



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 910

MEETING TRANSCRIPTION**The Former Memphis Depot****Restoration Advisory Board****September 20, 2007****1620 Marjorie Street****Memphis, Tennessee**

The Restoration Advisory Board (RAB) meeting was held at 6:00 p.m. on September 20, 2007 at the South Memphis Senior Citizens Center located at 1620 Marjorie Street, Memphis, Tennessee. The attendance list is attached.

WELCOME AND INTRODUCTIONS:

MR. DOBBS: Okay, we're going to get started. Good evening. My name is Mike Dobbs, the team leader for the Environment Safety Office at the Defense Distribution Center. I'm the co-chair of the Restoration Advisory Board. On behalf of DLA and the Base Realignment and Closure BRAC Team, I would like to welcome everyone to the meeting this evening.

Tonight we have some new faces with us. One of them is behind me, Ms. Stacy Umstead. She is a public affairs specialist for the DDC. Many of you remember Jackie Noble. She has taken another job in Washington and has moved on.

I also want to introduce some new people that's going to be our community relations consultant from The Vandiver Group. With us tonight we have Ms. Kelly Ferrara.

MS. FERRARA: Good evening.

MR. DOBBS: She's the senior vice president with the company.

We have Laura Lock. She's a team leader.

And we have J.J. Goldman, senior associate.

MS. GOLDMAN: Good evening.

MR. DOBBS: You already know Tom Holmes at the table there with e²M.

He's our contractor responsible for the restoration underway. Tonight Tom will give us an update on where we are and where we're going. Beside Tom is Michael Perlmutter. He is with CH2M Hill. They are the ones that did the design for the projects at the Depot. You all know Turpin (Ballard) is, here; he's part of the BCT. And as with all this change, we have a new player, Jamie Woods from TDEC. He will be replacing Evan Spann who is going to Nashville. So, again, progress moving on.

Again, as we go through the meeting tonight, there's posters around the board that we'll use, and after the meeting, take a moment to look at the posters and talk to the technical team and we'll go over them with you. A reminder as we go through the presentation, if you can jot yourself any questions you have and hold those questions

until after Tom's presentation, we'll address all those questions you have. With that . . .

REVIEW AND APPROVE AGENDA:

MR. WILLIAMS: My name is Mondell Williams. I would like to welcome everyone to the October (sic) the 20th meeting. And has everyone received an agenda this evening? (Brief pause.)

MR. WILLIAMS: Has everyone reviewed it for corrections or anything they would like to make or add anything? (Brief pause.)

MR. WILLIAMS: If not, can I get someone to approve the agenda?

MR. TRUITT: So moved.

MR. WILLIAMS: Second?

MR. BALLARD: Second?

MR. WILLIAMS: I've got a second. All in favor?

THE BOARD: Aye.

MR. WILLIAMS: Any opposed? (Brief pause.)

MR. WILLIAMS: Abstained? (Brief pause.)

MR. WILLIAMS: So moved. Agenda approved.

OLD BUSINESS; COMMUNITY RAB HOUSEKEEPING ISSUE

MR. WILLIAMS: Old business. Does anyone have any issues they would like to bring up on old business? (Brief pause.)

MR. WILLIAMS: If not, I would like to make a statement about a couple of letters that was going back and forth to Mr. Dobbs and Mr. Tyler. And as I told Mr. Dobbs, I really appreciate the dialogue him

and Mr. Tyler made on reference to the changing of the public relations, and I told him at one time a long time ago the dialogue was so minimum, but at that point it was very good, and I would like to thank him for that. Any more old business? (Brief pause.)

NEW BUSINESS; ENVIRONMENTAL RESTORATION UPDATE

MR. WILLIAMS: Any new business? (Brief pause.)

MR. WILLIAMS: Okay, so we'll move right along. Oh, we're going too fast. Okay, on the new business, Environmental Restoration Program Update.

MR. DOBBS: Tom.

MR. HOLMES: Hello, I'm Tom Holmes, the project manager with e²M, and I'll go over our Environmental Restoration Update to let you know what has been accomplished since we were here I guess in April. I'm going to talk about -- there are three areas at the Depot where we're doing environmental cleanup. I will talk about the activities with each of those. That's the Main Installation and Dunn Field source areas where we're performing Remedial Action. And then the -- I'll just try and talk loud. If you can't hear anything, let me know, and I will try and speak a little louder.

So, the Main Installation and Dunn Field Source Areas where our Remedial Action is underway, and the Dunn Field Off-Depot groundwater where remedial design -- we are still in the Remedial

Design phase and about to wrap that up, and then we'll begin Remedial Action. Also, we're in the process of preparing a Five-Year Review for all of the Memphis Depot. I'll speak to that, and then we'll go over the schedule for the next steps over the next few years.

On the Main Installation, the Remedial Action has three main components that are underway: Enhanced Bioremediation Treatment, and Monitored Natural Attenuation, and Land Use Controls. The Enhanced Bioremediation Treatment, or EBT, and the Monitored Natural Attenuation, or MNA, both are addressing solvents in the groundwater, and both of them are basically using the same process, physical and biological processes that reduce the solvent concentrations over time. In the treatment areas, where concentrations were higher, we've enhanced that through the enhanced -- the biological activity through injection of lactate that feeds the bacteria and helps to speed up the breakdown. And then in the areas where concentrations are lower, we are using the MNA where we are monitoring the action.

Then the Land Use Controls are in place to restrict activities on the site to ensure the protection of human health over the long term. Here are the two areas, treatment area -- well, this is the Main Installation, Airways here, Dunn Road here, here is Dunn Field up here (indicating). The two areas where we're treating are on the southwest corner. Treatment Area 1 is in the Barnhart Crane

property, and then Treatment Area 2 in the southeast corner next to the golf course is behind the new police station.

Over the last year, in September of 2006, we completed construction and began sodium lactate injections with 37 injection locations in Treatment Area 1 and 12 in Treatment Area 2. We've completed -- in December last year--we completed the first quarterly groundwater sampling. We spoke to those results in April. And then in March we completed the second quarterly groundwater sampling event. I will talk about that in a little bit. And we are continuing with quarterly groundwater sampling since that time.

There are "Operating Properly and Successfully" Criteria, and Operating Properly and Successfully or OPS is a term that's used for the federal facilities that address whether the Remedial Action was installed as designed and is operating in a manner that will achieve the Remedial Action objectives. The Operating Properly criteria for the Main Installation that addresses whether it was installed as designed is -- or that address these three issues: Well installation, and we completed installation of the injection wells and performance monitoring wells as planned. The lactate distribution in the injection areas and lactate is present in monitoring wells in the areas. And the injection volumes, which we change some over time, we have increased them in some areas, but we have been able to meet the planned injection volumes.

