basically  
20       bring into a pool those sites which then would be  
21       processed for some type of action. What happened is, you  
22       know, yes, some issues were brought up relative to a  
23       couple of landfills.

24              You know, these sites never were included in the  
25       RIFS. Well, documents were passed around, areas were

1 identified. When does this information come into play?

2 Well, it's kind of late. Okay. Fine. Do we stick it in  
3 the RIFS now and hold up the process and basically delay  
4 clean-up at these sites?

5 Now, we don't want to do that. What we're doing  
6 is we will be giving the state and EPA, and they  
7 understand that, work plans this spring to investigate  
8 these areas which John just referred to, a couple of  
9 small dumps out there that I think were actually used  
10 when they closed out the facility. But we're going to go  
11 out there and we're going to take a backhoe through the  
12 areas and investigate and take samples, et cetera, of  
13 those areas.

14 Now, how do we address this through the process?  
15 What we're doing is -- what drives everything, really, is  
16 the BRAC closure plan, okay? And that's the ultimate  
17 clean-up document for the site. These areas will be  
18 identified in that plan, and it's this plan that is  
19 available to you all.

20 And it will describe what our plans are for  
21 investigating and bringing those sites to some  
22 resolution. So we got those areas. We got the RICRA  
23 area, and we have the CIRCLA area. And then, frankly, we  
24 have another area of interest, and I think we're going to  
25 get into that a little bit later and talk about that with

1       you.

2               MR. HALE: One more question, I guess this is a  
3 rumor and stuff like that that out there that Fort  
4 Wingate was a site where they stored chemical munitions  
5 before. Is that true or was it mainly conventional ammo  
6 that was stored out there?

7               MR. EGNACZYK: Once again, the Army probably  
8 should be the one to answer. We basically looked at that  
9 several times. As far as the records show, there was  
10 only at one point in time back around World War II a  
11 train that just stopped temporarily on their way to a  
12 disposal facility outside of the State of New Mexico as  
13 far as the records show is the only time any chemical  
14 weapons or any kind of materials like that might have  
15 even been in this place, but they most certainly were not  
16 treated on the installation. That's the only time they  
17 were referred to in any of the records that we  
18 identified.

19              MR. SHELTON: Mustard gas?

20              MR. EGNACZYK: Mustard gas, right.

21              MR. ALEXANDER: In addition to that, what we know  
22 now, the Army requires before we dispose of the property  
23 at a land disposal site, what they do is they go back and  
24 do an archive search.

25              Really, this effort is relevant to munitions



1 handling on the facility. Going back and doing an  
2 archives search and seeing if there was or wasn't  
3 chemical munitions handled at the site. But to our  
4 knowledge, and we do a pretty thorough evaluation of that  
5 issue, the only thing that we can turn up was this train  
6 going through.

7 MR. EGNACZYK: And that just stayed temporary. I  
8 think it was Dougway.

9 MR. ALEXANDER: But we what we're looking at is  
10 the --

11 MR. EGNACZYK: Right. The information we did  
12 look at is all summarized in the remedial investigation  
13 report that is in the library.

14 Just to summarize kind of what Tim said, it's  
15 been an evolving process since we started the  
16 investigation process on Fort Wingate. I certainly don't  
17 want to lead anyone to think that we picked these sites  
18 and these are the only sites we looked at, and that's all  
19 we did.

20 It's been an evolving process. We started with  
21 around thirty sides in the initial work plans. And as  
22 we've evaluated areas and as the state has identified  
23 areas, we've done, you know, reviews of the historical  
24 area photos, historical records of past disposal  
25 operations. We've interviewed employees. So we've done

1 a fairly comprehensive search to try to identify any area  
2 on the installation that might have been used in some  
3 past activity.

4 And as we started with around thirty or  
5 thirty-four, we're now up to thirty-five areas and any  
6 additional areas that the state has requested us to look  
7 at. So it's been an evolving process as we move through  
8 the characterization. Do you have a question, sir?

9 MR. SHELTON: Lynn Shelton, Wingate for  
10 Wildlife. I notice that a lot of your alternatives for  
11 some of the different areas range from very expensive to  
12 very, very expensive. Have we looked into recycling like  
13 in the lead? I'm assuming that the lead contamination  
14 comes from actually the shot.

15 MR. EGNACZYK: Shot.

16 MR. SHELTON: The bullets and the shot, right.  
17 Did that come from observation from the presence of the  
18 lead itself and if it is lead, why weren't we looking at  
19 recycling? That is a natural resource that we can reuse.

