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THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 543

MEETING MINUTES Restoration Advisory Board February 18, 1999. The Memphis Depot, Memphis, TN Conference Room

The Restoration Advisory Board (RAB) meeting was held on February 18, 1999 at the Memphis Depot, Memphis, Tennessee in the Conference Room.

The attendance list is attached.

(Dr. Rueben Warren, [Agency for Toxic Substances and Disease Registry (ATSDR)], spoke briefly prior to the beginning of the meeting)

WELCOME AND INTRODUCTION

1	MR. WILLIAMS.	My name is Mondell Williams I'm the Co-chair of the Restoration
2		Advisory Board for the community and I would just like to
3		welcome everyone to this meeting tonight, to the February meeting.
4		I hope that everyone has signed in over here so that we may be able
5		to forward information to you if there is anything important that
6		you might want to have. I still would like to welcome any former
7		members of the Depot, any community people, or any distinguished
8		guests that are here. I'd like to welcome all of you tonight. I'd like
9		to question you on the time frame that we have We have an hour
10		and 30 minutes to get through the meeting and we have a time limit
11		on the comments. So we must make sure that we watch the time
12	man gramma and figure	during the comment period. We'd like to take a close look at the
13		agenda right now to see if anyone would like to add, change, or to
14		do anything with the agenda.
15	MR. CLAY.	I've got a couple of things I would like to do as far as the agenda
16		As far as the agenda, I don't see where we are going to be talking
17		about the minority contractors and the dollars spent on cleanup.

1		Can we just add that to the agenda so that maybe we can let Shawn
2	•	highlight some things that maybe he has come up with?
3	MR. PHILLIPS:	I was going to talk about that during the comments from the
4		January meeting because there were several questions about that
5		from Dr. Kirk.
6	MR. WILLIAMS:	Would anyone like to add anything else, like to address some of the
7		information that this gentleman [Dr. Reuben Warren] is talking
8		about tonight and make it part of the agenda? Because all of the
9		information that we have discussed thus far is not on the record; it
10	•	is just in the wind.
11	MS. BRADSHAW	Why?
12	MR WILLIAMS	I just wanted you all to know that There were some important
13		questions asked
14	MR BRAYON:	May I ask the doctor a question? I am sorry
15	MR. WILLIAMS:	If we could make it part of the agenda, it would be a lot better
16		because we have set aside some time for that
17	MS GRAY:	Mondell, could we have him available for questions during the
18		public comment period, maybe?
19	MR PHILLIPS	Dr Warren - I've asked about his schedule He has a plane.
20	DR. WARREN	I've got an 8.00 p m. plane I've got a 16-year-old young man that
21		must see me every night. So, I don't apologize for that.
22	MR. PHILLIPS	So, we do have a time constraint here for Dr. Warren's time.
23	MS. BROOKS:	I would like for Dr. Warren to address mustard gas concerns
24		relating to Dunn Field and the residents, especially those living on
25		the front row facing Dunn Field, mustard gas contamination issues,
26		health issues, relating to the health of the people who are living
27		directly in front of the mounds.
28	DR, WARREN	What I can do, if that is a concern you want to address, I can take it
29		back to the agency and say that there is a concern of this

1	•	committee, and we can get a response from the scientist who is
2		dealing with the Public Health Assessment.
3	MS BROOKS:	Very good Thank you
4	DR. WARREN.	I appreciate the time. And let the record reflect, particularly about
5		the article in the paper, that I think the record needs to reflect that
6		those statements were incorrect.
7	MS. BRADSHAW:	I would like to say that we have to be careful of misleading
8		information that gets to the media, because this is used against the
9		community, and it hurts the community. And it is time that the
10		truth that when you all put information out there, have the right,
11		or whatever, to verify this, because I know that some things are
12		untruthful that was in this article and some things that we didn't
13		even hear about
14		
15		So, it is very important that, if you are going to call up the media
16		for something like this, that you put some true statements. You
17		make sure that you go back and try to verify some of these things,
18		because it discredits the Defense Depot altogether, and people don't
19		even want to hear anything else that you say
20	MR TYLER	For the record, I would like to state that the 1995 study is going to
21		be revisited in 1999
22	DR. WARREN	Oh, we are doing it.
23 🚓	MR. TYLER	I just wanted it on the record.
24	DR. WARREN:	Yes. We are redoing, updating, to use the exact words, the 1995
25		Public Health Assessment, and that is to conclude in the next
26		couple of months. And it did come as a result of community
27		concerns, particularly the DDMT-CCC.
28		•
29	REVIEW AND API	PROVE AGENDA

I		
2	MR. WILLIAMS:	Now would anyone like to make a motion to approve the agenda?
3	MS. WILLETT	I so move
4	MS. YOUNG:	Second
5	MR. WILLIAMS:	All in favor?
6	MR. BRAYON:	Aye.
7	MR. WILLIAMS	Any opposed? Sustained? The agenda is approved.
8	MR PHILLIPS:	Thank you
9	DR. WARREN	Good night, and I appreciate the time. And the relationship, at least
10		from ATSDR's perspective, in working with this Memphis
11		community has been a growing and an outstanding one. We have
12		the principles of how to work with communities here in Memphis
13		and you should be proud.
14	MR. PHILLIPS	Before Dr Warren leaves, let me mention, by the way thank you,
15		Dr. Warren We've done this ourselves before in the past when
16		articles have gotten into the print media that had factual
17		inaccuracies in them. We've written letters to the editor for
18		clarification That is always available, and ATSDR you are more
19		than welcome
20		
21	REVIEW JANUAI	RY MEETING MINUTES
22		
23	MR. WILLIAMS:	I'd like to know if everyone received the minutes from the last
24		meeting, and I was wondering if anyone has any -
25	MR. CLAY:	I have several changes I would like to submit and see if we can get
26		approval in the meeting I went over them The first was starting
27		on page 21, line 8. I'm guilty. I said "fixing" I would like to
28		change that to "about."
29	MS. YOUNG.	Line 87

1	MR. CLAY:	Page 21, line 8. I would like to change the word "fixing to vote
2		on." I would like to change that to the words "we are about to
3		vote on," instead of fixing to vote on
4		
5		The next one is on page 43, line 9. I wanted to say "I am going to
6		go on record" versus "I am going on board." I wanted to go on
7		record to see how much we've gotten. So change the word
8		"board" to "record." On page 43, line 22, the last statement "if you
9		don't, you are a racist." I would like to change the word racist to
10		"if you don't, you are for voluntarily promoting a racist agenda."
11	MR. BALLARD	That is what you said, though
12	MR CLAY	That is what I said, Turpin
13	MR BALLARD:	I heard you say: If you don't, you are a racist, and this is a
14		transcript of the meeting
15	MR CLAY:	And I stand by that, but I am trying to make it a little bit more
16		palatable to those of you who probably are not racist. If it fits, I
17		mean, you can wear it I mean, I ain't got no problem with that. I
18		meant what I said. Voluntarily promoting a racist agenda is what I
19	•	would like to substitute I've got a couple more
20		
21		On page 44, line 8, starting at line 8, "board to do it. If it is not the
22		other board." It says "to." I want to change the word "to" to
23		"should." On line 9, I don't understand what was said here. At the
24		beginning of line 9 it says well, continuing on line 8, after we
25		changed the word "to" to "should." I want to change the word
26		"during the Smith and nickel this money." I don't understand what
27		this is. So, obviously, I was probably speaking a little too fast. I
28		would like to change that "to awarding the contracts."
29	MR. PHILLIPS.	Then start up again with We need

1	MR. CLAY	Right. Again, on page 44, lines 15 and 16, I said it, but I would like
2		to change it for the grammar. Telling the board we ain't got no
3		input. I want to change it to we don't have input. That is it from
4		my standpoint
5	MR. ENGLISH	This is a point of order. I kind of agree with Turpin, not to take
6		anything away from what you are saying I think you have every
7		right to clarify the minutes in any way you see fit and that is fine.
8		But it is a transcript. And if there was an error made by the
9		transcriptionist where she didn't hear what you said, she thought
10		you said one word, and you really said another word, then that is
11		appropriate for changing the actual minutes. But, if you said those
12		words, and you either regret them now or you
13	MR CLAY	I don't regret what I said I'm changing it to clean it up to make it
14		look a bit more palatable to the board
15	MR ENGLISH	But that is not what this
16	MR CLAY	Some of the words I didn't say I asked to change. I'm not backing
17		back from anything I said. So I don't want anybody to think that I
18		am I'm trying to just make it like I intended it to be.
19	MR ENGLISH	I understand, but I don't think that is what the transcript process is,
20		and what we're about in terms of checking the minutes is supposed
21		to be about.
22	MR. CLAY:	Well, Jordan, on the ones that I obviously was misquoted on, I
23 -	2 Walada -	would like for those to be changed. And the statement about racist,
24		leave it I can stand up to it.
25	MR. WILLIAMS:	Could we vote to approve the minutes for the last meeting with the
26		changes?
27	MS. BRADSHAW:	I had it was a mistake on something I said too.
28	MR WILLIAMS.	A mistake?
29	MS BRADSHAW	Yes.