For Operating Successfully criteria, which deals with progress toward the remedial goals, there are these three: Creation of anaerobic conditions, which we are continuing to spread anaerobic conditions throughout the treatment area, and that they are maintained, which they have been, in the areas that they are created, and the concentrations of the parent compound, PCE or Tetrachloroethene, and TCE Trichloroethene. But they have decreased and they have declined in both of the treatment areas.

All three of these activities are monitored through the quarterly groundwater monitoring. For the MNA areas, we've recently installed some additional monitoring wells to expand our network. In April we installed 27 additional wells and completed semi-annual groundwater sampling events. We're still evaluating the MNA criteria, which are that contaminant levels reduced as expected, that the expected rate of contaminant loss within the groundwater plume is established, and that the plume is stable or retreated.

So, over the first year of Remedial Action, we completed the biweekly injections. We will continue with monthly injections over the next year, which is a part -- as part of -- as in the Remedial Design. We perform quarterly monitoring, which we'll continue to do over the next year.

To address the Land Use Controls, we perform an annual site inspection. We have done that since 2005. We have completed the

latest one in July of 2007 and sent it to EPA and TDEC, as required, and we didn't find any deficiencies in that. And that addresses whether there's any residential land use or installation of drinking water wells, and none of that is going on at the Depot. And we expect to achieve cleanup goals in the EBT areas after the second year of injection, in 2008, and to achieve the cleanup goals in the MNA areas in 2015.

So, now the second area, the source areas of Dunn Field. We completed the Remedial Design in April of 2007, and that was approved -- reviewed and approved by EPA and TDEC. We conducted a public briefing on this document in May. And then the source areas Remedial Action is being done in a phased approach to reduce the chlorinated volatile organic compounds, the solvents, in the subsurface soils prior to treating the groundwater. And you see a drawing here of the conceptual model, and the way we got -- so here is Dunn Field, the disposal sites where material was released and leaking into the groundwater.

The first thing we're going to do is the Fluvial SVE to pull the vapors out of the Fluvial SVE to pull the vapors out of the sand zone in here (indicating), above the groundwater. Then we're going to do Thermally-Enhanced SVE in the Loess here (indicating) and we're also -- in some isolated areas where it's small and not very deep we're going to just dig out the areas through

excavation with off-site -- transportation and off-site disposal.

And then finally we'll inject the ZVI into the groundwater.

The three areas we're going to work at -- here is a map of the Depot with the Main Installation and Dunn Field, Person Avenue and Hayes Road. The area here in the photo where we're going to work is over here on the northwest side, and we're doing it in four areas, as shown here TA1, 2, 3 and 4, and then the railroad tracks and the MLGW substation up here in the corner (indicating).

So, we've begun the Fluvial SVE. We completed construction in July. We have installed the fenced treatment compound, seven SVE wells and ten vapor monitoring points. We installed conveyance piping from each of the SVE wells into the treatment compound. With SVE, air is pulled through the soil to an extraction system that collects and safely removes the CVOCs. The air is treated with carbon and sampled to ensure compliance with Clean Air Act requirements and the operating permit, and condensate is collected for disposal via the existing groundwater recovery system.

The system began operating in July -- on July the 25th, and we anticipate operating the Fluvial SVE system for five years. The system -- we encountered some materials during installation of SVE wells and conveyance piping in Treatment Area 3. Some crushed drums and black tar-like substance were found and were sampled and analyzed for full EPA Target Compound List

and Target Analyte List, and the results show that the material was a heavy hydrocarbon, like a lubricating compound or grease.

We removed the drums and impacted soils that were within the trench and in the well area, collected samples for disposal, and disposed of the materials as non-hazardous waste at the Tunica Landfill. There is a further area that is going to be addressed as part of the Loess excavation, transportation and disposal, where we'll go ahead and dig up the remaining (materials) from our trench.

It looks like it's an area about 50 feet by 30 feet that was covered by a soil pile previously, and we will excavate all of that for off-site disposal. We think it's at a depth -- it goes to a depth of just a few feet. We will collect -- just like all of the other excavations we're doing, we collect confirmation samples at the base and sides of the excavation to determine that we have met the cleanup standards.

For vapor treatment, the extracted vapors had high CVOC concentrations to begin with, and that was decreased by a factor of 50 in the first week, from 10,000 to 200 parts per million. Air monitoring results indicated that the carbon filter units had reached capacity, and the system was shut down on August 1st. We pulled out a little more than we thought we would at the very beginning, and we had about --we had two 2,000-pound carbon vessels. We reached the capacity that they could hold, and then so we shut the system

down, and then we replaced the carbon filters on August the 13th and restarted the system. We were taking air monitoring with field monitoring equipment and collecting samples for laboratory, and the results showed that the discharge through our GAC after treatment was well below the levels established by the operating permit from the health department.

So, now we'll move on to the other -- the second phase of the source areas Remedial Action, the Loess and groundwater. EPA and TDEC are reviewing the final LOESS/groundwater Remedial Action Work Plan. Approval is expected later this month. Following approval, the work plan will be in the Information Repositories. The first step will be limited excavation, transportation and disposal. And construction of the thermal enhanced SVE system, we expect to start that in the latter part of October. So, that's it for the source areas.

The third area then that we're doing Remedial Action is the Off- Depot, which is to the west of Dunn Field. The map -- here is the map here of the Dunn Field plume. So here is Dunn Field (indicating). Here is the boundary (indicating). These are the source areas where we're doing the thermal treatment and then the ZVI. And then the plumes going off site towards the -- across the railroad tracks to the -- this is the MLGW substation.

So, EPA and TDEC review the pre-final Off-Depot

Groundwater RD in September. We expect to submit the final Off-Depot Groundwater RD in November, and then to have the final approval in March of 2008. Upon approval, RD will be available in the Information Repositories.

There have been some changes from the ROD to the Off-Depot Groundwater RD based on new information that's been collected since the ROD was signed in April of 2004. The BRAC Cleanup Team determined that the ZVI Permeable Reactive Barrier which was planned was not the most effective remedy. We have done -- we've expanded the groundwater monitoring network significantly since the ROD, and we have done studies of the field trial for installation of the Permeable Reactive Barrier. That's lead to these additional findings.