20 MR. EGNACZYK: Well, there have been quite a few  
21 projects done to date, and I certainly can't list all  
22 those accurately. The problem with lead shot is exactly  
23 like you said, there is large pieces of shot that you do  
24 see visually as you walk along the ground.

25 And then there is an oxidation process that

1 occurs that concentrations of lead can then get into the  
2 soil. There are various mechanisms you can use as  
3 screening mechanisms to try to -- a screening mechanism  
4 or spinning mechanism to get the lead shot out of the  
5 soil.

6 The problem is that there are certain regulatory  
7 concentrations of lead we need to meet so that it is no  
8 longer hazardous. Some of the previous work that's been  
9 done at other sites, they weren't able, even after that  
10 screening process, to pass the regulatory requirements  
11 for lead-contaminated soil that made it nonhazardous.

12 So while we've proposed that as part of a  
13 reduction in soil volume on what would require  
14 landfilling, our concern now is, and the treatability  
15 test would confirm this, that the soil would still be  
16 hazardous and would still require off-site disposal.

17 MR. SHELTON: Or capping to immobilize the  
18 place?

19 MR. EGNACZYK: Well, unfortunately, there you  
20 have to start looking at the potential future use  
21 alternatives for the site. And, obviously, if you cap  
22 soil and leave it in place, there are institutional  
23 controls that come into play.

24 So if you look at a small sized area, and the  
25 fact that you have to fence that and have someone come

1 out and look at that fence and maintain it for the next  
2 thirty years, you know, you not only have to look at the  
3 immediate impact of an alternative on the site, you also  
4 have to look at the long-term impact.

5 It basically would require you monitor that area  
6 for thirty years. So then you fall into the cost  
7 balance. You talk about real expensive. Is it less  
8 expensive to take seven hundred and fifty yards and get  
9 it out of there or how much is it going to cost to have  
10 someone go back and look at that fence and look at that  
11 area on a regular basis and sample it for the next thirty  
12 years?

13 Now, in the case of the TNT washout, that's where  
14 we have more alternatives there. There was certainly  
15 more soil there. There was about forty thousand cubic  
16 yards there or more. That then necessitates us to look  
17 at more alternatives rather than just digging it up and  
18 moving it off site or somewhere else.

19 MR. SHELTON: I had one last thing about that.  
20 In the course of doing this excavation and removal,  
21 whatever way you decide to do, whatever method you  
22 choose, will this involve destruction of any existing  
23 structures?

24 MR. EGNACZYK: Actually, no.

25 MR. SHELTON: Are we going to be tearing any

1 part of the, say, firing range out? That's a public  
2 property thing, and if that decision is made to remove  
3 such facility, who makes that decision?

4 MR. EGNACZYK: By "firing range," I'm not sure  
5 what you mean by "firing range."

6 MR. SHELTON: Well, the pistol firing range.

7 MR. EGNACZYK: Well, there is a backstop there  
8 right now, a wooden backstop.

9 MR. SHELTON: So all of that will be removed?

10 MR. EGNACZYK: The backstop, I'm assuming, and I  
11 certainly can't predict ahead how the work will be done.  
12 I'm assuming that could be picked up and moved off to the  
13 side because what we would be concerned with is the soil.  
14 And what the future use of that site would be after then  
15 really is up to the Army and the public and all that.

16 MR. SHELTON: I was just concerned with  
17 destruction of the buildings and such.

18 MR. EGNACZYK: There are no buildings in any of  
19 the areas we're evaluating right now. The pistol range  
20 area does have the backstop from the firing range that is  
21 up there, the wooden structure. And that is basically on  
22 an earthen berm. It sits behind that.

23 The TNT leaching beds are basically just lagoon  
24 areas. They're all flat areas that basically the buffalo  
25 roll around in.

1 MR. FISHER: If we do clean up that site, we  
2 certainly don't want to come in and use them again and  
3 then, you know, in a few years have to turn around and  
4 spend a lot of money cleaning them up again. So once we  
5 stop using it, it won't be used again as a pistol range.

6 MR. SHELTON: By the military?

7 MR. FISHER: By the military.

8 MS. STAHN: Elvira Stahn. I work in Building 12  
9 and 13 in Fort Wingate. I have a question here for Mr.  
10 Fisher. Do you know if the memorandum of agreement for  
11 Building 12, 13 and 5 is approved?

12 MR. FISHER: I'm sorry, I can't answer that.  
13 There is a gentlemen, he was hoping to be here tonight,  
14 but he had another meeting back in D.C., Malcolm Walden.  
15 I can give you his name and phone number.

