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AR File Number 735

MEETING MINUTES
Dunn Field Proposed Plan
Public Comment Meeting
May 15, 2003
South Memphis Senior Citizens Center
1620 Marjorie
Memphis, Tennessee

The Dunn Field Proposed Plan Public Comment Meeting was held at 6:00 p.m. on May 15, 2003 at the South Memphis Senior Citizens Center located at 1620 Marjorie Street, Memphis, Tennessee.

The attendance list is attached.

WELCOME AND INTRODUCTION

MS MOORE Good evening everyone My name is Alma Black Moore I would like to welcome you tonight to the Public Comment Meeting for the Dunn Field Proposed Plan at the Memphis Depot Before we begin, I would like to run through our agenda for tonight and some general guidelines for the Public Comment Meeting

We will start with the presentation by Steve Offner of CH2M Hill outlining the Proposed Plan Preferred Cleanup Alternative for Dunn Field The presentation will be approximately 30 minutes Following the presentation Mr Offner will respond to questions of clarification only about the information contained in tonight's presentation Again, please be reminded that points of clarification should pertain to the Dunn Field Proposed Plan Following the presentation and points of clarification we will begin the Public Comment Meeting At that time, you can provide your comments verbally A transcript is being taken tonight to record your comments for the record here

Please note that the Public Comment portion of tonight's meeting will not be addressed tonight Responses to all comments received throughout the 30-day Public Comment Period will be considered by the Defense Logistics

Agency (DLA), the Environmental Protection Agency (EPA), and the Tennessee Department of Environment and Conservation (TDEC). All responses to the comments will be provided in what we call a Responsiveness Summary, which will be included in the Record of Decision that will document the selected cleanup alternative for Dunn Field

The Record of Decision (ROD) will be available for review in the Depot's three Information Repositories, which are located at the Cherokee Library on Sharpe, the Memphis/Shelby County Health Department on Jefferson and the Memphis Depot's Community Outreach Room

If you signed in tonight -- and I would like to remind everyone to do so -- and you indicated that you wish to receive a copy of the Responsiveness Summary, one will be mailed to you There's also a box for you to check if you would like to receive a copy of tonight's minutes

I would now like to invite Steve Offner of CH2M Hill to start his presentation Thank you, and welcome

DUNN FIELD PROPOSED PLAN PRESENTATION

MR OFFNER Good evening everyone Can you hear me okay? Again, my name is Steve Offner I'm the project manager with CH2M Hill, and I will be giving a presentation and overview of the Proposed Plan for Dunn Field

The overview for the Proposed Plan presentation includes the cleanup requirements for Dunn Field, how we got here, which includes a discussion of the Interim Record of Decision, the Early Removal and Remedial Activities on Dunn Field, the Dunn Field Remedial Investigation, which we will talk about the study areas, and the Risk Assessment that was contained in the Remedial Investigation, and the Dunn Field Feasibility Study

We'll discuss the Remedial Action Objectives for Dunn Field, and the detailed analysis of the Remedial Alternatives, and then we'll discuss the Preferred Alternative for Dunn Field -- for the Disposal Sites, Sub-surface Soil and Groundwater, and that will include a review of the proposed technologies And then last we will talk about the next steps for Dunn Field For our cleanup requirements for Dunn Field we have two primary legal requirements and procedures that will ensure the cleanup to be protective of human health and the environment The first one is the Comprehensive Environmental Response, Compensation and Liability Act, also known as CERCLA And the second one is the National Oil and Hazardous Substances Pollution Contingency Plan, known as the NCP These requirements apply to all National Priority List (NPL) sites, of which the Memphis Depot is an NPL site

There are additional regulations and guidance for cleanup decisions based on intended future reuse, and these are Department of Defense regulations and guidance and EPA as well

How we got here with respect to Dunn Field In 1996 an Interim Record of Decision for Dunn Field was signed, and it primarily dealt with an Interim Groundwater Remedial Action Between 1998 and 2002 -- in November of 1998 the groundwater containment interim remedial action began, and it's a pump and discharge system, and it's currently running at this time Actually, through March of this year it has pumped 144 million gallons of water through the duration so far

Also, during this time period the chemical warfare materiel (CWM) removal action was conducted This included 29 empty bomb casings and the effected soil -- the excavation of those items This action was completed in May of 2001

And the Early Removal/Remedial Activities include the Site 60 former pistol range removal action Surface soil containing lead was removed from this site, and this action was just completed in March of 2003 Also in 2002 the Remedial Investigation for Dunn Field was completed, and the Feasibility Study was completed for Dunn Field early this year, 2003

The Remedial Investigation for Dunn Field was finalized in July of 2002 Three study areas were defined during the Remedial Investigation, and these were based on past and anticipated future land uses for Dunn Field It was broken into three areas the Northeast Open Area, the Disposal Area and the Stockpile Area Soils, surface water, sediments and groundwater were sampled from each of these areas A note, the onsite and offsite groundwater is studied as a separate operable unit or area to these other three areas And the Risk Assessment was conducted and completed as part of the Remedial Investigation

This figure shows the three study areas (Indicating) Again, the Northeast Open Area in the northeast quadrant of Dunn Field, the Disposal Area, which is basically the northwestern two-thirds of Dunn Field, and the Stockpile Area, which is primarily the southern portion of Dunn Field Now, this is a footprint of the groundwater study area for Dunn Field (Indicating) And as you can see, it takes into account all three of those areas and also the offsite area as far as groundwater

The Risk Assessment was completed for each of those four areas for Dunn Field The Risk Assessment identifies the potential health risks associated with all potential or possible future land-use scenarios, and those land-use scenarios included looking at residential, industrial and recreational use