The clay surface is highly variable beneath the groundwater, makes it difficult to install, to key the wall into the clay to make sure there is no groundwater flowing under it. There's high groundwater velocity in the area where we're going to put the barrier, which means the barrier would have to be a lot thicker and more difficult to install.

There are construction challenges that were identified during the field trial, and the groundwater plume had gone further than it was thought to have when we did -- when the ROD was signed, so that additional technologies were going to be required down gradient

of the PRB.

So, with all of those issues, we took a step back and thought is this the best approach, and decided it wasn't, and decided that an Enhanced Bioremediation Treatment would be better and that's what's proposed as the remedy for the Off-Depot plume.

Part of that reason -- there are a number of reasons for it: The ease of implementation, that you can put the monitoring wells pretty much wherever you want to, or the injection wells to inject the substrate. And it's been successfully implemented on the Main Installation.

So, that change in remedy though requires a Revised Proposed Plan and Amendment to the Dunn Field ROD, which requires a public comment period as well.

The Dunn Field Revised Proposed Plan will be a synopsis of the changes DLA proposes to the selected remedy. The public comment period follows agency approval of the plan. There was a proposed plan, you may remember, I think in 2003 that was -- that had a public comment period prior to the original ROD that would go through the same steps again. Then the ROD amendment is the official documentation of the remedial alternative and selection of revised remedy. The ROD contains -- the ROD Amendment contains information used to determine that a change is necessary and the remedial alternative evaluated, that the selected remedy for achieving

the cleanup goals will protect human health and the environment, and it will contain responses to any public comments. EPA and TDEC are reviewing the Revised Proposed Plan and the draft ROD amendment now. We'll submit the Final Proposed Plan to EPA and TDEC for review, and then the public comment period to follow approval.

We'll process the Dunn Field ROD Amendment through DLA, EPA and TDEC. All agencies will have to sign it, and approval is currently expected in April of 2008. Upon approval, the ROD Amendment, like all the other documents, will be in the Information Repositories.

Finally, the final topic: Five-Year Review, that's underway now. The Five-Year Review requirement applies to Remedial Action selected under CERCLA, or Superfund sites, where the remedy does not allow for unrestricted reuse. It's required every five years after the start of Remedial Action.

The pump and discharge system at Dunn Field installed as an Interim Remedial Action on January of 1998, there was a Five-Year Review completed in 2003, and now we're in the process of completing the second review. DLA is responsible for conducting the review and providing the information to EPA and TDEC and the community.

The purpose of the Five-Year Review is to determine if the

Remedial Action continues to be protective of human health and the environment, and meets the objectives identified within the Record of Decision.

The process includes notifying regulators, community and other stakeholders; and that was done -- has been done through letters and sent out to the RAB members and to elected community leaders in the Memphis area, and through a notice that was put in the EnviroNews that was just sent out, and through this meeting.

We collect information via site inspection, document review and Stakeholder interviews, technical evaluation and conclusion, and then prepare and deliver the review report to the agencies and the community. Like other documents, the review will be in the Information Repositories.

Communities involved -- community involvement is a requirement in the Five-Year Review process, and now it's been addressed here through notifying the community of the start of the Five-Year Review, accepting comments on the selected remedies, informing the community about the review process, notifying the community upon completion, and placing the report in the Information Repositories.

This Five-Year Review is consistent with past practices of the Depot and with the public mission to promote human health and the environment, and to comply with federal and state regulations.

All the remedies for the Depot will be reviewed as part of the Five-Year Review. The Main Installation Record of Decision approved in 2001 contained these remedies:

Excavation, transport and off-site disposal of surface soil containing lead. That was done about the same time as the ROD was signed so that reuse of the property at the Depot could move forward. Deed restrictions and site controls on residential land use, day care facilities, drilling and groundwater use, and site access. All those have been implemented and are evaluated annually as part of the inspection I mentioned earlier.

Enhanced Bioremediation of Chlorinated Volatile Organic Compounds, which is the EBT we mentioned, and the long-term Groundwater monitoring, which is the Monitored Natural Attenuation that's underway. At Dunn Field a Record of Decision was approved in 2004. It included excavation, transport and off-site disposal of soil and material contained within the disposal site. That has been completed. The use of soil vapor extraction to reduce VOC concentrations in subsurface soils, and that is one of the things we talked about, the Fluvial SVE that's underway now, and the Thermal Enhanced SVE. Injection of zero-valent iron within Dunn Field to treat the CVOCs, that will be the ZVI injections that will follow the SVE. In this -- well, first, the installation of the Permeable Reactive Barrier, which is what we're looking at changing

now. So that was the remedy that is currently applicable.

And Monitored Natural Attenuation and Long-Term Monitoring of the groundwater. And then finally, implementation of Land Use Controls.

The Five-Year Review, as I said, is underway. To comment on the protectiveness of the remedy or the Remedial Actions at the Depot, please contact the Community Relations Line at that number. So, now we'll go to the next steps.: planned activities of the Depot over the next few years.

The remainder of 2007 is to continue the Main Installation RA, complete the Loess/Groundwater RA Work Plan, and continue the Dunn Field Source Areas Remedial Action with the Fluvial SVE and the limited ET&D and Thermally-Enhanced SVE in the Loess, and to complete Revised Proposed Plan and the public comment period.

In 2008 we expect to complete the Dunn Field ROD Amendment, complete the Five-Year Review, continue with the Main Installation RA and the source areas RA, complete the Off-Depot Groundwater RD and conduct a public briefing for that document, and begin the Off-Depot Groundwater Remedial Action. That's a repeat of the Five-Year Review. We expect to receive the Operating Properly and Successfully determination which has to be met -- provided by EPA on the Main Installation based on

their review of our progress. Complete -- that allows us to move forward with the Finding of Suitability to Transfer the remaining property on the Main Installation, and then we'll continue public involvement activities.

In 2009, continue the Long-Term Monitoring, which will be done with the -- expect to be done with the injection for the Enhanced Bioremediation Treatment installation. We'll continue the Dunn Field source areas RA, continue the Off-Depot RA and the public involvement.

And then in 2010 we are scheduled to go for OPS determination from the Dunn Field Source Areas and Off-Depot Groundwater RAs, and receive EPA approval of the Preliminary Closeout Report, which is following completion -- implementation of all Remedial Action, complete FOST No. 6, which is for the remaining property at Dunn Field, and then continue our public involvement activities. And that's the update. I would be happy to try to answer any questions.

MR. WILLIAMS:

Any questions?

MR. TYLER:

All right, Mr. Tyler.