16 MS. STAHN: I know him. The reason why I'm  
17 concerned about it is because if we're saying that  
18 Building No. 5 has those problems and also the burner or  
19 the boiler system, I'm just wondering who's going to take  
20 care of that? Is that the USDA or Tooele or is it going  
21 to be the Navajo Nation's responsibility?

22 MR. FISHER: If there is contamination, it will  
23 be the Army's responsibility to clean that up. But, you  
24 know, that's all negotiable in the lease or in the  
25 contract that you signed, and I really don't -- I'm

1       sorry, I really don't get into that portion of it. We  
2       basically are involved in cleaning, you know, these  
3       areas, but I see your concern there. But we were  
4       responsible for any contamination that exists there.

5               MS. STAHN: Another question is have you checked  
6       for contamination around those buildings?

7               MR. EGNACZYK: Those buildings weren't identified  
8       in some of our initial assessments for our investigation.

9               MS. STAHN: The reason why I'm concerned about  
10      that is it seems like about within a year we've been  
11      having problems with water lines, the water being  
12      corroded and water draining. And it's caused some  
13      problems for us. And I'm concerned about that.

14              MR. FISHER: I know the water lines have been  
15      out there for a long time, you know, since Fort Wingate  
16      was established out there, I guess. And they haven't  
17      really been upgraded, and there are problems with that,  
18      but I don't think -- I don't know. We can have that, we  
19      can discuss that, you know, a little bit later.

20              We don't want to cause any -- the contamination  
21      generally isn't that deep around those buildings out  
22      there. And there was never anything done in those  
23      buildings, really, to contaminate that area. And that's  
24      why they weren't really investigated.

25              But the water lines will eventually break, and

1       then they will be repaired. But I don't know. I don't  
2       see where you are picking up any contamination.

3               MS. STAHN: If I go to a staff meeting  
4       tomorrow, I can tell them that your buildings are pretty  
5       safe for right now?

6               MR. EGNACZYK: And what we're talking about at  
7       Building 5 is a grassy area outside the building where  
8       there was -- not inside the building.

9               MS. STAHN: Well, the boiler system is in the  
10      bottom of that building.

11              MR. EGNACZYK: Uh-huh, uh-huh. There shouldn't  
12      be a problem with the boiler. Maybe I can ask, I guess I  
13      don't quite know where you are, so I don't know -- I  
14      know where 5 is.

15              MS. STAHN: What we're waiting for, as I  
16      understand it, is the boiler system. And then also we're  
17      supposed to have our meter, electrical meter, hooked up  
18      before they let us use Building No. 5. So Building 5 has  
19      been vacant for over a year.

20              MR. PFEIL: What's the use for 12 and 13?

21              MS. STAHN: We store food in those two  
22      buildings.

23              MR. PFEIL: And that's been happening for many  
24      years, hasn't it?

25              MS. STAHN: For, I think, twenty years.



1 MR. PFEIL: I see, okay. Okay.

2 MR. FISHER: It's been a long time, and Building  
3 5, I believe, they want the vehicle --

4 MS. STAHN: Maintenance shop.

5 MR. FISHER: That's what they used to have, but  
6 the area that is contaminated is the grassy area.

7 MS. STAHN: But that's very close to Building  
8 13.

9 MR. ALEXANDER: What we're talking about here,  
10 what we're talking about is, I hate to use the term, but  
11 I think over the years people apply pesticides to control  
12 pests.

13 Now, Steve talked earlier about how do you go  
14 about making the decision about what sites to clean up.  
15 And the way we do that is we gather our data, our  
16 chemical data, and we subject that data to a RIFS  
17 assessment.

18 Well, the way the RIFS assessment came out, it  
19 said that in a residential exposure scenario, you know,  
20 if somebody's living in that area, I mean, that's the  
21 hypothetical exposure scenario that the RIFS assessment  
22 employs.

23 And what we came up with was a risk of someone  
24 contracting cancer because there are some carcinogens.  
25 Some of the pesticides have carcinogens. And there was

1 one times ten to the minus fifth risk. What that means  
2 is one in one hundred thousand, if they were to live  
3 there for thirty years and eat the soil, they'd have to  
4 eat the soil.

5 And what they did is they used a maximum  
6 concentration. So there was a hot spot. There was one  
7 sample that came up higher than the rest. That was the  
8 sample that actually shows that concentration. They put  
9 that into their risk assessment.

10 So, you know, even at that, we're looking at --  
11 what the statute says is with the thresholds for action  
12 or what Congress said is unsafe, they said what is safe  
13 is anything between a ten to a minus fourth and ten to  
14 the minus sixth risk. And we're talking about  
15 carcinogens.