1	MR. PHILLIPS:	While you are looking for that, Kevin, your intention behind some
2		of the statements, whether or not the board approves to make those
3		changes or not, they will be reflected in this month's minutes
4		because of this conversation.
5	MR. FLYNN:	And this is important. That is how you clarify it rather than
6		changing the transcript, just to put it in the record for this one.
7	MS BRADSHAW:	On page 34, it says we never did get a chance to contact Dr.
8		Bullock. His name is Dr. Robert Bullard.
9	MR. PHILLIPS:	Could you spell that?
10	MR BRAYON	B-U-L-A-R-D.
11	MR PHILLIPS	A-R-D at the end?
12	MS BRADSHAW	That is the only error I see
13	MR TYLER	Speaking on Mr. Clay's issues, we are not allowed to revise these
14		minutes, they are as they are, we can only add or subtract with any
15		errors or omissions, is that correct? Just a point of clarification.
16	MR. WILLIAMS	So we hear, if the mistake was made by the transcriber, then we
17		could do it. But if he wanted to just change something, that is not
18		feasible is the way I hear it.
19	MR PHILLIPS	He clarifies in this month's minutes that he was misunderstood the
20		previous month and explains what he intended to say or what he
21		intended to be understood to say. And he did that clearly.
22	MR. WILLIAMS:	Ms. Hooks.
23	MS HOOKS:	Thank you. I want to make a little light of this. Down at the
24		council all of our meetings are transcribed, et cetera. And I would
25		love the ability to go back, as I am sure my colleagues would, on
26		many occasions to change it but, unfortunately it has to be the way
27		that it was said. I certainly can appreciate where you are coming
28		from but, unfortunately I've even had to pick up the paper and read
29		where I've said, "well this ain't going nowhere." But that is the

1	-	correct procedure, only errors that are made in her transcribing can
2		actually be changed prior to approving the minutes.
3	MR. WILLIAMS	Well, Kevin we appreciate you trying to clean it up
4	MR. PHILLIPS:	No - Kevin?
5	MR. CLAY:	Not cleaning it up, clarifying was the word
6٦	MR. WILLIAMS:	Yes, clarifying.
7	MR PHILLIPS:	Mr. Clay, you clarified several comments. But did you have
8		comments that you think were inaccurate?
9	MR. CLAY:	Oh, yes. There were some. But I think I prefaced them, each one
10		If I said I said it, I told you I said it. But what I didn't say I want to
11		change. So to go back to those that were. Let's go to page 43, line
12		13 I will be the one to throw a "monkey-wrench", not "money-
13		wrench" That needs to be changed Let's go to page 44, line 9 -
14		"Smith and nickel" I don't even know what that means So
15		obviously she didn't probably hear exactly what I said
16	MR PHILLIPS	I have no idea what that meant The suggested change is
17		"awarding the contracts."
18	MR. CLAY	I don't know where Smith and nickel come in If I said I am going
19	•	on board on page 43, line 9, clearly I meant record, but you don't
20		have to change it.
21	MR PHILLIPS:	Okay
22	MR. WILLIAMS.	All right. Now that we've went over the minutes, would someone
23 .		like to make a motion to
24	MS. YOUNG:	I so move.
25	MR. WEBB:	Second.
26	MR WILLIAMS:	All in favor?
27	MR. ENGLISH	Aye.
28	MR. WILLIAMS:	Anyone disapprove? Sustained. Motion is carried. The minutes
29		are as follows

1		
2	OLD BUSINESS	
3		
4	UPDATE ON RECE	NT MEDIA COVERAGE
5		
6	MR. PHILLIPS:	We're on to Old Business. First of all, if anyone doesn't know we
7		were in the newspaper, the Commercial Appeal, Monday. We have
8		copies of the article in case people don't have that We at the
9		Depot thought that was a fairly balanced article And by the way,
10		you can get autographs from Ms. Brooks after the meeting tonight.
11		We were on the television media several times Monday And while
12	•	in general, we thought from our perspective the stories were fairly
13		accurate, there are some things that we at the Depot want to clarify
14		with the media. But there is one clarification that was fairly
15		important. I need to clarify it to the RAB tonight
16		
17		I believe it was on the ABC affiliate, Channel 24 The road
18		construction contractor's equipment was shot in the picture frame,
19		and they said that that equipment was being used to dig up
20		Chemical Warfare Material (CWM) That is not true That is
21		asphalt equipment that they shot I want to assure you that our plan
22		for the Chemical Warfare Material action is right now for October
23	and the first transfer of Park	through December of 1999. And coming up this summer we plan
24		to have full briefings and inform you of what is going on. There
25		will also be an opportunity for the public to comment on that work
26		plan I just wanted to make that clarification
27	MS. BRADSHAW:	Could I ask you something else I didn't hear in the media? I am
28		sorry
29	MR. PHILLIPS	Ms Bradshaw

1	MS. BRADSHAW	When are the public hearings set? Any time that you do any type of
2		remediation, hearings are supposed to be set under the Superfund
3		law and I didn't hear anything about a public hearing being set
4		When? Each time you do a remediation, Shawn, there is supposed
5		to be an official notice, and then hearings are supposed to be set so
6		that the community can come in and voice their concerns. And that
7		is something I did not hear.
8	MR. PHILLIPS:	The Engineering Evaluation and Cost Analysis (EE/CA) for that
9		removal action of CWM is due out I believe, the March time frame.
10		That will be put out in the Information Repositories (IR) for public
11		review and comment This summer we will make presentations to
12		the RAB and look for folks to comment back on the plan
13	MS BRADSHAW:	We won't hear. The community won't hear it We haven't had any
14		hearing on any remediation, and it is time We want a hearing
15		before you do anything. Give the people a chance to voice their
16		concerns, not in writing. We need a hearing
17	MR. PHILLIPS:	Would you like to respond to this EPA - the process?
18	MR. BALLARD	There are two kinds of public processes for environmental response
19		actions There is a remedial action and a removal action And,
20		within the removal action category, which is all that has happened
21		at this base so far in terms of cleanup, there is time critical and non-
22		time critical removal actions Now, the time critical ones are ones
23		that need to happen pretty soon. And the National Contingency
24		Plan (NCP) allows for public comment process on the non-time
25		critical removals. But it requires that for the time critical removals
26		that the documentation - the planning documents and the
27		documents that document the cleanup that has happened - be made
28		available within I believe, it is 60 days of starting the response
29		action So, that is for the removal

1		
2		Now for a remedial action, what we are doing now is the Remedial
3		Investigation (RI) and the investigation report and the Feasibility
4		Study (FS) report. The requirement is that once this Remedial
5		Investigation and Feasibility Study are complete, then the lead
6		agency, which in this case is DLA, puts out a proposed plan for
7		public comment and makes available the entire Administrative
8	•	Record (AR) for that decision. We're planning on going a step
9		further than that which is to, as each document is finalized, make it
10		available. Making ourselves available to answer any questions
11		about it, making a presentation about it, if that is what the
12		community wants But the actual, the requirement in the NCP for
13		the remedial process is to have a public comment the official
14		public comment period at the time a proposed plan is put out for
15		the community to review
16	MS. BRADSHAW	Regardless of what you are talking about, those rules and
17		regulations, I know under the Superfund law before you start a
18		cleanup, the community is due a hearing on what you are doing
19		Now what I am asking, and the next, I am going to demand, that
20		the community have a hearing on the cleanup of those mustard gas
21		bombs. There are people living across the street from that mess.
22	MR. BALLARD:	And they will get it.
-23	MS. BRADSHAW:	And that is what we want. I'm not by myself on this. You can see
24		many community people that walked in here tonight because of
25		that.
26	MR. BALLARD:	You will get that.
27	MS. BRADSHAW:	What were you saying? We don't want no write-in comments. We
28		want a public comment period

1	MR BALLARD	A public comment period includes a period of time in which the
2		public can review the written record and either make written
3		comments or make your comments orally at a meeting. And we
4		have to keep a transcript of that meeting, and that is part of that
5		We have to respond to all, not every single comment, but all
6		substantive comments which are made on the record.
7	MR. PHILLIPS	Kevin.
8	MR. CLAY:	Was a cleanup and removal and remediation done at those
9		apartment units on the property?
10	MR. PHILLIPS:	That was a time critical removal action.
11	MR. CLAY.	And that means that the public wouldn't have an opportunity to
12		comment?
13	MR. PHILLIPS	That means that we must make a summary of that removal action
14		available after it is completed
15	MR BALLARD	Actually, if the removal action goes for more than 60 days, within
16		60 days you have to make the information that you have, your
17		plans, available for public comment
18	MR. CLAY.	Was that done?
19	MS BRADSHAW	No.
20	MR. PHILLIPS	Not to my knowledge
21	MR. CLAY:	So what is that organization, the EPA? They have been bending
22		the rules?
23	MR. BALLARD	I don't think there have been any
24	MR. CLAY	DLA
25	MS. BRADSHAW:	It is the lead agency.
26	MR. CLAY:	has not followed the procedures? Is that on the record?
27	MR BALLARD:	Mr. Clay, the information on which that removal action was based
28		was in the Preliminary Risk Evaluation Shawn?
29	MR. PHILLIPS	Yes, I believe that was. The data was based.