Stanley Tyler. Sorry about coming in late. That was quite a bit of information to digest, and my first question was you found some more 55-gallon drums on Dunn Field?

MR. HOLMES:

We found some crushed drums.

MR. TYLER:

How many?

MR. HOLMES: Well, they were crushed, and so we didn't really count them, and they were in a trench area that we dug when we were digging the conveyance piping for our SVE system, and they were within an area in the trench about 50 feet long, and we only -- of course, the trench was only a couple of feet wide. What we're going to do now is a geophysical survey to determine the extent, and then we'll go back out there with a backhoe, and we'll dig up the rest that's there. I don't have a number. None of these were, you know, full drums. They had all been, I guess, used, the material taken out of them, crushed and then buried as part of a past disposal practice.

MR. TYLER: You said they -- are you sure they weren't full or is that just your best guess?

MR. HOLMES: Well, they were crushed, so they couldn't have been full. I mean, there were no ---

MR. TYLER: It was a dump, right, and when you dispose of stuff, you don't know what you -- you know, what you put in the ground. Is that not correct?

MR. HOLMES: Well, I do know that, but I know that the drums were crushed, so they couldn't have been full.

MR. BALLARD: Well, they could have been full when they were disposed of and then crushed -- I think what you are getting at, they could have been full of something and then crushed by -- as part of the disposal operation.

MR. HOLMES: Well, I guess they could have, but it wasn't -- I mean, it was this really black, viscous tarry-like material; and so when you dug it up, it didn't look like that stuff that had just been spread everywhere.

MR. BALLARD: Residual.

MR. HOLMES: So, I would think that what was left was residual, because normally if you were going to bury -- I would think if you were going to bury a full drum, you would just bury the drum without crushing it.

MR. TYLER: Then there wasn't any cancer-causing agent, anything harmful to the environment over a long period of time?

MR. HOLMES: There were -- I don't think there were any -- there were no pesticides, PCBs, that kind of thing. There were some semi-volatile organic compounds and a few volatile organic compounds. There were the kind of things you find in hydrocarbons, in tars. There weren't -- you know, it didn't look like -- they weren't solvents like the ones that are in the groundwater. So they were -- you know, I mean, they were hydrocarbons, so they are not safe, but it did -- it looked like it was a lubricant or a petroleum-based material that was disposed of, not some ---

MR. BALLARD: This is in an area we're going to be treating, the Loess in this area.

MR. HOLMES: Yes.

MR. BALLARD: So, in order to do so, the drums they have to be removed, all the disposed material has got to be removed, and then the soil is going to

be treated -- was already planned for treatment.

MR. HOLMES:

Well, all the -- we will do this geophysical, basically a fancy metal detector, to determine the extent of these drums. Go in there with a backhoe, dig them up, put them into a roll off, test them, and then send them off for off-site disposal. Then dig up any stained soil that's under the drum, and then test the soil that's remaining to see if there is anything left. And we're not -- these are not the compounds -- these kind of volatile organics or semi-volatiles from petroleum-based materials are not the kind of things we see in groundwater. I mean, we do have wells in these areas. So it doesn't look like that -- this material would not appear to be the -- what caused the groundwater contamination.

MR. TYLER:

One other question. I noticed a -- I don't know what the proper term is -- tinkering with the remedy, changing of the remedy or using a new remedy.

MR. HOLMES:

The Permeable Reactive Barrier would be a significant change, and that's what triggers the ROD. If it were just a little tinker, not too much, we wouldn't be going through a ROD Amendment and Revised Proposed Plan. But because it's what's considered a fundamental change -- and that's the purpose. So, that is -- and I think we've discussed that we were in the process of making this change, and there will be more information coming out when you get the Revised Proposed Plan, but it is a large change in the Off-

Depot Remedy.

MR. TYLER: Well, my question is: Why don't we have a public hearing instead of a public comment period so we can inform the public that this is a significant change and what direction we are going in so the public can be informed of this rather than just going through a public comment period?

MR. HOLMES:

There will be -- once the proposed -- Revised Proposed Plan is set and we're not making any more changes to it, then there will be -- the public comment period will have a public meeting that will be announced at the beginning of it. So we're thinking in schedules that there would be a 60-day public comment period; about 15 days into it, there would be a public meeting. So then you would have another 45 days after the meeting to provide comments.

MR. TYLER:

And this Off-Depot plume, are we trying to contain it, clean it up or just stop it from coming onto the Dunn Field?

MR. HOLMES:

Well, it's not -- it's not coming onto Dunn Field. There is a little Off-Depot plume up here that's coming onto it that TDEC can address. What we're trying to do -- this is -- most of this plume then, as you can see, is moving off of these disposal sites on Dunn Field. So, the treatment alternative is to -- and what we're doing with our treatment is we're going to cut off the source areas on Dunn Field. That's what all that source areas work is, and then go after cleaning up the plume

Off-Depot. So it's not the Enhanced Bioremediation Treatment as the treatment. It's not a containment remedy.

MR. WILLIAMS:

Mr. Covington.

MR. COVINGTON:

Jim Covington. I just have a similar question. Well, I guess it's the same question I asked last time. In the Soil Vapor Extraction or the Thermal Extraction or any the other removal activities, are there any tents or moon suits or land crawlers or flashing lights or anything that neighbors or tenants are going to be concerned about that we need to prepare them for in advance?

MR. HOLMES:

No, not really. I mean, there will be -- we'll wear the appropriate technology, but we're planning on cleaning up in what's called Level D. So, there will be nothing really more than basic -- a construction outfit. We'll be monitoring the air while we're doing it. They will have respirators available, but we don't really think that -- there's not going to be a lot of material that will be exposed. That's with the excavation.

With the thermal treatments or the, all of this is taking (place) subsurface, which mainly what happens at the surface is the drill rigs that install the materials, the wells to pull out the vapors or borings to inject the ZVI in. So, with that, it's pretty much the same sort of thing we've been doing. It looks like installing wells. So there is not anything new.

MR. WILLIAMS:

Ms. Bradshaw.

MS. BRADSHAW: Okay. I want to go back to the first question he asked about those drums. So, you have not clearly identified the substance?

MR. HOLMES: Well, we -- okay, we haven't identified the -- what the source material was in the drums. We have collected a detailed analysis of the constituents of it through the volatile organics, semi-volatile, pesticides, PCBs, herbicides, metals, and we didn't find anything except the semi-volatile organic compounds and the volatile organic compounds that are common with hydrocarbon materials.