16 MR. PFEIL: Explain those numbers, Tim.

17 MR. ALEXANDER: Well, I've already said it's one  
18 in one hundred thousand. One times ten to the fourth is  
19 one in ten thousand. And one times ten to the minus six  
20 is one in a million risk that someone would contract  
21 cancer in this case living, you know, at that site and  
22 eating soil from the hot spot over a thirty-year period.

23 And we only have one sample that came up with  
24 contamination there. And, frankly, that's what's causing  
25 us to go back and re-evaluate what do we really have to

1 do here right now because it doesn't make sense to go up  
2 and dig up that whole area.

3 So, frankly, we've taken back the information to  
4 the Army RIFS assessors, and these folks actually  
5 represent the Surgeon General of the United States, and  
6 said, "Look, guys, these are really some conservative  
7 assumptions that were made here. We've got some  
8 additional sample data, and we're trying to figure out  
9 exactly what we have to do there. And maybe our original  
10 shot of what the action should be was a little too  
11 conservative."

12 So our concern was about people who, No. 1,  
13 don't live at the site, spend eight hours a day there.  
14 This is an entirely different risk scenario, okay? And,  
15 therefore, you know, you know, what's the concern about  
16 their health?

17 Well, we'd have to ask a toxicologist to give  
18 you something definitive, but if you take what I say into  
19 consideration and understand that, No. 1, we use maximum  
20 concentrations. We used the exposure theory, which we  
21 talked about, residential, somebody living there at the  
22 site. Now we're talking about workers who are there  
23 eight hours a day, and hopefully they're not eating the  
24 soil.

25 So you know, that's the contrast. We're working

1       that issue to determine whether we need to do anything  
2       there at all.   Okay?

3               So that's not definite.   That doesn't give any  
4       explicit answer to say, "Oh, it's safe for your workers."  
5       And, frankly, we can be responsible enough to get back to  
6       you on that and get you some information, okay, because  
7       we are waiting on the RIFS assessors, we'll do something  
8       in a couple of weeks.   They're going to tell us whether  
9       or not we have to do anything at all.

10              MR. WINKLER:   Joe Winkler, New Mexico  
11       Environment.   Would you describe the RIFS assessors to us  
12       and where they're located and who they report to?

13              MR. ALEXANDER:   All right.   Well, our risk  
14       assessors work for an agency within the United States  
15       Army, the Army Environment and Hygiene Agency.   And they  
16       are the ones we currently consult with in regards to  
17       these matters.

18              And in addition to that, obviously, our data and  
19       our risk assessments go to the regulatory agency, who  
20       also evaluate that information.   So, you know, this isn't  
21       carte blanche.   There are, you know, checks.

22              MR. SHELTON:   One quick question.   I've been  
23       operating under the assumption that the Department of  
24       Defense was going to be funding the clean-up for all of  
25       this.   Is that correct?   The reason I asked is this lady

1 just mentioned if there was any apparent liability of the  
2 Navajo Nation to pay for clean-up around certain  
3 buildings. I was curious as to why she would be  
4 concerned about that.

5 MR. FISHER: The Army is responsible, like I  
6 said, for cleaning up any past sins, you might say. And  
7 the Department of Defense will pay for those, you know,  
8 for the clean-up. The money is coming for that.

9 MR. ALEXANDER: The law is written so rigorously  
10 that it says you will not only clean up for your past  
11 sins, but even after we dispose of the property, transfer  
12 the property, if there are new findings and, obviously,  
13 it's demonstrated that the Army is associated with the  
14 findings, then the Army has some liability there as well.

15 MR. EGNACZYK: I hate to defer to Army issues,  
16 but when it's their money, I can't answer on any  
17 questions. All we did was the feasibility study. Yes?

18 MR. HALE: Frank Hale. You have those remedial  
19 alternatives of one, two and three like in the pistol  
20 range. Now, I understand that these remedial  
21 alternatives are being summarized. They're to be put out  
22 for public comment and review.

23 Who makes the final decision as to which  
24 alternative is to be utilized and does this -- I guess  
25 it's called a Resource Advisory Board. Do they have any

1 input or say as to the decision that is made to go with  
2 two, but the feeling is that you should really go with  
3 three? Is there any room for compromise or discretion in  
4 the area?

5 MR. EGNACZYK: Right. There certainly is. I  
6 don't know, Larry or Tim, if you want to answer that  
7 when you've got that, again, the Army dollar here.

8 But during the evaluation process that does  
9 occur that the public does have involvement with, when  
10 the decision is made about what alternative will be  
11 selected, that then goes into what's called the Record of  
12 Decision or ROD for the site. And that is put out for  
13 public comment.