The potential risks for offsite residential use were also evaluated during the Remedial Investigation, the Risk Assessment portion of that study And those looked at potential risks for offsite dust from Dunn Field, future groundwater use and vapor intrusion from groundwater up into buildings and structures

This table -- and you have it in your presentation -- provides a summary of the conclusions of the Risk Assessment for Dunn Field As you can see, (Indicating) all of the four areas are broken out Northeast Open Area, Disposal Area, Stockpile Area and onsite and offsite groundwater And it looks at the land-use scenarios, and it gives the overall conclusions and comments for each of these areas

Based on the conclusions from the Risk Assessment and coupled with the recent removal action of the surface soils from the former pistol range, the area in blue you see there (Indicating) is slated for "no further action " And as you can see, that's approximately -- well, Dunn Field is about 64 acres, and we're looking at approximately 50 acres of Dunn Field

Now, the Risk Assessment showed areas that had unacceptable risks include, one, the Disposal Area And within the Disposal Area the disposal pits and trenches are areas that pose an unacceptable risk Locations and contents of the disposal pits and trenches are identified based on historical records and geophysical information

In addition to that, a Pre-design Investigation to establish the exact pit boundaries and contents is slated to be conducted in the fall of 2003 to better define those areas to support the Remedial Actions Surface soils within the Disposal Area containing volatile organic compounds, also known as VOCs, are at unacceptable levels These VOCs were detected in the sub-surface soil down to the water table, which is approximately 65 to 80 feet below the land

surface on Dunn Field And the constituents of concern (COCs) include trichloroethene, which is TCE, tetrachloroethene, which is PCE, and 1,1,2,2 tetrachloroethane, which is also referred to as PCA, carbon tetrachloride and chloroform And where we detected these soils in the sub-surface soil didn't consistently associate with the disposal pits

Groundwater in the shallow aquifer also contains some of the same VOCs at unacceptable levels Now, the shallow aquifer, also called the fluvial aquifer, is not used for drinking water, and there is no anticipated future use of the fluvial aquifer or shallow aquifer for potable water Again, you'll see some of the same compounds here The constituents of concern, COCs, include TCE, PCE, 1,2-dichloroethene 1,1-dichloroethene and 1,1,2-trichloroethane (TCA), carbon tetrachloride and chloroform

As we discussed previously in other presentations for the Memphis Depot for the Restoration Advisory Board, connections or windows exist from the surficial aquifer to the deeper aquifers, intermediate aquifer and the Memphis aquifer However, there has been no impact detected from environmental conditions in the fluvial aquifer in these deeper aquifers And the Memphis drinking water, which is the Memphis aquifer, is not affected by the conditions on Dunn Field or in the shallow aquifer

MR BALLARD We're giving clarifications after the presentation

MR TYLER Well, with the connections, could you clarify that?

MR BALLARD After the presentation we will hear your clarifications

MR OFFNER Now, we spoke mostly about the Remedial Investigation, and I will be moving into the Feasibility Study, based on the risks that are presented in the Remedial Investigation The Feasibility Study looks at those (risks) and develops goals for Remedial Actions to meet and protect human health and the environment according to the intended future land uses

Now, based on the risks that came out of the Risk Assessment and Remedial Investigation, we established Remedial Action Objectives (RAOs), and the

Remedial Action Objectives for Dunn Field are based on a media and then areas on Dunn Field The first one is the surface soil on Dunn Field

The Northeast Open Area contained lead in the surface soil However, as we said earlier, the surface soil was removed this March, and that now allows for unrestricted land use for most of the Northeast Open Area

The Disposal Area For the surface soil land-use controls, excavation or containment to prevent exposure to the COCs are the Remedial Objectives for that are, and those objectives will allow for the anticipated future land use (industrial) for the Disposal Area of Dunn Field

For sub-surface soil The Remedial Action Objectives include the prevention of exposure to environmental conditions in the top ten feet of soil, prevent the disturbance of buried waste by workers, and to prevent the migration of volatile organic compounds, or VOCs, to the groundwater

Disposal sites Which are primarily in the Disposal Area of Dunn Field, the Remedial Action Objectives include eliminating the potential for groundwater impacts from buried waste and to eliminate future unacceptable risks of exposure primarily for workers

And the soil-to-indoor air The Remedial Action Objectives for that are to prevent direct inhalation of volatile organic compounds in indoor air vapors from the effected sub-surface soils

And the last area is groundwater, and there are three RAOs for groundwater They are the prevention of use of the shallow aquifer, fluvial aquifer as a source of drinking water, prevent further offsite migration of the VOCs in the shallow aquifer, and to remediate the shallow aquifer to be protective of the deeper Memphis aquifer

Now, in the Feasibility Study there is a detailed analysis of, or a variety of Remedial Technologies and Alternatives available to us to complete the Remedial Action Objectives The Feasibility Study identifies and screens the cleanup alternatives or technologies, and then it looks at the Applicable or Relevant and Appropriate Requirements, (ARARs), and they are developed and looked at for each alternative

Now, ARARs are federal or state standards that have requirements or limitations for those Remedial Actions Those Remedial Actions have to meet these sets of regulations or laws There are three types of ARARs One is a chemical specific ARAR This is a drinking water standard or a maximum contaminant level There is an action specific ARAR, such as an emission--to--air during a Remedial Action And then there is a location specific ARAR, and for us it includes the prohibiting of water wells within a half mile of a CERCLA site That is a location specific ARAR It's already established with Memphis--Shelby County