MS. BRADSHAW: Also, you said that you were going to just take a backhoe and dig some more before you do like a metal detector?

MR. HOLMES: We're going to do the metal detector first to see how big an area it is. Then we will go back with the backhoe, which is how we found it initially, and try to excavate it.

MS. BRADSHAW: And then after that, you are going to do what? After you've got everything done, then you're going to go back to your previous plan or ---

MR. HOLMES: Well, yeah. So, we've got to get the metal drums out of the way before we start doing the thermal, and then we will -- so we'll dig out the drums, put them in the roll-offs, test them, and properly dispose of them off-site. Then we'll collect the soil samples to determine that it's clean or at least I think we'll do it for it's clean, other than the CVOCs we're planning on treating with the thermal SVE system

anyway. And then we will backfill the hole, and then we'll go forward with the remainder of our planned cleanup.

MS. BRADSHAW: Okay. Because my concern is I'm hearing heat and petroleum in the same, you know ---

MR. HOLMES: Petroleum will be --the drums will be removed before any of our heat ---

MS. BRADSHAW: Okay.

MR. HOLMES: --- is put into the ground.

MS. BRADSHAW: Seems like whatever possibly could go wrong at the Depot seems to always -- the second question is about the off-site plume. Could you make me understand exactly where that is as far as Airways and ---

MR. HOLMES: All right. Well, this is Dunn Road here. Here is Person here. This is -- this is Menenger here (indicating).

MR. BALLARD: What's the name of the community, Gaslight? Gaslight. So this is MLGW, the substation in here. This is Rozelle.

MS. BRADSHAW: So, that's like in the Cincinnati Street area and Gaslight area by Hamilton High School?

MR. BALLARD: That's further.

MR. HOLMES: Yes, that's further.

MS. BRADSHAW: That's further, okay.

MR. HOLMES: But this is the beginning I think of the Gaslight area in here. This is a residential area beginning at the end of the plume, and these concentrations here, right at the very end, are 100 to 500. So this is

the -- the core of the plume, of course, is in here, and it ends at about where the MLGW substation is, and we've been monitoring, and the plume is fairly stable in this position.

MS. BRADSHAW: Okay. I'm talking about the one that's not connected with the huge -- where is that on the map?

MR. WILLIAMS: At the top.

MS. BRADSHAW: At the top.

MR. HOLMES: Here?

MS. BRADSHAW: Yes.

MR. HOLMES: This apparently is coming down from an area up here (indicating). It goes further this way, and it continues at a low level down across the Depot, but given that there are concentrations are higher here and here, the source is upgradient. Maybe Jamie or Evan, you can ---

MR. SPANN: Evan Spann with TDEC. The plume comes onto the site at the Hayes and Person intersection.

MS. BRADSHAW: Hayes and Person?

MR. SPANN: Yes, and what TDEC has done is over the last two years -- Turpin, correct me if I'm wrong -- we have done two investigations trying to determine where the source of this contamination could be, and in both cases we have not found the contamination. So, we just got data back on our latest investigation. We're evaluating that data. It doesn't appear that the groundwater from the Cintas site -- which is

essentially, due north of the plume you see on the map there, it doesn't appear that that's where it's coming from.

So, we're going to wrap up that report and then evaluate the findings from both of the reports, and then try to find the third location to go look to.

MS. BRADSHAW: Okay.

MR. WILLIAMS: Anyone else?

(Brief pause.)

RAB COMMENT PERIOD:

MR. WILLIAMS: Okay. I guess we'll move along to the comment period for the Restoration Advisory Board. Anyone like to -- Mondell Williams. Just sitting here and listening to everything that's going on, we take so light of what is going on, and we are 12 years into restoration of this Defense Depot, and we are a hundred thousand into spending to restorate this Depot, but for some reason or another I guess they want us to take light of it, and I don't understand.

If there is nothing wrong, why does it take so long? You know, and that's where I'm at. If there is no real hazard to the community, what is taking so long to clean it up? If there is no danger, what is the thing with digging and monitoring wells? And I'm just sort of dumbfounded about it. Like I said, we are 12 years into this restoration, and I think he showed 2015 something we'll be going

on. That's another eight years down the road. So, I'm not really looking for an answer, but somebody might accidentally answer for me, but I'm just dumbfounded. I'm just wondering is it as bad as they say or not. Anyway, so much for that. That's just something I recognize.

MR. TRUITT: Turpin, do you want me to answer that?

MR. WILLIAMS: Okay. Go ahead.

MR. BALLARD: You can give it a shot.

MR. WILLIAMS: Yeah, give it a shot.

MR. TRUITT: Number one, the standards for cleaning up military bases or former military bases or governmental entities is much higher than it is for our civilian counterparts. That's the problem. It's not a problem. It's that the standards are much higher.

MR. BALLARD: Well, not quite. You're being held to the same standards as the private entities are. For groundwater we're not making you clean it up cleaner than drinking water standards, just as we would any other, but part of the problem is that most of the issues with the cleanup, aside from what we're doing at the disposal sites in the source areas, has to do with groundwater. In order to understand the groundwater problem, it takes time to -- it takes time to understand the groundwater problem because you have to install the wells, you have to monitor them over time to get a sense of the dynamic system of the groundwater to get -- understand the extent of the plume.

And I will readily admit that when we did the Remedial Investigation, we collected I think enough information to determine there was a problem and to select a remedy based on what we knew at the time, but additional monitoring has shown us that the -- there was more extensive groundwater contamination.

Now, the groundwater is not being used for drinking right now, but that doesn't mean it's not a resource. And our national policy is to clean up groundwater when we can to restore it to, you know, its beneficial uses. And it takes time to develop, design and implement the remedy, and then it has to work.

So, that's why, you know, it's taking so long. Now, I would love it to take a shorter period of time, but if the results -- if we did it too quickly, people would be, you know, hitting us over the head for not looking at it carefully enough, so.

MR. WILLIAMS: It was just that I was just wondering. I guess the community, the folks here, you know, and I was just wondering.

Any more comments?

MS. BRADSHAW: (Doris Bradshaw is joining in through speaker phone.)

MS. DORIS BRADSHAW: My question is: I hear you over the phone talking about the monitoring wells and moving the monitoring wells, but I want to know what happened to the Cobalt 60 that was in the water, the Gamma and the Alpha, and where is the source of that coming from

if this is not an area where this is produced. Which this is -- we know Cobalt 60 is manmade.