14 And the public does have the ability to respond  
15 to the alternative or alternatives that are selected for  
16 the site, and it is a public involvement process that  
17 then is agreed upon with EPA in the State of New Mexico  
18 as well as the Army and the public. So it is an evolving  
19 process that the public has input to.

20 MR. HALE: Once the Record of Decision is made,  
21 is it pretty much set that whatever that decision is  
22 made, that the Army will implement it or will there be  
23 some deviation depending on the public input and  
24 comments?

25 MR. ALEXANDER: Before we generate a ROD, what

1 really happens is that we finish up this feasibility  
2 study, okay? It comes back to you all for comment.

3 And one purpose of the Restoration Advisory  
4 Board is they have input along the way. Okay? They  
5 facilitate communication with people outside the  
6 reservation and in the community. So, hopefully, we're  
7 garnering their concerns and whatever. And we're  
8 instituting those and we're putting them into writing in  
9 the feasibility study, itself.

10 Now, there is a formal hearing that's offered.  
11 "Hey, guys, you know, we're going to hold a public  
12 meeting. You want to have a meeting." We come and we  
13 have a meeting. People actually -- you know, they'll  
14 issue comments where we have to respond to those comments  
15 in writing. After that's done, then the ROD is written,  
16 okay?

17 MR. HALE: When is the ROD due out?

18 MR. ALEXANDER: We're hoping we get it done by  
19 late spring.

20 MR. WINKLER: Could you describe the ROD?

21 MR. ALEXANDER: It is actually a Record of  
22 Decision. That's what the acronym stands for. And the  
23 process is outlined in the National Contingency Plan.  
24 Those are the regulations, which, basically, you know,  
25 drive this stuff.

1 MR. EGNACZYK: And I think if you do any reading  
2 of your newspaper or any magazines, you'll understand  
3 it's a very interactive process as the ROD is being  
4 developed and even after it's agreed upon with the public  
5 specially regarding future use of any property. Anything  
6 else I can answer? Thank you very much.

7 MR. FISHER: Thank you. We'd like to hear from  
8 Huntsville Corps of Engineers, and the representative  
9 here is Mr. Karl Blankinship. And he'll be talking with  
10 us.

11 MR. BLANKINSHIP: Just quickly, I am Karl  
12 Blankinship of Huntsville, Alabama. Mr. Ron Roberts is  
13 here from our office. And like I said, I know we're  
14 running on very short time. I'll introduce Ron. And  
15 from here on, he or I will be very happy to answer any  
16 questions.

17 MR. ROBERTS: Like Karl said, I work with the  
18 Corps of Engineers, Huntsville, Alabama. And hopefully  
19 we'll get through this little brief that I've got. You  
20 might be able to understand what our job will be here  
21 during the clean-up or during the waste clean-up.

22 First I'd like to provide a little background  
23 information about the establishment of the Huntsville  
24 Division.

25 Under the Defense and Environmental Restoration



1 Program which was drafted in 1986, the Defense  
2 Department's goal is remediation of environmental  
3 problems on current and formally used defense sites.

4 As a result of this program, the Huntsville  
5 Division was designated as a mandatory center of the  
6 expertise and design center of unexploded ordinance. The  
7 division is now responsible for the remediation of  
8 environmental waste and for ordinance and explosive  
9 waste.

10 Engineers and other specialists from the division  
11 investigate sites where ordinance and explosive waste has  
12 been confirmed or is suspected. Division personnel  
13 determine the potential danger as a result of this  
14 contamination and develop plans to remediate the  
15 ordinance problem.

16 The Huntsville Division functions as a technical  
17 manager for the execution of ordinance and explosive  
18 waste remediation plans. The primary goal is to render a  
19 designated site as safe as possible with a minimum risk  
20 to all.

21 The division has established rigid safety  
22 standards and uses contracted personnel highly qualified  
23 in explosive ordinance removal. The Corps personnel who  
24 oversee the remediation work of contractors also have  
25 extensive experience in the removal of ordinance and

1 explosive waste.

2           The Huntsville Division executes site remediation  
3 in various phases. This usually begins with an archive  
4 search, which was mentioned before. An archive search  
5 consists of interviews with local residents and former  
6 employees of the defense activity, also a document  
7 research and numerous site visits.

8           If the archive search identifies and confirms an  
9 ordinance problem, the next phase is the site  
10 investigation. With the site investigation complete, the  
11 Huntsville Division explores alternate methods for  
12 disposing of ordinance and explosive waste and then  
13 selects the best possible method.

14           The selected method is then reviewed by  
15 appropriate governmental agencies before the final  
16 approval is received. Once final approval has been  
17 received, the remedial design and removal phases of the  
18 project can begin. And all this, of course, is done in  
19 accordance with the environmental regulations, both  
20 federal and state.

21           Now, what I'd like to do is just give you a  
22 little quick update or current status of what we're doing  
23 out here at Fort Wingate. Currently, the only ordinance  
24 and explosive waste investigation action that is being  
25 conducted in this area is associated with approximately

1 two hundred and fifty acres of Navajo Indian Tribal lands  
2 which lie adjacent to the installation's southwestern  
3 boundary.

4 The contaminated area extends from the boundary  
5 fence of the installation demolition area in a westerly  
6 direction approximately twelve hundred feet and extends  
7 north nine thousand feet paralleling the installation  
8 boundary. A contract delivery order has been awarded to  
9 a qualified unexploded ordinance contractor to perform a  
10 one hundred percent surface sweep of the area and to  
11 conduct representative subsurface investigation.

12 This subsurface investigation should identify to  
13 what extent the site may be contaminated. This will  
14 assist the Huntsville Division and develop a scope of  
15 work to complete the ordinance and waste removal action  
16 on the Navajo and tribal land.

17 The initial removal investigative action for all  
18 such contaminated areas should be commenced mid April and  
19 hopefully be completed by early July. As of today, we  
20 have personnel in the Huntsville Division gathering  
21 supporting data to assist in development of the scope of  
22 work and cost estimate in order to begin surface sweeps  
23 and subsurface investigations of all suspect areas.

24 The date scheduled to award a contract delivery  
25 order for this action late summer or early fall. This

1 concludes a little short brief, but that's about all I've  
2 got for you. Are there any questions?

3 MR. PFEIL: I'm John Pfeil with the New Mexico  
4 Environment Department. It might be worthwhile, and  
5 maybe I'm tired enough not to have heard it, but to tell  
6 the folks here what sort of activities on the base  
7 actually resulted in this contamination on tribal land.  
8 I'm not sure it's obvious. Maybe it is.

9 MR. ROBERTS: I've got notes in here. Let me go  
10 through them rather quick if you could bear with me one  
11 minute. Okay?

12 MR. PFEIL: Okay.

13 MR. ROBERTS: I take that back. I left it back  
14 in the room. What I'd like, if I could get Karl to stand  
15 up and kind of --

16 MR. BLANKINSHIP: If I could, Ron doesn't have as  
17 much background as some of us here, and especially the  
18 ADC people. The primary reasons for going and cleaning  
19 up these areas is that munitions were demilled on the  
20 site, mostly in the OBLD areas.

21 What they did was take ammunition that was either  
22 outdated or had some problem with it or something that  
23 they just needed to get rid of, and they would explode it  
24 on the site. What we're doing is going back to confirm  
25 that everything they did detonate on site has been

1       detonated. If there is anything live, we want to get it  
2       out of the ground so, of course, there is not anything  
3       left there when we leave the base.

4               MR. WINKLER: Are you both experts in that field  
5       or do you hire the experts?

6               MR. BLANKINSHIP: Let me try to address it as  
7       best I can. We are both project managers. We have in  
8       Huntsville approximately eighteen explosive ordinance  
9       folks who are retired military, all with over twenty  
10      years, most of them with over twenty-five years of active  
11      duty EOD experience. They actually oversee the work.

12              We help get the contracts in place, and we  
13      actually put one of those people on site with our  
14      contractor who are all EOD, ex-EOD people. And we  
15      will -- we officially do the paperwork. They do the  
16      ordinance removal.

17              MR. PFEIL: What's the status of gaining access  
18      to those lands to do this work?

19              MR. BLANKINSHIP: The last time that I talked  
20      with the Albuquerque District, right now, to my  
21      understanding, everything is go. I haven't seen it.  
22      Maybe Mr. Fisher might know a little bit more about it  
23      than I do.

24              MR. FISHER: No, I don't. I'm sorry to say I  
25      don't. Last time I checked, they were still working on a

1 couple of issues there. Real estate people were trying  
2 to get -- I forget what it's called.

3 MR. BLANKINSHIP: Right of entry.

4 MR. FISHER: Right of entry, you know, so the  
5 people who have the responsibility to roam the land out  
6 there will sign documents allowing them to go on their  
7 property and do this type of work and basically cleaning  
8 up what they find out there.

9 And, of course, this is very important. We  
10 don't want to leave anything out there or have anything  
11 out there that's going to cause us any problems.

12 We have kind of walked the area a little bit,  
13 and mostly what we found is what we call shrapnel or  
14 pieces of scrap metal that was blown out that far and  
15 some other items that haven't been that serious. So  
16 that's why we decided to have -- off-post contamination  
17 is what we call it, and the Army is funding that to get  
18 it cleaned up so nobody will have any problems on the  
19 property.

20 MR. HALE: Yes, I do have a question. What's  
21 this contract for? Is this to investigate the -- so they  
22 can develop a scope of work or is it to actually do the  
23 actual clean-up, I guess, of the shrapnel, and if they  
24 find any, to take those out of the ground? And what's  
25 the scope of work there?

1 MR. BLANKINSHIP: Right now the contract that  
2 we've got out, the delivery order, is to go out and do a  
3 one hundred percent surface sweep of the area. Then  
4 they're going to go back and they're going to do  
5 magnetome, metal detectors, and they're going to do a  
6 subsurface investigation to find out what the  
7 concentration of the metal contents are underneath.

8 MR. FISHER: And how deep is that?

9 MR. BLANKINSHIP: Right now we're looking at a  
10 foot deep because this is nothing but grazing land. So  
11 once it has been determined as to how much contamination  
12 is there, that information will be sent back to  
13 Huntsville where they will develop a scope of work to go  
14 back in and complete the clean-up of that area that's  
15 contaminated.

16 MR. ALEXANDER: What relationship does that  
17 off-site ground have to the actual area where you  
18 actually burn the ordinance? I guess what I'm getting at  
19 is, basically this is stuff that basically they call it  
20 kick-out.

21 MR. BLANKINSHIP: Right.

22 MR. ALEXANDER: So what's your suspicion that  
23 you're actually going to find a lot of ordinance  
24 subsurface?

25 MR. BLANKINSHIP: Well, like Larry said, right

1       now we believe what we're going to find most of is what  
2       we saw in the walk-around, nothing but metal, empty  
3       casings, busted casings. Just scrap melt.

4               MR. ALEXANDER: At the surface?

5               MR. BLANKINSHIP: Or very close to the surface.  
6       There wouldn't be any force to cause it to penetrate very  
7       deeply because it would all be thrown out of the LBLD  
8       ground as a result of a detonation several hundred feet  
9       away.

10              MR. FISHER: All the scrap metal and everything  
11       that will be found out there will be brought onto the  
12       depot and we will have our people basically determine if  
13       it's contaminated. If it's free of contamination, it  
14       will be sold as scrap metal.

15              Anything that we may find out there that may be,  
16       oh, you know, exploded ordinance or anything like that,  
17       these experts will determine if it can be moved on post.  
18       If it can't, then it will have to be detonated in place.  
19       If it's brought on post, then it will be brought into the  
20       area that we've done detonation in before and be blown  
21       there.

22              MR. WINKLER: Joe Winkler, New Mexico  
23       Environment Department. What might you expect to find  
24       subsurface? Like Howitzer shell that penetrated?

25              MR. BLANKINSHIP: That's kind of hard to answer.



1 Like I said, from what we saw when we were walking  
2 around, it's primarily debris. Just guessing, and like I  
3 said, I am just guessing, the Howitzer shell, I can't  
4 quite see a kick-out that far, that kind of weight.

5 Now, it's possible, but with the size of it, you  
6 would figure that it would at least stay surface, on the  
7 surface of the ground. It wouldn't penetrate. But we  
8 saw no evidence of anything like that. We did see split  
9 casings and debris.

10 MR. PFEIL: What's the distance we're talking  
11 between the OBOD and this area?

12 MR. BLANKINSHIP: That I'm not too sure of.

13 MR. EGNACZYK: I'd say about a hundred yards in  
14 the OBOD area.

15 MR. BLANKINSHIP: I was looking at primarily the  
16 new one.

17 MR. EGNACZYK: That's over the hogback there, so,  
18 yeah.

19 MR. PFEIL: Is it clear? Has it been determined  
20 that this material came from the old or the new or maybe  
21 a little of both or it's unclear?

22 MR. EGNACZYK: Preliminary indications, if I can  
23 just answer just from our previous contractor, just by  
24 dating the ordinance, it looked like it had been in the  
25 old area, not from the new area. That's just what a

1 visual indication showed.

2 MR. SIDES: Marc Sides with EPA. So after this  
3 clean-up, do you anticipate a hundred per cent clearance  
4 of any explosive waste that might be there or --

5 MR. BLANKINSHIP: That's being -- I guess I need  
6 to ask a bit of a clarification from you. As far as  
7 explosive waste, could you help me there?

8 MR. SIDES: Just of the explosive.

9 MR. BLANKINSHIP: Of the ordinance?

10 MR. SIDES: To certify that there is not  
11 anything there that would be harmful. Would it be  
12 cleared for grazing lands or whatever the land use would  
13 be?

14 MR. BLANKINSHIP: Yes, it will be cleared. The  
15 area outside will definitely be cleared to the standards  
16 that is agreed upon between the Army and the local  
17 environmental community for the land use that will be  
18 agreed upon, also. The depth to which we clear is  
19 dependent upon the future land use there. So it will be  
20 cleared, yes.

21 MR. PFEIL: So I trust going into the process,  
22 you have an idea about what the future land use is, which  
23 is grazing?

24 MR. BLANKINSHIP: Well, right now, that's what  
25 it appears the land outside the installation boundary is

1 going to be used for.

2 MR. PFEIL: And I guess it's safe to assume that  
3 that's what it would because the terrain is extremely  
4 hilly, very hard soil, rocky. And, of course, there are  
5 arroyos there, also.

6 MR. BLANKINSHIP: Any other questions? Thank  
7 you.

8 MR. FISHER: Well, if there aren't any other  
9 questions, we really appreciate everyone coming. This is  
10 the largest crowd we've have. I hadn't expected it to be  
11 this large, and with so many new people, we didn't really  
12 come prepared to talk about -- I mean we discussed some  
13 things last time that we weren't prepared to talk about  
14 this time, but we're glad you're here and participating.

15 If you'd like to have additional information  
16 about what we're doing here, it is in the library here,  
17 and you're welcome to check that out and read up on that.

18 MR. WINKLER: What would it be under? What  
19 documents?

20 MS. STELL: Fort Wingate.

21 MR. FISHER: It's under Fort Wingate. Do you  
22 remember what it was called? Administrative record?

23 MR. ALEXANDER: I think it's administrative  
24 record. They have it on file.

25 MR. FISHER: If you ask for the Fort Wingate

1 file.

2 MR. ALEXANDER: They should know what you're  
3 talking about. In fact, in follow-up to the discussion  
4 with Mary Jane's discussion, there is a document that's  
5 going to be put on file that's published by the United  
6 States Geological Survey that's pretty much on the Zuni  
7 watershed issue, so if folks want to dig into that a  
8 little further, they can grab it and give it a shot.

9 MR. HALE: Going back to the figure three on the  
10 Zuni River Basin again, I'm just wondering why there  
11 isn't a similar type of graft for those waters that flow  
12 off where the depot activity is located. Why is there a  
13 concentrated effort to go in the Zuni River Drainage  
14 Basin? It seems to me like most of the activity is in  
15 the depot proper, itself.

16 MS. STELL: Well, there is two reasons for that.  
17 One was the concern that was expressed in this last  
18 meeting that there was some way that the activities at  
19 the base would affect the Zuni Tribal land. So that was  
20 the focus of the research I did in that presentation and  
21 why that figure actually comes right out of that document  
22 we referenced.

23 The other reason is there is not a lot of  
24 geological data about the area of the base, itself. And  
25 I didn't find a similar figure like that that just

1 defined the area that the drainage of the base  
2 contributes to. So it was, one, the answer to the  
3 question and, two, that I have not found that particular  
4 information for that area.

5 MR. HALE: Well, will you be doing something  
6 similar like this collection data and making drafts?

7 MS. STELL: As part of the record closure that  
8 we mentioned we're going to be doing, we're going to have  
9 to be doing some much more detailed ground water studies,  
10 so we will be doing some research.

11 MR. FISHER: Are there any additional  
12 questions? We really appreciate the attendance here. We  
13 will be having another meeting in May. I haven't chosen  
14 a date yet, but we'll put a notice in the paper and send  
15 letters out. We'll send letters out to the people that  
16 signed up tonight. Also, look for it in the paper about  
17 May, the May time frame. And we hope to be able to use  
18 the same area here. Thank you very much.

19 (Whereupon, the taking of the meeting was  
20 concluded.)

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25 STATE OF NEW MEXICO)

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1 COUNTY OF MCKINLEY )

2 I, Margo Manaraze, Certified Court Reporter No.  
3 18 in the State of New Mexico, do hereby certify that the  
4 foregoing and attached Transcript of Proceedings was  
5 reported by me in Stenotype and reduced to typewritten  
6 transcript by me and that the same is a true and correct  
7 record of said proceedings to the best of my knowledge,  
8 skill and ability.

9 Dated at Gallup, New Mexico, this the 17th day  
10 of February, 1995.

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12 *Margo Manaraze*  
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