Now, as part of the detailed analysis, these alternatives or criteria are evaluated against the nine criteria that EPA has established to evaluate the Remedial Alternatives and to lead us to the final selection of the Preferred Alternative There are three upper level groups of criteria that these fall into -- these nine fall into

The first one is the *threshold criteria* These are required criteria It includes the overall protectiveness of human health and the environment and compliance with the ARARs that we talked about

The second group of criteria is the *evaluating criteria* These are used to balance alternatives or technologies against each other These include the long-term effectiveness and permanence of the remedy, reduction of toxicity,

volume and mobility through treatment, short-term effectiveness, the implementability of the Remedial Action or Technology and the cost of it

In the last two, 8 and 9, they fall in the *modifying criteria*, and that includes state acceptance, in our case TDEC, and community acceptance Now, these criteria are evaluated after the Proposed Plan and the Record of Decision, these two in particular And I want to note that a more detailed description of all nine criteria is in the Proposed Plan document that we included here (Indicating)

Now, CERCLA, in this part of the analysis, is one of the laws that govern the cleanup of an NPL site It says that we're going to look at a range of alternatives that have to be evaluated, and this includes a "no action" alternative –"What happens if we don't do anything?" That's considered unacceptable for portions of Dunn Field that have an unacceptable risk at this point

The second one is one or more alternatives that involve containment with little or no treatment, and then to look at a range of alternatives to address the potential risks and eliminate or minimize the risks and the need for long-term monitoring

Now, the Remedial Alternatives evaluated for the Disposal sites You remember back we walked through the media and then the Remedial Action Objectives Now we're going to look at each of the alternatives, Remedial Alternatives, that were looked at for each of those RAOs

The first one is the Disposal sites Remedial Actions, and you will see here we have three alternatives The "no action" is included in there and evaluated, but we're not presenting it because it's not acceptable You will see here (Indicating) along the left of the column, the nine criteria that we

discussed, and across the top it explains the three Remedial Action Alternatives that we looked at The first one is soil containment with institutional controls The second one is an ex-situ soil treatment with institutional controls, and the third alternative is the excavation and offsite disposal with institutional controls

Now, you can see here in your handout that each of these is compared against these nine criteria and against each other And I do want to point out a couple of things that go into the evaluation process of how the Preferred Alternative is derived For instance, to be protective of human health and the environment, we discussed that it was a threshold criterion The soil containment with institutional controls has a low ranging for that particular criterion The other two are rated high

Under the third criterion, effective and permanent, if you will look at the DS6, which is an excavation and offsite disposal that ranked high And then you can see the others once you go down, short-term effectiveness implementability, and cost You can see the data there (Indicating)

Based on this evaluation for the Disposal sites, the Preferred Alternative is the excavation and offsite disposal of affected soil and debris from the disposal sites This includes institutional controls that would prevent future residential land use on the Disposal Area of Dunn Field As part of this Preferred Alternative, the excavated areas are filled with clean soil and restored with landscaping following that

Now, this Preferred Alternative This figure shows the location of the Disposal Sites on Dunn Field, and there's a drawing I believe against that wall that shows the same thing (Indicating) Again, if you remember back earlier in the presentation, we talked about a Pre-design Investigation which is going to occur this fall to support this remedy and better define for the

Remedial Design Process and to go forward with the Remedial Actions for the Disposal Sites.

Next are the Remedial Alternatives evaluated for sub-surface soil Now, for this one EPA provides guidance for Presumptive Remedies, and for VOCs in sub-surface soils, and the EPA has done an extensive evaluation of soil vapor extraction (SVE) It is documented as a presumed remedy for VOCs in the sub-surface soil In looking at the Presumptive Remedy route, it is a very good way to streamline the process to get to the Preferred Alternative, in this case, the Presumptive Alternative or Remedy

We conducted a pilot test for SVE on Dunn Field in late 2001, early 2002, and findings were favorable for the use of this technology So, therefore, that, as a Presumptive Remedy, and no action were evaluated, and you can see here it ranks high It complied with ARARs It's effective and permanent, and it uses treatment to reduce toxicity and mobility and volume of the VOCs, in this case So, again, our Preferred Alternative for the sub-surface soil is soil vapor extraction, and that will be used to treat the sub-surface soils containing the VOCs for the solvents

Now, this technology It applies a vacuum so that air is pulled through the soil to speed up the vaporization process of those VOCs An extraction system is located on the ground surface, and that treats the vapor to safely remove the solvents that are extracted from the ground This figure here -- and it may be hard to see on the overhead here, but there is another poster of this over here (Indicating) This is the conceptual system laid out for the SVE system for Dunn Field And I want to note that, as you can see, this is primarily located in the Disposal Area on Dunn Field

Now, for groundwater the Remedial Alternatives were evaluated Again, we looked at the nine criteria, and we have three alternatives that were evaluated

against these criteria These include the injection of zero-valent iron (ZVI), the enhanced bioremediation of the groundwater, and enhanced extraction of groundwater coupled with monitored natural attenuation (MNA) and institutional controls The second alternative is zero-valent iron injection with the construction of a permeable reactive barrier (PRB) wall – barrier, and monitored natural attenuation with institutional controls

The third groundwater Remedial Alternative includes air sparging with SVE, the installation of a PRB, or a permeable reactive barrier, along with MNA and institutional controls Each of these is evaluated against the nine criteria and themselves