Alpha and Gamma is not something that is nature made. This is something that is manmade. What happened to this? What happened to a lot of the chemicals, and I'm hearing -- what I have been reading is ten chemicals, but in the beginning it was a lot of chemicals at different places.

I want to know what happened to the chemicals, and how did you all go about cleaning them up? Because all of the sudden they mysteriously disappeared. I need those two questions answered.
(Brief pause.)

MR. WILLIAMS: Anybody?

MS. DORIS BRADSHAW: They hear me?

MS. BRADSHAW: They heard you. I don't think they have an answer for it, because there was 360 known chemicals in the Depot and nothing ---

MS. DORIS BRADSHAW: And also, you know ---

COURT REPORTER: I can't hear it.

MS. DORIS BRADSHAW: --- spectrum of chemical done over Dunn Field, and the other thing is, if there is still a leaking source into the groundwater, why in the world are you selling that land? That's the craziest thing in the world. If it's still a source -- it's still something that is draining into the groundwater, and you are trying to get rid of the land.

MR. BALLARD: The land that's being sold, that was just recently sold, doesn't have sources on it, doesn't have groundwater contamination under it.

We're not selling the ---

MS. BRADSHAW: Could it still be something draining from that area onto the other side?

MR. BALLARD: No, ma'am. No, ma'am.

MS. BRADSHAW: You already have sold the land.

MR. BALLARD: No, ma'am, we haven't, but there are no sources on that land draining to the other side or draining down to groundwater, but if -- and I'm just saying if -- in the future there was something that we missed is found, the government is required by law to go back and address it.

MS. BRADSHAW: Is it required or liable?

MR. BALLARD: Liable and required. Liable and required.

MS. BRADSHAW: That's what I wanted to hear.

MR. BALLARD: During the sale, the government gives covenants to the new -- to the buyer that if they find anything subsequent to the sale that's, you know, the responsibility of the government, that they will go back and address it.

MS. BRADSHAW: Okay, thank you.

MR. WILLIAMS: All right. Anymore comments?

MS. BROOKS: Just very briefly to comment I hope. I think that this body and those that are associated within this age group, I think our minds cannot sink so low as to comprehend the damnable, condemnable action of

those types of materials being buried underground, and then the audacity of those home builders to build houses, '48, '49, right after World War II. It's my understanding that a lot of those materials were German, Nazi. Okay. So, the people that be, they're on an expedition. They don't know what they're going to -- it's my understanding -- please, correct me if I'm wrong -- they have no idea the extent of the horrendous mentality and spirituality of somebody who would bring those types of carcinogenic, physically debilitating materials into a neighborhood where people would live. We've got two and three generations of people.

So, it's my understanding that you're on a journey, and we're trying to find out, we really don't know. And as we go, we might have to revamp, redo, get it straight, rethink, because our minds do not function at such an evil level. We're just trying to figure it out as we go. Now, if I am not correct, please, let me know.

MR. WILLIAMS:

Mr. Tyler.

MR. TYLER:

First of all, before my question, I would like to say thank you to Frontline and especially to Alma Moore Black who has worked well with the RAB board, has gave 120 percent of her time and her energy to help us, and especially me, because I have been a headache to her constantly. And the new public relations firm, as you know, I did send a letter out, and it wasn't malicious, but I just want to state the fact that we had a good person, a great person, a dedicated person on

staff, on board who was left out of the process, who will go above and beyond duty to inform the community, work with the contractors, with the Depot and with the community. And when you find a person who will do work for free and often day or night or seven days a week, I just thought that that was inappropriate and it wasn't fair that she wasn't included in the opportunity to be part of the new public relations team.

Now, that's why I sent the letter out, and I'm glad I sent it out, because I wanted people to know that I thought that highly of her. And we found somebody who will work hard help me for free, and that's just what I felt like we should do. So I don't know about the new firm. I have not contacted them, talked with them, but I'm going to be open-minded enough to know that I'm probably going to worry you just as much as I worried Alma. So get used to it. All right, that's that comment on that. And thank Alma very much for her hard and diligent work.

All right, my comment. I notice that on Dunn Field we're changing the -- use the proper term. We are adjusting the remedy. And once before I said Plan A, Plan B, Plan C. So now I'm going to change this is Plan 1-A or Plan 1-A-B or Plan 1-A-B-C. Because, you know, that's why I wanted a public comment period, so we can tell the public we thought about Plan A, and it did not quite get us where we want to go. Now we're going to tweak it to Plan 1-A-B.

And my question is always, what is Plan 1-A-B-C, in case we run into more than what we planned on running into. Because, obviously, you are changing the ROD or adjusting the ROD. And that's just what I was concerned about. Because you might hit something down there that you don't quite know how much it is.

And then the third one is, what is this highly variable clay surface and high groundwater velocity? Does that mean the clay is too thin to be worked with, too thick to be worked with or is it troublesome to work with? Exactly what does that mean?

MR. BALLARD:

Well, I think the term "high variables" means it's not a smooth surface. It's got fissures and depths and, you know, areas where -- which would make it difficult to ensure that you have a properly constructed wall. And if there is a way for groundwater flow underneath the wall, then it preferentially will do that and bypass the contamination -- or a large portion of the contamination would bypass the wall and render it relatively ineffective.

So, the groundwater velocity is -- the issue there is that the faster the groundwater is flowing, the wider the wall, the thicker the wall has to be to give the contamination enough residence time in the groundwater to be broken down by the Zero-Valent Iron.

So, in the most accessible place for installing the walls, the groundwater velocity was such that we would have needed a 12-foot

thick wall to, you know, give it the residence time needed to break it down.

The third issue was that even if we had put the wall in, given what we had discovered in the Off-Depot plume further downgradient, the levels of concentrations were higher than we saw in the ROD, and we still felt we would need to go in and do some additional treatment in that area which originally had been planned for Natural Attenuation.

So, putting all those pieces together, we decided if we have to go ahead and implement another treatment technology down here, downgradient of the wall location, why not just focus on implementing one treatment technology for the whole Off-Depot plume, rather than having one that we wouldn't be sure of getting a good installation and still having to do the second one for, you know, just as long.

MR. WILLIAMS:

Mr. Tyler, before you came, I made a comment about the dialogue that you and Mr. Dobbs had, and I thanked him for responding to your letter, and I appreciate you sending the letter to him to show your concerns.

MR. TYLER:

Thank you.

PUBLIC COMMENT PERIOD:

MR. WILLIAMS: And with that said, is there any public comment period? State your name.