	MR BALLARD	Which were part of the public record They were in the
2	WIN BALLAND	Administrative Record I think there probably was a failure on
		·
3	•	EPA's part to - omission I'm not going to say it was a deliberate
4		omission, but
5	MR CLAY	But you did it and you didn't include the public is basically the
6		truth, right?
7	MR BALLARD	What we didn't do was make a public announcement that this, to
	-	my knowledge, in a newspaper, public announcement, that this
9		operation is ongoing; the Administrative Record is available, it is
10		expected to go beyond 60 days, so.
11	MR CLAY:	But the public never had an opportunity to stand up and question
12		the EPA or DLA, right, correct?
13	MR PHILLIPS	Yes They were allowed that
14	MS. BRADSHAW	At what point?
15	MR PHILLIPS	It was, the plan to do that removal action was presented at the
16		Restoration Advisory Board, and we also handed out fact sheets to
17		the neighbors and at apartment buildings and the neighborhood
18		surrounding that area
19	MR. CLAY	However, there was no meeting called for the public to actively
20		attend?
21	MR PHILLIPS	Apart from the Restoration Advisory Board, no, there wasn't
22	MR CLAY.	So, EPA, DLA failed to follow the proper procedure, is that
23		correct?
24	MR BALLARD.	No, that is not.
25	MR CLAY.	Under the Superfund law?
26	MR BALLARD	In terms of having a public meeting for a time critical removal
27		action, there is no requirement for a public meeting What I said
28		was, if the removal action is expected to go beyond 60 days, then,
29		within 60 days of starting the work, you need to make available the

	Administrative Record, that is all the written records for that work,
	so that, you know
MR. CLAY:	Make them available to who and how?
MR. BALLARD:	In the Information Repositories.
MR CLAY	And the 60 days starts when? When does the 60 days starts?
MR. BALLARD:	It starts from the time they start to work.
MR. CLAY:	And the work is defined as when they bring the back-hoes in to do
	the work or does the work start when your contractors start to talk
•	about it?
MR. BALLARD:	I will have to talk to the removal people and see how they interpret
	that, okay. I work on the remedial side. So, I would rather than
	give you what I think it is, I will have to get back to you on
	whether it is
MR. CLAY	So, you are not really sure if you did right or wrong, right?
MR. BALLARD	I'm not sure what date, you know, what date a notice would have
	necessarily been published in the newspaper
MR. WILLIAMS	Mr. Tyler
MR. TYLER:	Now, this mustard gas situation, is there going to be a meeting
	before the work starts, or is somebody going to be notified? Are
	the citizens around that particular area going to be notified in a
	timely organized manner so they can relate their cares and concerns
	back to us?
,MR. PHILLIPS:	Yes, sir
MR. TYLER:	Who is the official or people in charge that we need to talk to or get
	to so we won't have a recurrence of this problem? The people in
	charge so we can say - I want to talk to John Doe, Jane Doe - so I
	can get the proper information to the proper people?
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MR. PHILLIPS.	This summer we will put an announcement out in the paper notifying about the plan to do that action. We will make those
	MR. BALLARD: MR. BALLARD: MR. CLAY: MR. BALLARD: MR. BALLARD: MR. CLAY' MR. BALLARD MR. WILLIAMS' MR. TYLER: MR. PHILLIPS:

l		plans available. It appears to me like we need to make copies of
2		those plans for all the RAB members, and we will discuss that at a
3		RAB meeting. The 30-day public comment period, I don't know
4		exactly when that will start, but it won't start until the
5		documentation that supports that removal is prepared.
6	MR. WILLIAMS:	Ms. Bradshaw.
7	MS. BRADSHAW:	EPA is sitting down there. You brought up the dieldrin cleanup
8		and how the process was supposed to have been done on notifying
9		the community and everything about the dieldrin. Sir, I filed an EJ
10		complaint, Environmental Justice complaint, against DLA on their
11	•	cleanup because of the dust particles that was in the air that they
12		could not keep down. And EPA did not answer my complaint. I
13		took it all the way up to the top official in Washington, DC at EPA
14		And, to this day, that complaint has not been answered
15		
16		And I want to know that if something happens with this mustard
17		gas bomb that is like what happened with the dieldrin, we won't
18		have time to file no complaint. So, you better get our fears and
19		concerns taken care of in the beginning, or you are going to have a
20		problem with the community. Now, you can kind of stonewall and
21		try to play and make it pretty like this is absolutely harmless, and
22		we know that chlorine will probably be in the air and different levels
23	Ann e	of it after they start digging. You better. I am warning you,
24		because you already got the community in a frenzy already, and you
25		are going to have to answer to that.
26		
27		So, you better get some plans together quick and fast on when
28		those hearings are going to occur. We are going to do what we
29		have to do to protect ourselves, and that is all to it, because

		علامية بنيا الفاري والمراجع
1		mustard gas is not absolutely harmless, especially when you don't
2		even know how these bombs was actually disposed of. And that is
3		a false statement You said that one statement was a false
4		statement. And the statement on ABC, when he said this mustard
5		gas is absolutely harmless, that was a statement also on ABC. And
6		we know better than that We don't know what we are getting
7		ready to exhume, and we may be exhuming a monster.
8	MR. WILLIAMS:	Okay. I guess we'll move along with the agenda - update of the
9		TAPP Grant, questions and comments from the January meeting.
10		
l 1	COMMENTS/QUI	ESTIONS FROM JANUARY MEETING
12		
13	MR. PHILLIPS	In the January meeting, there was a comment Mr Clay brought it
14		up earlier this evening. I've got a few slides on this Excuse me,
15		folks.
16	MR WILLIAMS	While he's getting ready.
17	MR BALLARD	Yes I was just going to suggest that but, I guess, just forget it.
18	MR PHILLIPS	At last month's RAB meeting, Kevin Clay requested a listing of all
19		of the minority contractors who participated in our cleanup The
20		very next week we received a request for the same type of
21		information from Congressman Ford's office. Congressman Ford's
22		office, in particular, asked for well, it is still the same slide. I'm
23		sorry. They asked particularly for: Who are the contractors
24		responsible for the cleanup at Dunn Field? What is the time line for
25		the cleanup? What are the contractual obligations? What are the
26		end results expected of this cleanup?
27		
28		We forwarded our response of the congressional inquiry to Defense
29		Logistics Agency (DLA) on January 28th, and on January 29th

Congressman Ford's office had it We've made copies of those 1 responses for you tonight. I believe they are on but, in summary, 2 there have been 42 contractors who have been involved to date in 3 the - I believe we might actually have a bit of a typo there. It goes 4 back to before 1995. Twenty-seven (27) of those 42 contractors 5 have been small businesses, and nine of those companies have been 6 either minority or women-owned businesses. \$4 2 million has been 7 spent so far on construction contracting on cleanup. That includes 8 the housing, the groundwater system over at Dunn Field, and also 9 the new road, which is the dust control over at Dunn Field. 10 11 Of that \$4 2 million, just over \$900 thousand, just under a million 12 dollars has been awarded to small minority-owned businesses, a 13 couple of them here from this city Allied Electrical Contractors, 14 V&W Construction Contractors and S&W Road Construction 15 16 There was also something else that I had last month. Next slide A 17 comment was reflected in the minutes that there was a hundred 18 million dollars spent here either to date or planned on being spent 19 here I don't remember exactly what their comment said, but that 20 did not ring true with me. So, I ran back and looked at everything 21 we've spent to date plus our plan to finish. To date, a total of 22 about \$28 million dollars has been spent either at the Main __ 23 SCH 26.26. . . Installation or at Dunn Field. And our plan is it will take roughly 24 about \$23 or \$24 million left to finish it. Total funds estimated to 25 complete the cleanup here are \$52 million dollars, less than half of 26 that comment from last month 27 You have a question from Mr. Brayon down here 28 MR. WILLIAMS. MR PHILLIPS Okay. I'm ready 29

1	MR. BRAYON:	In regards to the \$28 million that has been spent, how much is
2		available to spend? How much is available to spend?
3	MR PHILLIPS:	Of the \$28 million?
4	MR. BRAYON:	No. I said, in regards to the \$28 million dollars that has been spent,
5		can you give me how much is available to spend? Not the
6	MS. BROOKS:	What is left over?
7	MR. BRAYON:	Yes.
8	MR. PHILLIPS:	What is our current – how much funds do we have left now?
9	MR. BRAYON:	I believe the comment was that there was \$100 million dollars
10		available to spend. You're giving us how much was spent. How
11		much do you have at your disposal to spend over and above the
12		\$28 million dollars?
13	MR PHILLIPS.	Our plan, our budget to complete all the actions here at the
14		Memphis Depot is \$23 5 million Right now, we're in the middle of
15		a fiscal year. I believe right now we're at about a million dollars left
16		to obligate this particular fiscal year and this year ends in
17		September But there will be future funding in the year 2000, 2001
18		and out years until we are finished here
19	MR BRAYON:	So, you are \$5 million over budget?
20	MR BALLARD:	These are all estimates. It is not what is available. These are all
21		estimates, our best guess of what it may cost to complete
22	MR. ENGLISH.	From this point forward.
23	MR. BALLARD	From this point forward, it is our best guess at this time, it is \$23.5
24		million. If we need \$33.5, that is what we end up needing and
25		asking for
26	MR. BRAYON.	Point of clarification, how much were you budgeted to spend?
27	MR PHILLIPS	In the beginning?
28	MS BRADSHAW:	Yes
29	MR. PHILLIPS	In the beginning, the budgets were done one year in advance

1	MR BRAYON:	Give me your figure
2	MR PHILLIPS:	The first year of budgeting that we had for the installation
3		restoration program was in 1986, and that year it was \$400,000
4		That's what we were budgeted to spend that year, and that is what
5		we spent.
6	MR. GRAY:	There is no package. They are individual year appropriations.
7		They've created an estimate of how much work is left to do.
8		However, if that estimate is wrong, they are still on the hook for
9		whatever overage they need to finish the project.
10	MR. BRAYON:	How much of the \$28 million comes out of the \$400,000?
11	MR WILLIAMS:	Ms. Hooks.
12	MS. HOOKS:	Thank you. I have a couple of things. One, on your screen, you
13		have a total of \$28 million spent, and you have a date 1986 through
14		1999.
15	MS. HOOKS	Out of that \$28 million, what has been spent since the Depot was
16		ordered closed and this board actually started working toward
17		remediation of the problem that exists out here, because that to me,
18		is a very artificial number if you are taking it back to 1986?
19	MR. PHILLIPS:	Your question is how much has been spent with the remediation
20		program since closure was announced or since we closed?
21	MS HOOKS:	You can give me both
22	MR. PHILLIPS:	Okay. Why don't I go back and get per year how much was
23		obligated and spent.
24	MS. HOOKS:	I guess what concerns me is, the closure took place in, what, 1995?
25	MR. GARRISON:	1997.
26	MS. HOOKS:	Okay, 1996 ⁹
27	MR. GARRISON	1997.
28	MS. HOOKS:	1997. Okay Well, we are looking at \$28 million dollars, but I
29		don't know what there is no breakdown Shawn, if you

1		understand what I am saying. From 1986 to 1999, we spent \$28
2	,	million dollars Well, I didn't get involved until the closure So,
3		whatever the other dollars that were spent, unless I have some kind
4		of breakdown to what I am looking at and what they cover, that is
5		a very artificial number in my mind. That is first.
6	MR. WILLIAMS:	So, if he went back from '85, from when they first started, to today,
7		it would be a good sum of money, wouldn't it? If he went back
8		from '85, which is when they started doing research on this base,
9		that is the \$28 million, from then to now?
10	MS. HOOKS	And I am primarily interested in what that \$28 million dollars
11		represents I mean, what was the work that was done for the \$28
12		million dollars. But, more particularly, since we've come together
13		as a board, what kind of money are we talking about that has been
14		spent? What came before this board, while certainly I would like to
15		have the information, is not near as relative to me as what kind of
16		money has been available and made available since the EPA has
17		said, as they do on Channel 5, clean it up.
18		•
19		So, that is what I'm interested in, because that is a very artificial
20		number The second thing, and I don't think this is going to come
21		as a surprise to anybody I think it is absolutely ridiculous that we
22		are sitting here looking at a printout that has 42 contractors, and
23 -	···· ···· (SE OF 195)	nine of them are minority and women-owned. There should be no-
24		issue. We need to be a lot more aggressive.
25		
26		I would also like to see what kind of contracts are being awarded to
27		the minorities and what dollar amounts, because, again, to tell me
28		that nine companies are minority-owned. Well if we take a look
29		and let's just say arbitrarily that \$8 million of this \$28 million dollars

has been spent between the years 1997 and 1999, and only nine1 minorities have gotten contracts, and that works out to be a couple 2 of hundred thousand dollars then that is certainly not acceptable 3 So, I don't have the kind of data that I need that is helpful for me in 4 terms of what we are really doing out here with minorities. So far, 5 those are my only comments. 6 Mr. Clay. 7 MR. WILLIAMS: I think there is a question that has been skipped and bounced 8 MR. CLAY: around According to the Superfund law, I think they set aside a 9 little over \$167 million dollars for the cleanup of the Defense Depot 10 of Memphis, Tennessee. I would like to get that into the record, 11 that figure. It is a little more than that, frankly, but that is ballpark 12 And, you know, that is a whole lot of dollars that's going to be 13 spent. And, at the rate we are going, I don't think we are ever 14 going to include enough minority contractors 15 16 I'm going to be frank with you, in Memphis, I'm talking about 17 black people, I don't really mean any harm when we talk about 18 white women. I understand that they have some differences and 19 problems getting contracts as well. But, we are coming into a black 20 community, 90 something percent black, and we're going to spend 21 less than 1 percent of the dollars with black contractors That ain't 22 right. And, as far as these numbers, they don't really tell me 23 anything either. It could be that it's a reflection of how the books 24 are being cooked by somebody. We don't even have enough 25 information to ask who is awarded contracts, what is the 26 procedure, and why is it that no black people even have an 27 opportunity to bid on these contracts 28

1	MR. WILLIAMS:	Since everyone is asking questions, I guess I will ask one. As Mr.
2		Clay said, the Superfund presented so much money for the cleanup
3		for the Defense Depot, as well as BRAC put up so much money for
4		the cleanup for the Depot. And, I was just wondering, what was
5		the percentage of the money that the BRAC cleanup put up?
6	MR. PHILLIPS:	The facility went on the National Priority List in 1992. At that
7		time, we were under the Superfund funding account. Once the
8	•	BRAC announcement was made, we're still under environmental
9		dollars, but it is all BRAC dollars. So, we are totally funded under
10		the BRAC remediation program now.
11	MR. WILLIAMS:	Ms. Bradshaw.
12	MS BRADSHAW	My question is: If you are getting BRAC dollars, and from what
13		Superfund allocated, why did BRAC cut that figure less than one-
14		third? Why did they cut the amount that was allocated by
15		Superfund and what your total estimate of how much it is going to
16		cost to do it through the cleanup?
17		
18		And, I have a question Are you really cleaning up, or just putting
19		contractors out there, your friends and stuff, just to say that we are
20		cleaning up? How do we know? We haven't seen any reports
21		afterwards about the testing of the grounds after the fact, what
22		levels. We haven't seen any of that, and I feel like that the board
23	NA.	should get that type of information.
24	MR. PHILLIPS:	The initial estimates, when we were Superfund, before the base
25		closure was announced, was purely based on the information we
26		had at date, and they were conservative estimates made. We
27		assumed we had the worst problem possible. And that is where the
28		hundred, and I don't know what the exact number you referred to,
29		Kevin.

1	MR CLAY	\$167 million
2	MR PHILLIPS	That is where that estimate came from More recently, we have
3		much more data, and we can clearly define what our expectations
4		of the cleanup out here to be That tighter control on what we
5		know to be out here has allowed us to refine our estimates That is
6		the change between whatever the figure was that Kevin referred to
7		and the \$52 million that we believe it will take to finish now Mr
8		Gray made a comment earlier that if that is not enough well the
9		government will have to fund more, but it will be cleaned up
10	MR WILLIAMS:	I have a question before I get Mr Tyler Mr English, don't you
11		have a contract with the Defense Department for some kind of
12		contract on cleaning up, or are you part of what?
13	MR ENGLISH	We are under the state memorandum of agreement, and we are
14		provided the oversight payments through our Defense and State
15		Memorandum of Agreement (DSMOA) to do the regulatory
16		oversight That is from me and my staff for oversight of the
17		activities. It is for us to use, our contractors if we want to, to send
18		samples or do anything like that.
19		
20		Generally, we will ourselves go out and split samples and send
21		those laboratory samples to our state lab That all comes out of
22		that account It's not a lot of money in that account, partially
23		because we don't get paid a whole lot But, laboratory costs are a
24		fair portion of some of that work
25	MR WILLIAMS.	Mr Tyler
26	MR TYLER:	Getting back to minority participation, is there an active program to
27		go out and recruit minority contractors from the beginning of the
28		process and the ending? And you say you don't have very much
29		money. Do you have a record, or a percentage of minority

1		contractors that you have on your bid list, on your ready-call list
2		that you can access to?
3	MR. PHILLIPS	Are you speaking to me?
4	MR. TYLER	No, Jordan. Since you have access to contractors, do you have a
5		ready list, bid list?
6	MR. ENGLISH:	Are you asking me?
7	MR. TYLER.	Yes, sir.
8	MR ENGLISH:	Our state contractors that do the work for us have to meet a lot of
9		technical requirements. I'm not sure how they go out and actively
10		recruit the minorities or any kind of small businesses. I would be
11		willing to bet you that small business, by definition, would be
12		excluded, because the state contractors, whether they be our
13		remedial contractor, our emergency contractors, or our
14		investigative contractors we have three different contracts have
15		to be able to do many possible things in many different areas.
16		
17		Basically, all three of them have to be able to get out there in
18		moonsuits with a lot of expertise. So it kind of rules out, and it
19		might rule out, and I would imagine would rule out a small
20		company A small company generally, wouldn't have the resources
21		to mobilize a large group of people to walk around in moonsuits
22		with air tanks. With regard to minorities, I'm not sure how that is
23		conducted. I-know they I would guess that the state would try to
24		do reasonable recruiting for minorities. I can't personally tell you
25		how that is done There are a lot of requirements similar to what I
26		have talked about that a large business would be able to do that a
27		small business would not. It is just a requirement
28	MR PHILLIPS	May I make a suggestion to the board? This is obviously an issue
29		that we are concerned with. I do not understand the aspects of the

	1		Small Business Administration's program to put minority
	2		contractors on bid lists or whatever If the board would like, and
	3		you guys will have to tell me this is your wish, I can try to get
	4		somebody either from that Small Business Administration or a
	5		government contracting officer type to come in and present to the
	6		RAB what that program is all about.
	7	MR. WILLIAMS:	Ms. Bradshaw.
	8	MS. BRADSHAW	Yes. Mr. English, you made a statement that the state gets such a
	9		little amount of that fund. That is still not telling us exactly, you
	10		know, how much of that fund is put into the state hands. Could we
	11		get something from you also, a budget from you stating and have it
	12		listed out what it is used for? Make it plain and simple. You know,
	13		don't just put it all together like this was done Do a breakdown of
	14		how much money the state is getting, what it is used for and
	15		everything like that, for the laboratory or whatever that it is used
	16	•	We want to know the big picture
	17	MR ENGLISH	That is readily available Whether it is DOD and the Defense Depot,
	18		or whether it is Arlington Blending Site or whether it is Hollywood
	19		Dump or whatever, we bill our time out and our activities out very
	20		precisely. We have to, because we are like a consultant and we
	21		have to bill our time out We have it broken down into specific
	22		activities that we do, and we also have it broken down into
· ·	23	y- A	laboratory costs and everything else. I don't have that right now,
	24		but I can assure you I can get that That is not a problem.
	25	MS. BRADSHAW:	You can get that from the time that you started with DLA on the
	26		cleanup?
	27	MR. ENGLISH:	Yes. I mean, any time we spend at the site where it is registered as
	28		a site, yes, absolutely
	29	MR WILLIAMS	Mr Gray.

1	MR. GRAY:	In the interest, all fascinating discussions, all pertinent to Old
2		Business in January, another Old Business in January was a
3		presentation on the groundwater remediation system which is
4		scheduled to take 25 minutes, which my watch puts us at the end of
5		this meeting. I would like to move that we move Mr. Underberg's
6		discussion of this system up ahead of the TAPP Grant discussion
7		update so we can see the technical information that I think all of us
8		are interested in to see how this system that is cleaning up our
9		environment hopefully, is now working. I'd like to make a motion
10		to change the order of the agenda and move Mr. Underberg's
11	•	presentation up
12	MR BOŅD	Second.
13	MR. WILLIAMS.	All approved?
14	MR ENGLISH:	Aye.
15	MR WILLIAMS	We are going to get one more question here since Mr Clay had his
16		card up and then we are through with the questions
17	MR. BRAYON.	A point of order. I thought it has been moved
18	MR WILLIAMS	Okay.
19		
20	GROUNDWATER	R SYSTEM/WELL MONITORING UPDATE
21	(PRESENTATION	V)
22		
23	MR. UNDERBERO	3:4 Many of you who were here last month, you can imagine my sense
24		of relief that we have an image here to talk about My name is Greg
25		Underberg, and I'm with CH2M Hill. What I'm going to do
26		tonight is give a presentation, an update rather, on the groundwater
27		characterization program and the status of the groundwater
28		extraction wells. I would ask, if you would, please hold off on
29		comments until I get through the presentation It is kind of staged,

and I may answer some of your questions, later. Again, I will provide an overview of the groundwater investigation, talk about the monitoring well sampling results in a general fashion of where some of the constituents are and what the groundwater flow is, and talk about the Dunn Field groundwater pumping system performance. I want to present a video based on the model that was performed by the Corps of Engineers to help design this system.

Overview of the groundwater investigation - We currently have 72 wells installed across the Main Installation and Dunn Field for the purposes of water quality sampling and water level measurements So we are using those wells to monitor the quality of the water as well as what the flow directions are We have 25 wells on the Main Installation, 28 wells are on Dunn Field itself, and 19 wells are located off-site Out of that 72 wells, in October, we installed 14 additional wells to further define groundwater conditions. This was to look at extent that we had identified in the first four rounds of groundwater sampling

In conjunction with those 14 wells in October, we installed eight push groundwater samples. This is an efficient way to get a sample of the groundwater. We push the drilling rod down and take the sample, and it allows us, again, to look at extent of constituents All of the wells or I'm sorry, the existing wells, the 72 minus the 14, were sampled originally in February of 1996, in June of 1997, September of 1997, and March of 1998. Then, the full 72 wells were sampled in October of last year—I should say there was some

previous sampling to February 1996, but I'm just going to report the data from 1996 tonight.

Some of you may have recognized this figure from the December Memphis Flyer. I just want to give an overview of the conceptual model for groundwater flow at DDMT. This is a geologic, a model of a cross-section, that cuts through Dunn Field all the way out to the Allen Wellfield, the Allen Wellfield being the source for the City of Memphis groundwater. It is being pumped out of the Memphis Sands Aquifer shown here in blue. That is about 1.5 miles away from the western perimeter of Dunn Field Part of this model, the geologic sections are shown here in the upper most section. The fluvial aquifer is shown in brown. And the fluvial aquifer of water shown here in blue is also part of that upper aquifer.

These are the upper sands that are located around Memphis.

Groundwater flow in that upper aquifer is generally from east to west, although there are changes at the local level. You see, across Dunn Field, we have sources in the soil that are contributing to organics in the groundwater. That is shown here. This brown area is the area immediately being impacted. Our pumping wells are intersecting that groundwater and sending that water off to the City of Memphis sewer system. The vertical flow is limited by a claysty.

We are looking at an area, and on this figure it is just to this area southwest of Dunn Field, where we have observed a thinning of this clay in some of the monitoring wells, and that is an area still under

evaluation to determine if there is a connection between the fluvial 1 aquifer and the Memphis Sands, or perhaps, instead of the Memphis 2 Sands, it is one of these other sand bodies within this confining unit. 3 United States Geological Survey (USGS) is helping us to evaluate 4 that situation. And, I will talk again in a couple of slides about the 5 distribution of the organics in this area on DDMT. 6 7 8 MR. UNDERBERG: This slide shows the distribution of the monitoring wells. The blue 9 crosses are wells previous to October. In this last groundwater 10 sampling round we installed the pink or magenta wells and water 11 sample locations. We installed two wells in the northeast corner of 12 Dunn Field to evaluate extent of organics in that area We installed 13 a sample to the west to help evaluate extent. In this direction, we 14 installed a series of ground samples and wells to the southwest to 15 evaluate the extent from the previously observed organics here, and 16 I will show this in a follow-up slide. 17 18 Again, more wells in the southeast corner and some other additional 19 interior wells to help evaluate the flow or the condition of 20 groundwater as it flows across the main installation What is in the 21 wells? This slide presents the results from the October 1998 22 sampling event. Under the compounds, we have identified the 23 organic and inorganic compounds that we have previously seen in 24 the wells. You can see Let me explain these columns first. We are 25 looking at the average concentration for these chemicals across all 26 wells in parts per billion, micrograms per liter, the average and the 27 maximum concentration. 28

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And we are comparing that to the Safe Drinking Water Act criteria, which are the criteria that EPA has established for drinking water So, even though we don't have drinking water sources directly on the Main Installation or at Dunn Field, we are comparing them to drinking water criteria. You can see that the primary organics that we had detected are trichloroethylene, tetrachloroethlene. That is TCE and 1,1,2,2-tetrachloroethane. We have identified those in most of the wells. We also see some carbon tetrachloride and 1,2-dichloroethene. These are all common organics associated with solvent releases. On the inorganic side, cadmium, lead, arsenic, beryllium, total chromium, copper and nickel are all metals that we have seen in previous sampling rounds. In October, it has been considerably lower

We did not see arsenic, beryllium, chromium or copper in any of the wells that exceeded the Safe Drinking Water Act criteria, and we only saw cadmium and lead in three and two of the wells where they were exceeded Where are the compounds in the groundwater? Again, this is the upper most aquifer, the fluvial aquifer This figure shows the distribution of total organic levels. We added up the concentrations of the organics I had in the previous plot. It is to show a general distribution of the organics. The blue lines are showing the direction of groundwater flow based on the new well locations that went in October. The pink line areas are circling the areas of organic constituents in the groundwater. They are dashed when we're a little uncertain as to what the extent is. The color of the dots, which might be hard to read on your handout, the darker dots are wells where the concentrations are between a hundred and

one thousand parts per billion. And, then, it grades down to the 1 light dots here where we did not detect any organic constituents. 2 3 What this is showing is, as we have reported in previous 4 documents, the flow of groundwater is, across Dunn Field, from the 5 east to the west, and then it splits, begins to move to the northwest 6 and towards the southwest. This flow here, these two long arrows, 7 are associated with that drop in the clay where we are seeing water 8 flowing towards that lower clay and off to the west and northwest. 9 On the main installation, you see groundwater flowing from the 10 west and the southwest on to the Main Installation as well as from 11 the east And, again, across the Main Installation, it is flowing 12 toward this feature So, this feature is acting as an -- it dominates 13 the flow of groundwater associated with DDMT Again, our 14 sampling in October indicated that we didn't have organics out in 15 16 this area 17 18 This is a new well location that identified some organics, and we 19 did not have it here. So, this is an off-site location where we have 20 elevated organics Again, flow is from off site on in this area. We 21 have a similar situation here where we have organics identified at an 22 off-site well at higher concentrations than are on the on-site well, 23, 16,24,246,44 flow is coming onto the Main Installation. 24 25 26 Moving on to the performance of the groundwater pumping system. 27 As some of you have seen back in the fall, we have seven pumping 28 wells installed along the western fence line at Dunn Field. The 29

pumping wells are operating correctly. They are operating as they were designed. The wells have been pumping pretty much continually, other than some minor shutdowns for repair, et cetera But, more importantly, we are seeing a draw-down in the water table, which indicates to us that our goal for achieving containment or preventing the movement of water across Dunn Field is being achieved. And I will show that video in a second to demonstrate what I mean by that. We are still collecting water levels. We are collecting groundwater constituent levels to look at the effect of the pumping system. And we are still in the data collection mode to evaluate the overall performance, but what we are seeing so far is looking good.

What is coming out of the wells at Dunn Field? These are the chemicals, the organics that we are detecting. These concentrations under discharge levels are from sampling at the pipe as the water goes from Dunn Field into the City of Memphis sewer system.

So, what it is doing is measuring the total organic levels in all of the groundwater coming out of all seven wells. So, this is what is going off-site to the sewer system. And this data is through December of this year. We have plotted the maximum, or excuse me, the minimum and the maximum levels in that discharged water.

We have given, or shown, the city discharge limits. This is the concentration that the city has permitted us to discharge to the sewer system under the current flows, and, again, the Safe Drinking Water Act limits.

What this shows is that all of these discharge levels exceed the limits So, we certainly can't discharge that water into any surface

water body. That is the reason we are sending it to the sewage 1 treatment plant where it will be treated there and then discharged. 2 They have their own monitoring at the plant to evaluate their 3 discharge into the river. We are well below the city discharge limits. 4 The maximum carbon tetrachloride concentration is five We are 5 permitted at 40 parts per billion Chloroform is at 21, about half of 6 our permit Dichloroethene is less than half of the permitted 7 discharge limits. Same thing for tetrachloroethene, about half as 8 well as trichloroethene, just about half. So, we are in good shape 9 with compliance with the permit. 10 11 Ongoing actions We are evaluating the groundwater and the soil 12 sources at the main installation We are working on the Remedial 13 Investigation report now, and that report will prepare a Risk 14 Assessment for groundwater at the Main Installation, as well as 15 identify potential sources for the organics in the groundwater, to 16 the extent that can be identified 17 18 MR UNDERBERG. We are working at doing additional field work in Dunn Field We 19 have completed the soil gas analysis, which formed the basis for a 20 sampling plan to go in now and put in borings and evaluate lateral 21 and vertical extent, and that work will be started in March of this 22 year We will evaluate the groundwater and soil sources in Dunn 23 Field in the Dunn Field RI report, which we will start on after the 24 field work And, again, we will conduct risk assessments of the 25

chemicals in the groundwater in both the Main Installation and the

Dunn Field RI. What I would like to do now is bring up the video

from Dunn Field. This video is model output. It was provided by

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the Corps of Engineers Waterways Engineering Station. I'm going 1 to sit down for this, or I will be in the way 2 3 This model was used to design the well placement and evaluate the 4 requirements of the system. What this is showing -- and I hope you 5 can all see this from the back. I will describe it as best I can. Some 6 of the lines are a little faint. The individual pumping wells are 7 shown here in blue. The extent of the organics in groundwater at 8 Dunn Field is shown in these dashed lines. Everything within this 9 line is approximately, or between a hundred and one thousand parts 10 per billion. Everything within this line is at a hundred parts per 11 billion This is the 10 parts per billion line here. And, then, this 12 outside line is where we have estimated that the concentrations are 13 non-detect. 14 15 So, there is no TCE, trichloroethene, detected outside this area 16 These other lines show the direction of the groundwater. And what 17 I am showing you now is the starting condition This is the model 18 condition before we turn on the pumps So, this is what it is like in 19 Dunn Field without the extraction system running. Again, it is 20 showing groundwater flow from the east to the west across Dunn 21 Field, moving to the southeast, moving to the south -- excuse me, 22 I'm sorry. Southwest and northwest, as I described previously. So 23 نها چه علی خرو_{ی دری} now, I'm going to start the pumps up and run them for 24 approximately -- that says 25 hours based on the model. What has 25 happened is the color-coding here reflects the degree of draw-down 26 of the water surface. 27

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What we are doing is dropping the groundwater surface within this orange area, and you can start to see some yellow forming at the well. So, you have got a lower elevation in the water table surface at each well. It might not be real obvious now, but the water flow directions are starting to move towards the wells. So, what is happening is we're pressing the water surface at the well, and that causes a gradient which allows the water to flow into it.

Water is being pulled into the well and sent off to the City of Memphis sewer. With more time, we have a greater area of compression of the water surface. You can see how that more of these water level directions are moving toward the wells And, if I run the model all the way out, which is basically the sustained — this is a term called steady state You obviously can't keep increasing and pumping, because, at some point, we will dry the aquifer So, this is what the aquifer can sustain in the system of running all the time. starting to pull the water back into the wells So, now, water moving across Dunn Field ends up in one of these pumping wells

What we have done is prevented water from moving beyond the pumping wells and off-site And the goal with this system is to -- again, the sources of the groundwater, of the chemicals in groundwater is in this area. And the rainfall is falling into this screen and carrying contaminants down to the water table So, what we have done now is prevented that water from moving beyond the western portion of Dunn Field. That is what the system is designed to do. We are currently collecting the data to confirm that it is performing in this manner. That is all I have to present Any questions?

1	MRS. WILSON:	I am a resident here, and I live right across from Dunn Field. What
2		I would like to know is, why did they start this after the plant
3		closed? Why did they do that? Why did you all do that?
4	MR. UNDERBERG.	Why we started after the Depot closed?
5	MRS. WILSON:	After the Depot closed.
6	MR. UNDERBERG:	Actually, I believe that the Interim ROD was in place before the
7		announcement was made. Shawn, can you?
8	MR BALLARD:	The decision to do this was made in 1996. So, the investigation
9		was going on before that, identified the problem, decided what to
10		do. And, since 1996, and since the Depot closed, it has been in the
11		design and construction
12	MRS WILSON:	I have been living on Hays. I have been over here 47 years. Why is
13		it now that the pepper gas coming up? Has it been up under there
14		all the time? The mustard gas, why is it coming up now? What I
15		am saying, we have been in danger all this time.
16	MR UNDERBERG	From a groundwater perspective, we have not seen any of the
17		compound from
18	MRS WILSON	So, if it was, you all would tell us? In the groundwater, what you
19		were saying was good. If it had done anything, would you tell us?
20	MR. UNDERBERG	Absolutely. We would have to.
21	MR. WEBB.	Let me speak to that if I may. James Webb from MLG&W. We
22		are very, very concerned about the possibility of this getting into
23.	*	the Memphis water. To date in fact, we just got through with a
24		group on analyzing all of the wells on the Allen Wellfield, as well as
25		all wells we have approximately 170 wells total in other wellfields
26	•	as well as this one. We ran all the Volatile Organic Chemicals
27		(VOCs), which is something like 54 compounds, a lot more than
28		you folks have run, and then all the Synthetic Organic Compounds

1		(SOCs), that is herbicides, pesticides, phthalates, and a whole bunch
2		of other things. We have not to date found anything. I am
3		surprised, frankly, that we haven't, but we have not to date
4	MR. UNDERBERG:	Let clarify one thing. We have run far many more compounds than
5		we are reported here. We are running the same sweep that you are.
6	MRS. WILSON:	Everything the Depot does, we don't even know about it until we
7		see it Is this what they are going to do on that mustard gas?
8	MR. UNDERBERG:	No.
9	MRS. WILSON:	We saw the guys with the suits over there under water. If they
10		could wear suits to protect theirselves, what was wrong with us,
11		and let us know I was concerned about that, because I am over
12		there looking at them And they've got suits on, white suits,
13		everything, and we are over there looking at them
14	MR. UNDERBERG.	Well, those gentlemen are working with the materials as it is
15		coming out of the ground
16	MRS WILSON	In the air
17	MR. UNDERBERG.	and they are handling it. That is why they are wearing protective
18		suits They are protecting themselves from contact with the
19		material
20	MR. BALLARD:	Possible contact.
21	MR. UNDERBERG:	Possible contact with the material
22	MRS. WILSON:	Well, I am like Ms Bradshaw. I have called, working on these
23	and the second of the second	hills, and all that dust goes everywhere. I have called, called and
24		called, and no answer. No nothing. They are still uncovered. I
25		know that our health, maybe, doesn't mean anything to the people
26		that don't live around there, but I live there. I am looking at this
27		every day. I am looking at those hills. They work over there.
28	MR. PHILLIPS:	Ma'am
29	MRS. WILSON	Sir?

1	MR. PHILLIPS.	My name is Shawn Phillips.
2	MRS. WILSON:	My name is Joanne Wilson.
3	MR PHILLIPS	Good to see you, Joanne.
4	MRS. WILSON:	Okay.
5	MR. PHILLIPS:	Those mounds of material over there, that is a mineral called
6		bauxite and fluorspar. That is not mustard.
7	MRS WILSON.	When they first put those hills over there, it was a man in fact, I am
8		going to call his name, Mr. Falls, he worked for the Depot. He had
9		a petition. He had everybody to sign it. I signed my name. They
10		never did do nothing about those hills. If it wasn't, those wasn't
11		anything to it, why would he work here, work there, and want you
12		to sign it?
13	MR PHILLIPS	I have no
14	MRS WILSON:	There is still something wrong with those hills
15	MR PHILLIPS.	I do not know that, ma'am. I cannot respond to that.
16	MRS. WILSON	Well, I am responding to it, because I said
17	MR. PHILLIPS	We have been in the process of removing those mounds over the
18		last year
19	MRS WILSON	But they don't have them covered They don't cover them when
20		they all of this is exposed to the community. All of the
21		community is surrounded by blacks And, I know that, you know,
22		it doesn't matter, but I am there too.
23	MR. PHILLIPS:	It does matter. It does matter. That material, we are going to sell
24		all that material. And, by June of this year, if they sell it to private
25		vendors who want to buy that ore, that mineral, bauxite or
26		fluorspar, if it is all sold in time, it should all be done in June. So,
27		you will see that. The reason we constructed that road over there
28		was due to Janet Hooks brought that to this board's attention last

1	,	year. We recognized that there is a tremendous nuisance problem
2		with dust
3	MRS. WILSON	Yes.
4	MR. PHILLIPS	None of the dust, though, is this mustard that has recently hit the
5		media. That dust is inert material. It is a nuisance. We know it is a
6		nuisance, and we want to get rid of it.
7	MRS. WILSON:	I know it is a nuisance. I be on my porch, and I can hardly breathe
8	,	I think that should be addressed, because the people that does sit on
9		the porch, you can't even sit on the porch if they are doing that.
10	MR PHILLIPS.	I would like to give you some of the fact sheets that we have
11		developed over what that material is. If we could, before you
12		leave, if we could get your address. We could mail it to you. You
13		signed in. We will get the information we have Then, you will
14		know everything we know.
15	MR UNDERBERG	Any questions?
16	MR PHILLIPS	I have a comment for the RAB board We are at our normally
17		appointed time There were several issues that were on the agenda
18		tonight that were just update type issues. I would like to propose
19		to the board that I put that update in a letter and mail it out to you
20		How about that as an idea?
21	MR. BRAYON	I move that you do.
22	MS. YOUNG	Second.
23	MR. PHILLIPS:	Those in favor?
24	RAB MEMBERS:	Aye
25	MR. PHILLIPS:	Those opposed? In particular, about the TAPP Grant, the
26		information that the RAB needs to be able to recommend particular
27		providers, the contracting officer has been contacted, and the RAB
28		subcommittee on that process is going to invite providers in to give
29		them presentations over their abilities They are going to be, like,

45-15

1		15-minute long presentations. The meeting date for that is the third
2		of March, and it is at 3:00 p.m, and it will be here in this room
3		The RAB TAPP Subcommittee will host that meeting, but any
4		RAB member is welcome to attend Is there anything you would
5	•	like to add, Ms Young?
6	MS. YOUNG.	No.
7	MR. PHILLIPS:	The information on the visit to Ogden, Utah, some more
8		clarification on what the contracting officer said about the TAPP
9		Grant, I can provide that in a letter to you. Ms. Bradshaw, you are
10		on the agenda for National Environmental Justice Advisory Council
11		meeting. Do you want to go through with that, or do you want to
12		table that until next month?
13	MS BRADSHAW:	I can go through with it and get it over with, because it will be the
14		second time it is tabled
15	MR. WILLIAMS:	As Shawn has said, we have ran over the minutes of the meeting.
16		So, I would like to have someone to make a motion to add more
17		time to the meeting so that we may be able to hear Ms. Bradshaw
18		and to take public comments from the audience. So, if I can get a
19		motion to extend the meeting
20	MR. GRAY:	I would like to make a motion that we carry forward for 15
21		minutes, which I believe was 5 minutes for Ms. Bradshaw's agenda
22		item and 10 minutes for public comment.
23	MS. BRADSHAW:	I can wait until the next meeting.
24	MR. WILLIAMS:	She said she can wait.
25	MS BRADSHAW:	It ain't no big deal
26	MR. WILLIAMS:	We have to have the public comment period.
27	MR. CLAY:	I move that we extend the meeting for the 15-minute public
28		comment
29	MR. TYLER:	Second

I	MR. WILLIAMS	All III lavoi i
2	MS BRADSHAW	Aye.
3	MR. WILLIAMS	Any opposed? Any sustained?
4		
5	PUBLIC COMMEN	NT PERIOD
6		
7	MR. WILLIAMS.	All right, comment period. Mr. Bradshaw.
8	MR. BRADSHAW:	I've got several items I'm concerned with. I see here they got \$2.7
9		million dollars for UXB International, a Huntsville firm, to remove
10		the mustard gas bombs and things. And, if you remember,
I 1		especially everybody on the RAB, when the Depot had a meeting at
12		Corry Junior High School, people from Non-Stockpile in the Army
13		was there, and this is what they do. They spend millions and
14		millions of dollars to formulate this rapid response system that
15		removes all kinds of non-stockpiled weapons from the ground. And
16		Colonel Libby was the expert in this area, and he came to the RAB
17		meeting. I don't think he got a chance to speak And I want to
18		know why you are going to spend \$2 7 million dollars and give it to
19		a private contractor when the Army already got this system figured
20		out
21		
22		They done took our state representatives and state senators out in
23		Utah to demonstrate this rapid response system And this is the
24		craziest thing I ever heard. Why is DLA going to spend \$2.7
25		million when the Army already got experts doing that. Okay, to the
26		groundwater thing, now, I think this illustration here, it was nice. I
27		liked your presentation and everything. But if you don't show the
28		bottom of this, people won't get any idea of that there is not but 10
29		or 15 feet between these aquifers. I know you didn't intentionally

misrepresent this, but I think the next illustration should have something showing that it is not but 15 feet between this aquifer and the other one, on this.

And on the groundwater, you didn't mention anything about synergism, that, although some chemicals might be harmless in a small undetectable limit, when they combine and all of these things, that they get worse, and they are a thousand times more potent. And, then, Mr. English and I were discussing before this. I think Mr. English is doing a good job on that groundwater and everything But I believe the people here need the in-depth discussion that Mr English and I had about transmissivity and things of that nature and everything, because when Defense Environmental Response Task Force (DERTF) was here, we got the book where they did all of that groundwater It was in 1990. And those things looked just about the same

But we know water is moving through these aquifers, and that plume is not going to just sit there for 10 or 20 years and everything. Then, the main problem with that aquifer, it is not horizontal infiltration; it is vertically, because it is a possible hole beneath that aquifer in that Jackson Claiborne confining area. And that is the primary source. And all of the lateral tested groundwater monitoring pumps, they don't even do anything to detect if poison going straight down through there, if I am not mistaken

And I would like to see DLA contact the other people in the Army and stop wasting taxpayers money, because these people are already the experts. Colonel Libby is the expert in this. He is going

1		to eventually be in charge of the Pine Bluff, disposal of those
2		stockpiled weapons, the Anniston, Alabama thing, and all over the
3		country and Utah. And I think it is a crying shame ain't nobody
4		from DLA contacted the real not the real Army, the all-you-can-
5		be Army
6	MR. WILLIAMS:	Anyone else?
7	MR. PHILLIPS:	I need to give on the record, let Mr. Bradshaw know that you had a
8		comment last month This was going to be on my Old Business.
9		You wanted a response in writing, and I believe the EPA is working
10		on that for you.
11	MR BRADSHAW:	Okay.
12	MS. BRADSHAW	And also, put it in the minutes. If you are going to respond in
13		writing, put it in the minutes. Thank you
14	MR. PHILLIPS	Reasonable request
15	MR. WILLIAMS:	Did you have a comment? You have your card
16	MS. BROOKS	Yes, I do. Oh, I am sorry.
17	MS FARWELL	My name is Joy Farwell, and I wanted to know about the mustard
18		gas bombs When you dig it up, the people who are going to dig it,
19		are they going to have some kind of insurance in case something
20		should blow up? Are they going to have insurance, funeral
21		insurance, in case they die? I'm saying, are they going to have
22		insurance or some kind of special benefits for digging it up?
23	MR. PHILLIPS.	In my knowledge contractors who work for the federal
24	·	government, we require them to be bonded. A construction bond is
25		a form of insurance in case there are accidents that occur during the
26		construction, and I am sure that will be required on this I can
27		check on that to make certain for you
28	MS FARWELL	Okay.
29	MR PHILLIPS	Thank you Good comment

1	MS. BROOKS.	Oh, I am sorry.
2	MR. REESE:	I would like to direct my question to the gentleman here.
3	MR. WILLIAMS:	Would you state your name for the record?
4	MR. REESE:	My name is Ben Reese. I'm a resident of the southwest corner of
5		the Army Depot, and I would like to address to you, how long is
6		this Dunn Field pump going to pump?
7	MR UNDERBERG:	The system will be in operation as long as is required to protect the
8		groundwater downgradient. To answer that question specifically, I
9		can't give you a number right now, because there are a couple of
10		factors we need to evaluate: What are the sources; what can we do
11		with the source to keep groundwater from moving downward and
12		requiring us to pump We want to remediate the sources so we can
13		stop the pumping at some point in time
14	MR REESE	I've got two more questions. One question is What lab do you
15		use to test your samples? Do you use the EPA lab here in
16		Memphis, or do you go outside?
17	MR UNDERBERG:	No. We use a CH2M Hill quality assurance lab in Alabama. And,
18		now, we are going to be using one in Redding, California.
19		However, we split our samples with the Corps of Engineers lab at
20		the Missouri River Division. We also split our samples with the
21		Tennessee Department of Environmental Conservation So, they
22		come out and take, split samples and analyze independent
23		evaluation of our samples.
24	MR. REESE.	You don't use the one here in Memphis?
25	MR. UNDERBERG.	No, we don't.
26	MR. REESE:	The other question is. Do you plan on digging anymore wells?
27	MR UNDERBERG:	We are going to be preparing the groundwater section of the
28		Remedial Investigation report and doing the risk assessment on the

1		groundwater. That work is ongoing now. At this point, we don't
2		anticipate the need for any other wells
3	MR REESE	I would like to make a suggestion to you
4	MR. UNDERBERG:	Oh, yes, I am sorry.
5	MR. ENGLISH:	He needs to clarify.
6	MR. UNDERBERG:	There is one thing I forgot. We are looking at installing a well next
7		to the trucking firm up here, STP.
8	MR. ENGLISH:	The old Auto Zone property.
9	MR. UNDERBERG:	The old Auto Zone property. The purpose of that well is to
10		evaluate that vertical condition that we have been talking about
11		So, we will put in one more well there to look vertically at what is
12	•	going on between this upper fluvial system and the underlying
13		aquifer .
14	MR REESE.	I was wondering why you didn't drill wells in the run-off, like the
15		ditches. It looks like you done the wells close together. It looked
16		like to me you just did them up on the hills and all around It looks
17		like to me you ought to be drilling wells where you have the wash-
18		off there, where it drains on and off.
19	MR. UNDERBERG:	In a groundwater situation, we usually find groundwater
20		contamination associated where a spill occurred, either on the
21		surface and went into the ground, or occurred subsurface. So, we
22		have located our wells where we had determined we had
23	¢.	constituents in the groundwater, and then moved outward to
24		evaluate the extent.
25	MR. REESE.	You never drilled one across the run-off like where the ditches run
26		off on Depot property?
27	MR. UNDERBERG:	We have never targeted a ditch because the surface water
28		concentrations in those ditches haven't indicated that we would
29		expect a groundwater problem there. We would expect a

1		groundwater problem where the actual release had occurred, not in
2		a ditch
3	MR. REEVES.	Okay.
4	MR WILLIAMS:	Ms. Brooks.
5	MS BROOKS:	For the record, as a resident on Hays Road which directly faces
6		Dunn Field, will any consideration be given for a possible buy-out,
7		optional, or relocation, of those homes directly in front of Dunn
8		Field, especially during the time of especially in consideration of
9		the mustard gas, in consideration with all of this other thing? At
10		least consider it. Will there ever be a consideration of giving the
11		opportunity for a buy-out or relocation, especially of the homes that
12		are directly in front of Dunn Field?
13		
14		Also, in relation to mustard gas, could there be a build-up of
15		information, a progressive informing of the residents, not only
16		media-wise, even by Internet, if possibly, or whatever it takes? Let
17		us know, even as, what Ms. Bradshaw was saying, the public
18		meeting Could mustard gas be defined specifically, as to what it is,
19		what damage it does, all of the ramifications as would relate to us
20		as residents? How does it affect children? Whatever, those two
21		items. We need to be informed as to exactly what we are dealing
-22		with, and especially so for those residents who are right in front of
23		Dunn Field.
24	MR. PHILLIPS:	I have a response to that First of all, UXB, the contractor who has
25		been awarded the contract to do the mustard casing removal, they
26		are preparing site health and safety plans, which will look at
27		residents who are surrounding the field. And one of the agencies
28		that reviews that is the agency Mr. Bradshaw referred to earlier, the
29		Project Manager for Non-Stockpiled Chemical Warfare Materiel. I