I want to point out a couple of things -- protective of human health and the environmental The first alternative there, which is actually Groundwater 2, has a medium ranking I want to point out that for effectiveness and permanence of the alternative Groundwater Alternative 3 and 4, which are the third and fourth columns there, are high And then for short-term effectiveness Groundwater Alternative 3 is high So, these are the kind of comparisons that are made with the criteria and against each other to come up with the Preferred Alternative for groundwater, which is the injection of ZVI, or zero-valent iron, into the shallow aquifer or the fluvial aquifer, the installation of a permeable reactive barrier, and along with monitored natural attenuation and institutional controls

Now, I'm going to walk over here for one second to the poster boards We show here the conceptual diagram of the zero-valent iron injection (Indicating) And what I want to show here on the poster is the area in orange These three areas this particular part of the Preferred Alternative for groundwater will be conducted ZVI, zero-valent iron, involves injecting iron particles into the aquifer or groundwater, and in this case we're looking at injecting it into the source areas of groundwater on and near Dunn Field

This will reduce the chemicals of concern, the COCs that we're looking at I want to add that there is a pilot test slated for this action to help in an ultimate design for this remedy in the fall of 2003 for Dunn Field

Now, the second part of the groundwater -- of the Preferred Groundwater Alternative -- is the construction of a permeable reactive barrier Now, I want to show you over here on this poster (Indicating) The area we're looking at constructing the PRB, or permeable reactive barrier, is in a position that is down gradiant with the flow of groundwater from Dunn Field and across the impacted areas of groundwater Now, this underground barrier will contain zero-valent iron and will act as a catalyst as the groundwater with VOCs move through this barrier Zero-valent iron breaks down these VOCs and treats the water to safe conditions

In this figure here you can see where flow direction is this way, a permeable reactive barrier is installed here (Indicating), the groundwater comes through, it is treated though the catalyst action of the iron, and then you have treated groundwater on the backside of the barrier (Indicating)

Also, part of the Preferred Alternative for groundwater is monitored natural attenuation This involves the monitoring of the natural breakdown of organic compounds and the changes of the environmental conditions over time in the groundwater With that this remedy also includes institutional controls that prohibit the installation of drinking water wells in the shallow aquifer on Dunn Field This is coupled with an existing Memphis, Shelby County regulation that prevents drinking water wells to be installed within a half-mile radius of a RCRA/CERCLA site or an NPL site

The EPA and the Tennessee Department of Environment and Conservation, TDEC, will review the effectiveness of these controls at five-year intervals Those are called Five-Year Reviews

Now, the Preferred Alternative, the summary, it addresses all the media of concern, both soil and groundwater It includes the residential use deed restrictions in the Disposal Area -- it basically prohibits residential land use in that area It includes the excavation and offsite disposal of the contents of the Disposal sites and the effected soil within those Disposal sites It includes soil vapor extraction, SVE, for the sub-surface soil that has been impacted by VOCs That's the unsaturated soils, also called the vadose zone, above the groundwater

And for the aquifer of the groundwater or the shallow groundwater, we're looking at ZVI injection, the down gradient installation of the ZVI permeable reactive barrier, monitored natural attenuation and institutional controls for groundwater treatment Now, this is also known as the Preferred Alternative This slide summarizes it in a present net worth, the estimated costs for this Preferred Alternative that we just summarized In addition, it also provides time to achieve the Remedial Action Objectives And the note here is that this is time after the Remedial Design has been approved and beginning the implementation of the Remedial Action (Indicating)

And with that -- oh, I'm sorry The next steps of Dunn Field The summer and fall of 2003 As we discussed earlier in this presentation, we have two Pre-design Investigations that will be occurring One is to confirm the locations and contents of the Disposal Sites to better provide that information for the Remedial Design and Remedial Action of those disposal sites and conduct field pilot tests for the ZVI injection That information will be pulled into the Remedial Design, and then it will aid in the actual implementation of the Remedial Action The community will be notified via fact sheets, news releases of the schedule of these activities and when these will be occurring

The next step is the submission of the Record of Decision to EPA and TDEC for concurrence, and then a final Record of Decision, also known as a ROD, for Dunn Field And this will include all the public comments from this Public Comment Period and the Responsiveness Summary, and will be available for public reference in the Information Repositories This document is expected to be final in September of 2003
With that, this concludes the presentation portion

POINTS OF CLARIFICATION

MS MOORE Thanks, Steve And now if anyone should require any clarification about the material that was just presented, Steve or Turpin will respond to those questions now Keep in mind that questions should only be for clarification, and should pertain to the Dunn Field Proposed Plan and the information that was given tonight If you have further comments about any other environmental projects at the Depot -- this particular Public Comment Period is just for the Dunn Field Proposed Plan We'll have time after the points of clarification for your comments So, if there -- Mr Tyler you had a question earlier?

MR TYLER Yes On Page 8, "Risk Assessment groundwater results," you said, "connecting to the deep aquifer " What does that mean? Fissures, holes?

MS MOORE Mr Tyler -- excuse me -- could you come up here (Indicating) and make your comment so everyone can hear you?

MR TYLER Okay I'm sorry Stanley Tyler On Page 8, "Risk Assessment results, groundwater Connections exist to deeper aquifer " Does that mean -- are those fissures or openings that's connecting to -- what are you talking about?

MR OFFNER Let me try to clarify that for you We may have talked about this a little bit in the February Restoration Advisory Board presentation, but in the fluvial aquifer there are three areas that we've identified through the Remedial Investigation where the clay at the bottom of the surficial aquifer is absent and there is a window or a connection down into the deeper aquifers That

includes an area here around MW (Monitoring Well) 40 (Indicating). Just for clarification, over in the Area 34, which is right here, over here, and that's 43, MW43, and down here and on the Main Installation down in there (Indicating)

MR TYLER Do you have that map?