MS. MOORE: Good evening. My name is Alma Moore. I served as your community relations specialist for a little more than nine years at the Former Memphis Depot. Frontline Communications hired me as one of their staff in June 1998.

I became an independent subcontractor for Frontline in August of 2004. Frontline abruptly severed ties with the Depot, which was effective May 31st, and we were notified in April of 2007. They gave the Depot and me notice the day before the April 2007 RAB meeting.

My work ethic and moral upbringing compelled me to complete those closeout tasks and avail myself to the community for questions and comments. I performed these duties well past the negotiated closeout fee I discussed with Frontline, which lasted throughout a few weeks in June.

I completed the task and wondered what arrangements were in the works for me to continue the community outreach promised to you, the RAB and the Depot community. I was told qualified people were needed to handle the community relations of the Depot, and firms were contacted for this project. I was not one of those contacted.

I have been a vital figure on the Depot team and have been here during the real serious issues: the chemical warfare material removal project, the paint removal, the lead and asbestos removal, the time when they failed to notify the community immediately when workers became ill on Dunn Field. We were promised, because my family and I am a part of this community, that we will be told immediately of any problems. The failure to do so created confusion and hurt feelings all around. Yet, I was not even considered to remain on the team.

There have been numerous times that I strongly advised contractors to speak with the public and not at the public. Contractors were frustrated by my insistence that they treat my community with respect. I insisted that they prepare their presentations in laymen's terms and without harsh body language. I have been insulted many times. Yet, I persevered because we are dealing with human beings who have a right to be considered about their children, family, homes, jobs, community, neighborhoods, churches, schools, and more importantly, health.

I stand before you on this significant, historic day, September 20th, 2007, a day when thousands of black people converged in a small town called Jena, Louisiana to show all of America that Americans, black, white and browns, will no longer tolerate injustice. Six young black men are being tried as adults for an altercation with

white students at a high school for sitting under a tree that was designated throughout years for whites only. One remains in jail waiting to be sentenced, while the white students involved in this controversy remain free.

Here, in Memphis, Tennessee, we have injustices here at the Depot and everywhere. If this were not bad enough, we have been unable to wrangle the truth about it from the government, and during the cleanup and the design of the Depot, shut out of equal participation in what should be public bids for work team.

Have you, the RAB, ever received information regarding the amount of contracts awarded to minorities or black people during this intensive, expensive environment cleanup at the Depot? Flora Beasley paved a few roads on Dunn Field, and Mr. Hill laid a few pieces of sod around the Depot, and I worked in and out of homes, schools, churches and door to door. Are there other minorities who have reaped any real benefits via monetary work during this cleanup which is now in the buildings?

I was approached after three months of no contact other than to ask me to provide information to meet with someone from the management group to work out the transition from Frontline because they were the new PR firm hired by the Depot.

I immediately told them that I needed to become compensated for my experience, expertise and body of language about this issue. I

have more than nine years of environmental communication experience, direct contact with the community, a master's degree and certification as a global career development specialist, and I am about to begin project management certification classes.

I was paid 500 dollars with all expenses paid to speak one hour at the University of Richmond, a small, white liberal arts college. They valued my experience and expertise as one of a few black people in this country with environmental communication experience, and they wanted to hear what I had to say.

I told the Depot folk my fee, well below what the consultants with my experience and education charge. They toiled with my request for a couple of weeks and told me yesterday that they would not agree to my fee. I was asked to consult for only ten days – for ten hours for now, September to the end of November. I really thought that I could look forward to meeting with the new people, hoping to get a feel of their plans for the Depot Community Outreach, for our community, and I would move on to other projects and other places at a feasible time. However, I cannot accept a consultant fee that is an insult to the quality of work I have done for this community. To my Depot Community RAB Members, thanks for your support and encouragement.

Mr. Williams, keep involved in our neighborhood affairs.

Mr. Bond, your quiet, attentive demeanor was balance to the group.

Ms. Peters, you are one of a kind, and please remember me when you pickle your beets and make your chow-chow this year.

Mr. Truitt, your work at the Depot was a valuable work. You did your job. Thanks for learning to hear others who didn't agree with you. You and your wife continue your good work helping the sick and elderly.

Mr. Eskridge, you are a great thinker, advisor and attorney.

Mr. Tyler, on top of everything and forever reading, keeping up with all things for the entire community.

Ms. Bradshaw, please keep the fight going.

Ms. Brooks, your soft, emphatic, eloquent words. I always loved hearing your whole message.

Thanks Community RAB Members for allowing me the opportunity to grow, learn and garner this environmental communication experience. Good evening.

MR. WILLIAMS:

That was nice, and before we -- after we adjourn, we would like to give honor and thanks to Alma for the outstanding work that she has done, and I would like to thank her, too, for never missing a meeting to call me to say, "There is a meeting," and I would be so busy, until she just leaves it on my phone, and I don't call, but she knows I will be here. And I thank her for that, and that was every meeting.

I missed it tonight, but I worked at it.

MS. PETERS: Could I make a comment?

MR. WILLIAMS: I'm sorry.

MS. PETERS: I am Johnnie Mae Peters, and I just want to thank Ms. Moore for all the work that she has done, because she has done a beautiful job. She always made sure she called us before the meetings to make sure that we were here; and any information that she thought we needed to get, she always gave it to us.

So, I'm wondering, the new company that took over, have they hired anybody for the position that Ms. Moore has?

UNIDENTIFIED SPEAKER: (Unintelligible).

MS. PETERS: Oh, I didn't know that. But I was just wondering why Ms. Moore wasn't considered. Could anybody answer that question for me?

MR. HOLMES: Well, the community relations support is provided by a subcontractor through e2M. We were looking for a firm with a lot of resources. Ms. Moore has been very instrumental in the work here at the Depot with Frontline, but as one person, she did not have sufficient capabilities for what we need. It's not a one-person job.

MS. PETERS: It takes five or six people to do the job that she was doing.

MR. WILLIAMS: So, was it somewhat recommended to the new company that they could possibly, you know, look at seeing that she has some of the qualities that they were looking for?

MR. HOLMES: Well, I'm going to go into a ---

MR. WILLIAMS: Go ahead, Ms. Bradshaw.

MS. BRADSHAW: Doris Bradshaw.

MS. DORIS BRADSHAW: Okay. I just want to make a comment, and I know that I haven't been at some of the meetings because I have been on travel, but I am very appalled of the Depot selling that land and knowing that they haven't dug up not one thing over there on that side. Even though you don't see it, it doesn't mean that it's not there. And I can't understand EPA thinks it's okay for this to happen. There is Gamma in that water. There is Alpha in that water. There is Cobalt 60 in that water. There is also 289 chemicals that was found around the Depot. And during the cleanup I have -- none of these issues have been addressed about the radiation. None of the issues have been addressed about a broad spectrum testing that whole Depot.