1		know that is a mouthful—it is Colonel Libby, the gentleman he was
2		referring to He is a recognized expert in that field.
3	·	
4		And they will be making any recommendations like what is the
5		safety risk to surrounding residents Secondly, what you say is a
6		very good point about what is mustard, how does it affect you. I
7		think we could work on a facts sheet for that, and we could prepare
8		that as part of our community relations program.
9	MS. BROOKS:	Please.
10	MR. PHILLIPS:	I believe in that article in The Commercial Appeal, I believe he
11		referred to some of the effects of mustard So, you might want to
12		look at that. I don't have it in front of me, but I seem to remember
13		reading that
14	MS. BROOKS:	We would rather have it from scientists who we feel we can trust.
15	MR. PHILLIPS.	I would like to call Colonel Libby and see if we can develop a fact
16		sheet
17	MS. MOORE:	That is part of the plan, Peggy. What happens is, the clarification
18		as far as the news article is concerned, we have no control over
19		what the newspaper reports Tom Charlier wrote the newspaper
20		article And when he did the newspaper article, it hit on a day that
21		nobody was here. There were several inaccuracies. Dr. Rueben
22		said that his quote wasn't the same. So once again, if it is
23		somebody comes in and interviews Shawn or John De Back, they
24		write the story We don't write the stories for the newspapers nor
25		what they are saying
26		
27		We're going to make sure that we get the experts that you want
28		and that the community residents want Ms. Littlejohn is the
29		president of that association, and I mentioned to you just yesterday

. . . .

1		that I would like to really speak with the residents, and that is part
2		of the plan
3	MR. PHILLIPS:	I need to make an official announcement. Ms Brooks was not
4		announced as an official member.
5		
6		(APPLAUSE)
7		
8	MR. WILLIAMS:	If you don't mind, I would like to go back to the public comment.
9		State your name.
10	MS. WILLIAMS:	My name is Janice Williams. I want to know if the residents in
11		front of Dunn Field will be given protective gear to wear the day
12		that they are going to dig up the mustard bombs? That is one And
13		what are the qualifications for suitability for FOSL?
14	MR BALLARD.	Finding of suitability to lease, I think she is asking She is asking
15	•	what are the qualifications for a finding of suitability to lease
16	MR. PHILLIPS:	In response to the first question, I will refer back to the response I
17		had for Ms. Brooks. We're not the health and safety experts about
18		this material When the contractor, UXB International, produces
19		his safety plan for the mustard, there will be experts from the Army,
20		the Project Manager for the Non-Stockpiled Chemical Warfare
21		Materiels, who will look at those issues. The second question.
22		What qualifications are there could you ask your second question
23	r	one more time for me, please?
24	MS WILLIAMS:	Suitability for FOSL?
25	MR. PHILLIPS:	Suitability for lease?
26	MS. WILLIAMS:	Yes
27	MR. PHILLIPS:	The only findings of suitability for lease that we are working on or
28		we are planning on working on are for the Main Installation.
29	MS. WILLIAMS	No What are the qualifications for suitability, for FOSL?

MR. BALLARD	What do you need to meet in order to say that it is suitable to lease,	
	is that correct?	
MS WILLIAMS	That's correct	
MR. BALLARD.	Or what do we have to find in order to say it is suitable to lease.	
MS. WILLIAMS.	The second part to that is, what, if any, are there any large	
	businesses considered for FOSLs and other than trash receptacles	
	storing companies, you know?	
MR. PHILLIPS.	The finding of suitability to lease is a document that the agency who	
	owns the properties, or who operates the property, it is the Defense	
	Logistics Agency in this Depot's case, we have to, according to any	
	realty law of any state in the country, we have to provide any	
	information to a potential tenant that we're going to lease the	
	property to over the environmental conditions of that property,	
	what has been stored there, have there ever been any hazardous	
	materials used there like glue or paint or whatever. A FOSL is the	
	full disclosure of all that information.	
MS. WILLIAMS	So it is okay for MIFA to bring homeless people to stay there?	
MR PHILLIPS	Are you referring to the housing?	
MS WILLIAMS	Yes	
MR. PHILLIPS.	Yes That has been found suitable to lease in a FOSL document	
MS WILLIAMS	So, do you have any large businesses such as lavish condominiums	
	or mansions, or anything like that, to be built on the property, if	
	homeless people can live here too.	
MR. PHILLIPS.	We have a member of this board. His name is Jim Covington. I see	
	his seat down there empty tonight. Jim Covington is the president	
	or the director of the Depot Redevelopment Corporation. They are	
	not associated with the Defense Logistics Agency They are	
	actually city employees. And that is a city-backed corporation	
	MS. WILLIAMS MR. PHILLIPS. MS. WILLIAMS MR. PHILLIPS MS WILLIAMS MR. PHILLIPS MS WILLIAMS MR. PHILLIPS. MS WILLIAMS	

1		They know who is interested in renting buildings out here I don't
2		know
3	MS. WILLIAMS.	Who was that?
4	MR. PHILLIPS.	His name is Jimmy Covington. I don't even have Jimmy's telephone
5		number off the top of my head.
6	MS. MOORE:	I have it I can't remember right now, but I have it.
7	MR. PHILLIPS:	We will get that telephone number for you
8	MR. WILLIAMS.	Could I pause the meeting for a minute and say that we have ran
9		out of time again. And, if you would like to allot more time for
10		public comment
11	MS. MOORE	You can fill out cards
12	· MR. WILLIAMS	you can fill out a card on your way out, and leave it with the
13		public relations person We will answer your card in writing If
14		you leave your address, they will mail it to you.
15	MS. MOORE	No It will be a part of the minutes
16	MR WILLIAMS	Well, when you get the minutes. Without further ado, I would like
17		to thank everybody for coming out to this meeting
18	MR. BRAYON	I move to adjourn.
19	MR WILLIAMS	I was going to say that
20	MR BRAYON	I move to adjourn.
21	MR PHILLIPS	We have a motion to adjourn.
22	MR. CLAY.	I second that.
23	MR. WILLIAMS	All in favor?
24	RAB MEMBERS	Aye
25	MR. WILLIAMS.	Any opposed? One opposed. Meeting is adjourned.
26		
27	(Whereupon, at ap	proximately 7:55 p.m., the Restoration Advisory Board meeting was
28		adjourned.)
29		

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NEXT MEETING: Thursday, March 18, 1999

The Memphis Depot, Conference Room

2163 Airways Boulevard, Memphis, TN

Attendance List

Restoration Advisory Board Members

Mr. Shawn Phillips	Facility Co-Chair
Mr. Mondell Williams	Community Co-Chair
Mr. Dave Bond	Citizen Representative
Mr John Garrison	Citizen Representative
Mr Jim Covington	Depot Redevelopment
	Corporation (DRC)
Ms Willie Mae Willett	Citizen Representative
Mr. Kevin Clay	Citizen Representative
Mr Carter Gray	Memphis/Shelby County Health
	Department
Mr Jordan English	Tennessee Department of
	Environment and Conservation
	(TDEC)
Mr Russell Ray Anderson	Citizen (substituting for Ms Johnnie
	Mae Peters)
Mr. Eugene Brayon	Citizen Representative
Mr. Turpin Ballard	Environmental Protection Agency
	(EPA)
Ms Janet Hooks	Memphis City Council
Ms Alma H Black	Citizen (substituting for Mr. Ulysses
	Truitt)

RAB Members (con't)

Mr James Webb Memphis Light, Gas & Water

(MLGW)

Ms. Elizabeth Young Citizen Representative

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Mr. Stanley Tyler Citizen Representative

Ms. Doris Bradshaw Environmental Group

Representative (DDMT-CCC)

Ms. Peggy Brooks Citizen Representative

Ms Terri Gray Citizen Representative

Others in Attendance

Ms Denise Cooper Memphis Depot Caretaker

Ms. Betty Mills Citizen

Mr Kenneth Bradshaw Citizen

Mr Willie Wilson Citizen

Ms Joanne Wilson Citizen

Ms. Hattie Johnson Citizen

Mr Elroy Black Citizen

Mr. Ben Reese, Jr Citizen

Mr. Alan Barnhart Citizen

Ms Frances Taylor Citizen

Ms. Marian Hunter Citizen

Ms Bonnie Daniels Citizen

Ms. Johnnie Mae Peters Citizen

Ms Dorothy Richards Corps of Engineers

Mr Scott Bradley Corps of Engineers

Dr. Reuben Warren Agency for Toxic Substances

and Disease Registry (ATSDR)

Others in Attendance (con't)

Mr. Benjamin Moore ATSDR

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Mr Michael Grayson ATSDR

Mr. Kurt Braun Corps of Engineers

Mr Ed Bradley Citizen

Mr. Robert Lindsay Roy F Weston, Inc

Ms. Janice Williams Citizen

Mr. Dwaine Houston Citizen

Mr. Charles Clark Citizen

Mr Ernest Edgar Horne Engineering Services, Inc

Ms Margaret Curry Citizen

Ms Tiki Whitfield EPA

Ms Katrina Hamm EPA

Mr Maynard Jordan Citizen

Ms Cloveice Exum Citizen

Mr Joseph Simmons Citizen

Mr Randy Gentry Groundwater Institute (University of

Memphis)

Mr Oliver Chiang Citizen

Mr Everett Humphreys Memphis Depot Caretaker

Mr. Benjamin Moore ATSDR

Mr Greg Underberg CH2M Hill

Ms Alma Black Moore Frontline

Mr Terry Flynn Frontline

Ms. Jennifer Hall Frontline

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