MR OFFNER Do you have this map? It's in the Proposed Plan Alma, it's in the Proposed Plan

MR TYLER Okay, thank you

MR OFFNER And that's when we talked about the Remedial Action Objectives for groundwater is to prevent the migration of the VOCs into these areas (Indicating)

MS MOORE Do we have any more points of clarification on the presentation tonight?

MR BALLARD I would just like to ask ---

MS MOORE Could you come up here?

MR BALLARD Yes

MS MOORE Thank you

MR BALLARD Turpin Ballard Just for those who haven't been involved in the process, if you could explain what the air sparging is Because between the selected alternative and air sparging, there's not that much difference in cost So, you know, the air sparging wasn't really described

MR OFFNER Okay, Turpin, I'm just going to go to that area so everyone knows what we're talking about and where that was presented All right, that is on this area over here and with this alternative (Indicating) Air sparging is kind of like SVE but in reverse What you do is you take the ambient air or pressurize the air, and you inject it into the aquifer, to the groundwater And it creates bubbles that basically come up of air, and it strips or volatizes those volatile organic compounds in the groundwater And what it does, it brings it up then into the unsaturated soil, you know, where the groundwater ends and the unsaturated soil is, and those vapors are then in the soil And typically with each air sparging system we have then the soil vapor extraction recovery system that

takes those vapors or volatiles and pulls them out of the ground through the soil vapor extraction system

MR BALLARD To follow up, this is often used as a complimentary technology with soil vapor extraction

MR OFFNER It is They're usually hand in hand Because you don't want to take the volatile organic compounds out of the groundwater and just put them in the soil You need to recover them from the soil We bring them up for treatment in the surface

MR. WILLIAMS Mondell Williams, Community Co-chair Point of clarification You said that in the fall you checked the aquifer I was wondering what is the difference in the aquifers in the summertime versus the ones in the fall time or is it the water level? And if the contamination or whatever is any different from the summertime? Do you understand what I'm saying?

MR OFFNER That's a good point of clarification I would like to address that I'm going to address that two ways I'm going to take a step back through the Remedial Investigation We monitored groundwater through dry and wet seasons out here, typically twice a year, and in 1996, 1997 -- all through the 1990s And we're still doing it now during this period for groundwater around Dunn Field

You do see a seasonal fluctuation based on groundwater rising and falling within the aquifer However, for what you saw there in the fall or late summer, which corresponds to -- getting into the fall corresponds to some of the wet season here Based on the schedule right now, that's when these pilot tests or these Pre-design Investigations are going to occur

Now, groundwater sampling is still occurring out at Dunn Field as part of the Interim Action that began in 1998 So we still have semi-annual sampling there But the fact that we're doing this work in the fall, you know, doesn't really depend on some seasonal variation right now We know we have all

the data, and it won't be impacted by a seasonal fluctuation, if that answers your question

MR WILLIAMS I guess I guess But I just wanted to clarify

MR OFFNER We don't see seasonal fluctuations in concentrations, per se, and we haven't

MR WILLIAMS Okay, meaning that the chemical level is higher during the fall?

MR OFFNER It's been pretty consistent, even though the groundwater may change slightly, and it raises up and down a foot or two, and that's it And it really hasn't shown to be a critical element that would make us do something at a different time of the year, something different during a different time of the year

MR WILLIAMS I don't know if this is a point of clarification here, but I'm going to ask it anyway, and you tell me if it's point of clarification I was looking at the amount of chemicals and the different things you were talking about that were being found in the ground and in the water and everything like that My point of clarification is At any point was the community ever in danger or anything like that? That's just a point of clarification with all the chemicals that you were talking about And I'm just basically trying to put it in laymen's terms to say was the community ever or the employees ever at risk with the amount of chemicals that was in the soil?

MS MOORE Mondell that is a very good comment

MR WILLIAMS Okay

MS MOORE But that is not a point of clarification

MR WILLIAMS Okay, thank you I told you I didn't know

MS BRADSHAW Marquita Bradshaw About your presentation, have these plans been implemented anywhere else?

MR OFFNER Yes

MS BRADSHAW And will we be able to look at data from those communities to evaluate, as a community and as a state, to see if the community would be in danger?

MR OFFNER Yes

MS MOORE I could answer that question There are several websites available I was looking at some comparative data of communities I'm working on that now

There are some good websites at EPA, the University of Waterloo, and ITRC There are several websites that I've gone to compile some information on those studies And there is so much of it on the Internet So, at any given point if you just put in "Permeable reactive barrier or zero-valent iron " I am composing some information for the community

MR OFFNER We can respond to that in the Responsiveness Summary and give you that information

MS BRADSHAW Okay, how long would the community have for that comment period?

MS MOORE The comment period ends June 6th

MS BRADSHAW All right, I would like to ---

MS MOORE That's not a point of clarification, not yet

MS BRADSHAW Okay, we received the information last week about all three plans, as a matter of fact, Thursday, and that's not adequate enough time to go over this type of information and be able to ask ---

MS MOORE That's not a point of clarification

MR TYLER That's the Public Comment Period

MS BRADSHAW But I know

MS MOORE We're going to be there in just a minute

MS BRADSHAW Okay, all right, and in order to work with the community and the state ---

MS MOORE Excuse me It's not ---

MS BRADSHAW --- you have to be able to ---

MS MOORE You will be able to say it when we get to that part That's not a point of clarification

MS BRADSHAW I mean, how can we clarify what he's talking about when we have not reviewed the data in a timely manner?

MS MOORE It's not a point of clarification for tonight's presentation

MS BRADSHAW I mean, it's just -- it's just ---

MS MOORE You can say that in ten minutes if you will just follow the agenda

MS BRADSHAW Okay, I just want to put it in now, because in order to have an intelligent conversation about this, we need to be able to look over the information

MS MOORE Do we have any more points of clarification? It's not that the community will not have time to have comments, but this agenda for tonight states this time is for points of clarification, and then we will begin public comments Are there any more points of clarification for Steve Offner's presentation tonight regarding the Proposed Plan Cleanup Alternatives for Dunn Field? Mr Tyler, do you have a point of clarification?

MR TYLER Yes, ma'am

MS MOORE Okay

MR TYLER Point of clarification You referred to a historical record as where you got all the information Is that correct?

MR OFFNER That's correct

MR TYLER And that's to the best of your knowledge, this historical record is -- how should I put this -- a hundred percent facts?

MR OFFNER It's based on the Administrative Record for Dunn Field, which is a collection of a number of studies and information -- Remedial Investigation, the Feasibility Study, all those pieces of factual information of, validated data that was used to make these decisions

MS MOORE Do we have any more points of clarification regarding the presentation tonight on the Dunn Field Proposed Plan for the Memphis Depot? Points of clarification from the information that was in the presentation that we received tonight from Steve Offner from CH2M Hill? (Brief pause)

PUBLIC COMMENT PERIOD

MS MOORE If there are no other clarifications, the Public Comment Period began May 8, 2003, and it will end June 6, 2003 You can review the Proposed Plan at the Depot's three Information Repositories, which are located at the Cherokee Library on Sharpe, the Memphis Depot's Community Outreach Room or the Memphis/Shelby County Health Department We have copies of the Proposed Plan available for anyone tonight if you would like to take a copy tonight As I stated earlier, responses to all comments made during the 30-

day Public Comment Period will be reviewed and considered by the Defense Logistics Agency as well as the state and federal regulators, who are EPA, the Environmental Protection Agency, and TDEC, the Tennessee Department of Environment and Conservation, before the Preferred Alternative for Dunn Field is finalized, and the Record Of Decision.

Responses to all comments will be provided in what is called the Responsiveness Summary as part of the Record of Decision documenting the Selected Cleanup Alternative for Dunn Field The Record of Decision will be available for review in the three Information Repositories once it has been signed, and that is expected to occur this fall

The community has four ways to comment during this 30-day Public Comment Period that began May 8th and will end June 6th You can provide your verbal or written comments tonight We have a transcriptionist here that's recording your comments Or you can record your verbal comments on the Depot's Environmental Information Line at 544-0617 You can email your comments to COMREL at DDC, dot, DLA, dot, MIL (COMREL@DDC DLA MIL), or you can send written comments by fax or mail to The Defense Distribution Center, Memphis, BRAC Environmental Coordinator, 2163 Airways Boulevard, Building 144, Memphis, Tennessee 38114 The fax number is 544-0639

Notices of the Dunn Field Proposed Plan Public Comment Period and meeting were placed in the Memphis Commercial Appeal, the Tri-State Defender and the Silver Star News

We would now like to begin the public comment meeting by inviting anyone who wishes to make a comment tonight to come to the standing microphone If you will please state your name before you begin your comments, and speak clearly so the transcriptionist can accurately record your comments

You may approach the microphone at any time and make as many comments as you like However, we ask that you limit each individual comment to a maximum of five minutes to allow everyone an opportunity to speak

We will be timing your comments and we'll show the card We will hold up numbered cards to show the time remaining And we thank you for the cooperation of sticking to the agenda to allow time for clarification and then comments

Tonight is for comments on the Preferred Cleanup Alternative for Dunn Field If you have other general questions -- comments related to the Depot's overall environmental program, we ask that you save those for another time Our next scheduled Restoration Advisory Board Meeting is June 19, 2003 here at the South Memphis Senior Citizens Center at 6 00 p m

Now I would like to open the microphone for comments, and please remember that your comments will not be answered tonight They will be recorded and be made available in a Responsiveness Summary at the end of the Public Comment Period Thank you for your cooperation, and the microphone is now open for comments

MR WILLIAMS I guess I will start it off Mondell Williams The question that I wanted to know that at any point before the restoration started on Dunn Field was the community or the employees of the Defense Depot -- at any point was the environment dangerous to them or the community or was the contamination in the water of such that it would harm the vegetables, the flower beds or contaminate the soil? And those are my questions

MS BATES Betty Bates, Restoration Advisory Board Member My question is In pumping the air into the aquifers to pull the vapors up, how would that not spread the contaminants further? How would you stop that from exposing other areas that's not contaminated?

And my second question is The cost for cleanup of the water -- groundwater, one was $14 8 million for Groundwater 2 Groundwater 3 had $8 8 million, and Groundwater 4 had $9 1 million This cost is per month, year? What time frame? And could you put a time limit on that? I see Turpin going like it might be ---

MR BALLARD I'll talk to you after the meeting

MS BATES Okay, because I would like to know what time frame was this money allotted for?

MS MOORE The floor is still open for public comments If you have any comments that you would like to be a part of the Responsiveness Summary -- to be put on record, the microphone is still open

MS BRADSHAW I would like to take this time to make a comment about not having adequate enough time to review the plan And I put forth a proposal to extend the comment period so the community can look at each plan and learn the information. And also look at the cost and reward ratio of each plan to see what are some of the setbacks and what are the pluses, too And also to be able to offer other plans if these are not the plans that the community would like

As far as disseminating information, this is a low-income community You do not send CD-ROMs in the mail at the last minute and think that people have computers in their home to be able to look at this information So, how is the information disseminated and how it came late? I'm sure it took you more than a week to put this information together So, it would be beneficial, as a working relationship for the community and this Board, to work along together to get the health affects down to a minimum from these volatile organic compounds We would have to work together Because our health is at risk These are people's lives This is not just data

MS MOORE The microphone is still open for more comments We appreciate your input The comments will be recorded and they will be reviewed and considered by the DLA, EPA and TDEC Responses to all the comments received from the

30-day Public Comment Period, which began May 8th and will end June 6th, will be provided in a Responsiveness Summary as part of the Dunn Field Record of Decision, which is expected to be completed this fall The microphone is still open for public comments

MR TYLER Stanley Tyler I have several comments I was trying to wait until the bitter end, but I'll try to be brief The first comment About this historical record The only thing historical about Dunn Field on the record is we all know that it was a dump And at a dump -- you never know exactly what was put, when it was put and how much was put Case and point, Hollywood Dump So we just can't say with historical certainty that we know what's there and how much is there and when it was put there That's the first comment

The second comment about these connections or fissures I was at a seminar, and they explained to me the fissure or connections are openings between clay aquifers Now, exactly how many? And where are they and the length and width of them? You know, like, are they three feet in diameter, six feet, eight feet? That has not been discussed, and I would like to make that comment I would like to know the diameter of the openings or the fissures or the connections so we know what monster we're dealing with

And, thirdly, I know it's already been asked, but I want to ask it again. This is an entirely large amount of information to consume, and one 30-day Comment Period is not enough And hopefully I'm the second person to ask that we would like a second 30-day extension so we can comment on this properly Because this is a lot of information I've been to some of those websites And when you get on those websites, you have to have time to sit down and go through that information And it's a whole lot of information on the website, and I urge everyone to go home, whenever you have some time, go to the library and spend at least two hours looking at those websites Because this is technical information, complicated information, and it takes

time to formulate the proper questions about what you want to ask and how you want to ask it

Because, bottom line, this is drinking water You can't replace drinking water Jackson, Tennessee found that out when the electrical pump broke -- had to boil water Now, I'm sure MLG&W (Memphis Light Gas & Water) is concerned about this But I trust MLG&W is going to do the right thing But the citizens have to verify by doing your homework to make sure that the information that is given to you is trustworthy and they're telling you the truth I'm not saying anybody is not telling the truth It's like the United States and Russia We trust the Russians are destroying their nuclear weapons, but we have spy satellites flying over Russia to verify they're doing what they're doing So now we trust CH2M Hill is doing the right thing We want the citizens to verify that they are doing the right thing Thank you

MS MOORE We appreciate your input As I said, responses will be received during the 30-day Public Comment Period and will be addressed in the Responsiveness Summary The ad for the Public Comment Meeting was inserted in The Commercial Appeal, Tri-State Defender and the Silver Star News as the time for this comment period from 6 00 until 7 30 p m We will be available here until 7 30 p m to honor our notice that was inserted in the paper So the floor is still open for comments That's what was stated

MS PETERS Johnnie Mae Peters I'm concerned when all of the studies have been finished, that we are getting this information here today -- will there be any danger of any chemicals coming out into the air harming the community? That's what I'm concerned about You get the data you -- maybe ordinary citizens might not understand all what you are talking about the chemicals But what I'm trying to find out with all the studies that has been done over the years and with all that -- when it is finished, how will it affect the health of people who live in this community?

MS MOORE Again, we'll be here until 7 30 p m , as it has been announced, for the Dunn Field Proposed Plan Public Comment Meeting We will continue to take

comments until 7 30 p m If you have a comment, feel free to come to the microphone Your comments will not be answered tonight TDEC, EPA and DLA will prepare a Responsiveness Summary and incorporate your comments They can be received verbally on the Depot's Environmental Information Line at 544-0617 You may email comments at COMREL at DDC, dot, DLA, dot, MIL (COMREL@DDC DLA MIL)

You can write your comments and mail to the Defense Distribution Center, Memphis, 2163 Airways, Building 144, Memphis, Tennessee 38114 Or you can fax your written comment to 544-0639 or you can make your comment between now and 7 30 p m at the microphone

MS BROOKS Peggy Brooks, RAB member, 1924 Hays Right across from Dunn Field is my residence, and I'm very interested in asking -- I really want an answer I'm really sincere about getting a good answer For those of us who reside right across the street from Dunn Field, is there the possibility that our homes can be bought or we can be relocated? Basically, my house has lost value I don't even have a fraction of what I paid for it Will that be taken into consideration? Is there some kind of financial remuneration for those of us who live directly in that area right across from Dunn Field who, unknowingly, bought homes? Had we known, we would not have done it And many of the residents are elderly, retired, homes paid for, on Social Security, and Medicare They're not able to relocate themselves Putting a human face on it and a heart and soul to it, I really believe that we should be considered, especially those people who live right across the street Thank you

MS MOORE You can respond via email at COMREL -- C-O-M-R-E -L -- at DDC, dot, DLA, dot, MIL (COMREL@DDC DLA MIL) You can respond via fax at 544-0639 You can leave your comment on the Environmental Information Line at 544-0617 or you can comment within the next 20 minutes here at the microphone and have it recorded Your comments will be responded to in a Responsiveness Summary The ad was inserted in The Memphis Commercial Appeal, Tri-State Defender and Silver Star News for the Public

Comment Meeting and presentation tonight from 6 00 to 7 30 p m And copies of the Proposed Plan are available for your review tonight

MS BRADSHAW I'm sorry What's your name again?

MR OFFNER Steve Offner

MS BRADSHAW After adequate enough time to go over this information, would the community have time -- would -- I would like for it to be possible that Steve come back so we can have intelligent dialogue about all the processes after adequate enough time to go over this technical information that takes people years to get degrees for And to understand what we're exactly dealing with, how these vapors will be released or how -- if any exposure would happen to nearby residents and what concentration and what does that mean for health

MS MOORE We appreciate your input All comments were recorded They will be reviewed and considered by DLA, EPA and TDEC The written responses, oral responses or comments made tonight during the 30-day Public Comment Period will be provided in a Responsiveness Summary as part of the Dunn Field Record of Decision which is expected to be completed this fall
Our next Restoration Advisory Board meeting is June 19, 2003 here at the South Memphis Senior Citizens Center at 6 00 p m

Copies of the Proposed Plan are available here tonight Feel free to take some to your neighbors Feel free to take copies with you They are also available on CD-ROM, at the Depot's Information Repositories, which are located at the Cherokee Library, the Memphis/Shelby County Health Department and the Depot's Community Outreach Room However, hard copies are available tonight If you would like to take them back to your community, they are available tonight The microphone is still open for 15 minutes for comments on the Dunn Field Proposed Plan

MS BRADSHAW I would like to ---

MS MOORE Please wait a minute Hold on Could the audience refrain until one more comment? We need to be able to hear, and the court reporter needs to be able to hear The microphone is open I believe for eight more minutes

MS BRADSHAW I would like for an itemized budget of showing how much money is going to what and to who and how each dollar is going to be spent

MS MOORE The Public Comment Meeting will be over in five minutes If you have any more comments regarding the Dunn Field Proposed Plan, you can either voice your comments tonight at the microphone so it can be recorded and your answer will be addressed in the Responsiveness Summary

You can either email your comments at COMREL at DDC, dot, DLA, dot, MIL (COMREL@DDC DLA MIL) You can leave your comments verbally on the Depot's Environmental Information Line at 544-0617 You can mail your comments to Memphis Depot Defense Distribution Center, 2163 Airways, Building 144, Memphis, Tennessee 38114

You have approximately five minutes to comment tonight during this Public Comment Period that began May 8, 2003 and will end June 6, 2003. Thank you We appreciate your input (Brief pause)

MS MOORE We have another comment here, Ms Brooks She needs to be heard by those in attendance as well as the transcriber Your attention, please, for Ms Brooks

MS BROOKS Very briefly I'm aware of our time constraint I would just love to have a statement as to why -- and I know I've asked this before, but I really want it personally done, realistically done, as to why the government would allow homes to be built right across the street from Dunn Field?

Somebody knew what was in that area Why was it allowed? Why were contractors allowed to even build homes, and then for years, decades and decades not allow people to know? So this really goes back to my original comment concerning residential removal, replacement, relocating us That's what I'm really interested in Because I really feel since we have been done such a horrible disservice those of us closest to Dunn Field really should be relocated, financially reimbursed, however it is to be put I do thank you (Brief pause.)

MS MOORE Thank you for your attendance and your input The Dunn Field Proposed Plan Public Comment Meeting has ended You can continue to respond via email at COMREL -- C-O-M-R-E-L -- at DDC, dot, DLA, dot, MIL -- M-I-L (COMREL@DDC DLA MIL) You can voice your opinion or your comments on the Depot's Environmental Information Line at 544-0617 You can write your comments or fax them in at 544-0639, mail it in to the Memphis Distribution Center, the Memphis Depot, 2163 Airways, Building 144, 38114

You have until June 6, 2003 to submit your comments We thank you for your attendance, your cooperation and your input The meeting is adjourned.

(Whereupon, at approximately 7:30 p.m. the meeting was adjourned.)

NEXT MEETING: Restoration Advisory Board Meeting
THURSDAY, JUNE 19, 2003
6:00 P.M.

Attendance List

Restoration Advisory Board Members

Mr Mondell Williams	Community Co-Chair
Mr John DeBack	Interim Facility Co-Chair
Mr Turpin Ballard	Environmental Protection Agency
Mr Jim Morrison	Tennessee Department of Environment and Conservation
Mr Reginald Eskridge	Citizen Representative
Mr Ulysses Truitt	Citizen Representative
Ms Johnnie Mae Peters	Citizen Representative
Mr. Stanley Tyler	Citizen Representative
Mr Jim Covington	Depot Redevelopment Corporation (DRC)
Mr Torrence Myers	Memphis Light, Gas & Water
Ms Peggy Brooks	Citizen Representative
Ms Betty Mills Bates	Citizen Representative

Others in Attendance

Ms Marquita Bradshaw	Defense Depot Memphis Tennessee/Concerned Citizens Committee (DDMT/CCC)
Ms Kim Bridges	Citizen
Ms Dorothy Mathis	Citizen
Mr Chee Chen	City of Memphis
Ms Esther Quisdale	Citizen
Mr Michael Dobbs	Defense Distribution Center (DDC)
Ms Jackie Noble	DDC
Mr Bill Kelley	DDC
Ms Ygraine Gula	DDC
Mr David Nelson	CH2M Hill
Mr Steve Offner	CH2M Hill
Mr Bruce Railey	U S Army Corps of Engineers (Huntsville)
Ms Alma Black Moore	Frontline Communications
Ms Keren Adderley	Frontline Communications
Mr Benjamin Moore	Agency for Toxic Substances and Disease Registry

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