Now, what is going -- who is going to -- for institutional controls over there to keep that land from being dug up, and that was -- that was our fear. You told us it wouldn't happen. It happened. Everything you told us that would not happen, it happened.

This place is not cleaned up. You can't look at something and tear up the papers and say it's clean. We have been lied to over and over. The health issues have not been addressed. The health issues have not been addressed, and we want the health issues in our community addressed.

Now, if you want (unintelligible) and the Depot, it can happen. Because you're going to kill several thousands of people there, and you think you're going to walk away from it and we say nothing. But this is a gross injustice, and we're not going to stop here. It's going to be some political repercussions from this, and also we are taking this to Washington. I am tired of DLA lying to us. One lie after every time. Turpin Ballard, you need to be fired. You know good and well that you need to address those (unintelligible). And to say that it doesn't matter because it's not on the report, something is wrong with that.

I just want things right in our community like white communities, and we are not getting anything, nothing. And our people have died over there. And it is time that you come to the table and put something there for this community and deal with the health issues now and stop playing with us and thinking that we're not intelligent enough to understand these issues. And being quiet is not helping.

Now, I'm tired. This is 12 years, and it's been one lie after another. You haven't said who is going to monitor these lands, and when somebody puts some houses over there, what are (unintelligible)? You going to put us over there to die?

You need to come clear on what those lands can be used for, and I haven't heard it yet. You claim light industry, but you need to

change this to residential so it will be cleaned up to the residential level. Because what you are doing is nothing, and then -- and use of bioremediation and letting nature take care of these issues, that is not a cleanup. And these issues have got to be addressed, and they have got to be addressed fairly in our community. This is racism in the worst (unintelligible), because our children are suffering in this area because of this. Thank you.

MR. WILLIAMS: We might have to come to some kind of decision on what just happened with the call. We might have to vote on new rules on handling that. It's been brought to my attention and ---

MR. TRUITT: Wait a minute. Wait a minute. We don't need to vote on anything. You are the chair.

MR. WILLIAMS: Right.

MR. TRUITT: I don't want to sit through a meeting that somebody calls in on a phone. If they want to say something at this damn meeting, be here. Don't call in on the phone and bore the hell out of me.

MS. DORIS BRADSHAW: Mr. Truitt, you can put on your boxing gloves.

MR. WILLIAMS: Okay. So much for the public comment period. Would anyone like to make a motion to-- oh, Ms. Peters.

MS. PETERS: I move that we adjourn.

MR. TRUITT: Second.

MR. WILLIAMS: Mr. Tyler.

MR. TYLER:

It's not a long speech, but this new public relation firm, how many black minorities do you have on your team, since you're coming into Memphis that's a half black city, and the community you're dealing with is predominantly black? Not that you have to deal with the community, but it's just a significant issue that -- we didn't know how many minorities and blacks you have on your team. You know, that since you picked a company that's experienced and qualified. And, yes, it's one of the fair questions. Because as we diversify, we want to make sure the diversity is represented on your team, so when you come to the community, they can see diversity. Because diversity, as you know in college -- there's universities everywhere. That's a big issue, and I'm personally partial to Alma because she worked hard and gave me a lot of free services. And if there is any way you can get me some of those numbers or introduce me to diversity on your team, and then I will be happy to work with you. And if you possibly could include Ms. Moore as a subcontractor or part of your team, I would greatly appreciate it as a community member and a RAB member.

Thank you, and I make a motion to adjourn.

MR. WILLIAMS:

Second?

MS. PETERS:

We done made two motions.

MR. WILLIAMS:

Okay. All in favor?

(Brief pause.)

MR. WILLIAMS: Any opposed?

(Brief pause.)

MR. WILLIAMS: Abstained?

MS. PETERS: Y'all can stay if you want.

MR. WILLIAMS: Meeting adjourned.

(Whereupon, at approximately 7:44 p.m. the meeting was adjourned.)

NEXT SCHEDULED MEETING: THURSDAY, * 6:00 P.M.**

**Attendance List
Restoration Advisory Board Members**

Mr. Mondell Williams	Community Co-Chair
Mr. Mike Dobbs	Facility Co-Chair
Mr. Turpin Ballard	Environmental Protection Agency
Mr. Stanley Tyler	Citizen Representative
Mr. Jim Covington	Depot Redevelopment Corporation (DRC)
Ms. Peggy Brooks	Citizen Representative
Mr. Torrence Myers	Memphis Light, Gas & Water Division
Mr. Evan Spann	Tennessee Department of Environment and Conservation (TDEC)
Mr. Mike Perlmutter	CH2M Hill
Mr. James Woods	Tennessee Department of Environment and Conservation (TDEC)
Ms. Marquita Bradshaw	
Mr. Ulysses Truitt	
Ms. Johnnie Mae Peters	
Mr. Norm LaChapelle	

OTHERS IN ATTENDANCE

Ms. Norma (JJ) Goldman	The Vandiver Group, Inc.
Ms. Laura Lock	The Vandiver Group, Inc.
Ms. Kelly J. Ferrara	The Vandiver Group, Inc.
Ms. Alma Black Moore	Frontline Communications
Mr. Tom Holmes	e ² M

C E R T I F I C A T E**STATE OF TENNESSEE:****COUNTY OF SHELBY:**

I, DANETTE CROUCH, Court Reporter and Notary Public for the State of Tennessee at Large, do hereby certify that I reported in machine shorthand the above-captioned proceedings.

I HEREBY CERTIFY that the foregoing pages contain a full, true and correct transcript of my said Stenotype notes then and there taken.

I FURTHER CERTIFY that I am not an attorney or counsel of any of the parties, nor a relative or employee of any of the parties, nor am I a relative or employee of any attorney or counsel connected with the action, nor am I financially interested in the action.

I FURTHER CERTIFY that in order for this document to be authentic and genuine, it must bear my original signature and my embossed notarial seal and that any reproduction in whole or in part of this document is not allowed or condoned and that such reproductions should be deemed a forgery.

THEREFORE, witness my hand and my official seal in the State of Tennessee on OCTOBER 4, 2007.

DANETTE CROUCH
Court Reporter and
Notary Public at Large

My Commission Expires:

MAY 24, 2011

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE