MEETING MINUTES Restoration Advisory Board January 22, 1998 Defense Distribution Depot, Memphis, TN Commander's Conference Room

The Restoration Advisory Board (RAB) meeting was held on January 22, 1998 at the Defense Distribution Depot, Memphis, Tennessee (DDMT) in the Commander's Conference Room. The attendance list is attached.

Welcome and Introduction

Mr. Mondell Williams, Community Co-Chairman, opened the meeting by welcoming members of the Board and the community.

OLD BUSINESS

RAB Member Election Mondell Williams, Community Co-Chairman

Mr. Williams reported that one application was put forward in response to the RAB's call for nominations for an environmental position. As only one application was received, he asked the Board to consider their recommendation for proceeding.

Mr. Williams asked if Board members were aware of any criteria for the selection of new RAB members. Mr. Ulysses Truitt offered that he was not aware of any, but that it was his opinion that the current number of RAB members was sufficient. If it was the decision of the RAB to expand, then he suggested a committee be struck to examine the applications to make sure a diversity of experience was maintained within a workable structure.

Ms. Doris Bradshaw, representing the applicant the Concerned Citizen's Committee (CCC), noted that the residents in the neighborhoods around the Depot have legitimate concerns for information of the Depot activities. She recommended that if it had been the practice of the RAB to fill vacancies, then it should continue to do so.

Mr. Eugene Brayon, requesting a point of information, asked how many RAB positions were open and how many applications were received. Mr. Williams confirmed that one position was open and one application was received.

Facility Co-Chair Glenn Kaden reminded the RAB of their vote to maintain a board of 20 at the September 1997 meeting. He indicated his support for a sub-committee to review the nomination process and the RAB charter.

Mr. Dave Bond noted that the RAB should have a member with a scientific background, as the current membership would benefit from the addition of this perspective.

Ms. Terri Gray asked if a community position was open, or if it was one of the officials from the City of Memphis' position that was open. Mr. Kaden clarified that it was an environmental position and not a community position.

Ms. Bradshaw distributed a fact sheet on the CCC. She described the organization's background, its involvement in community environmental issues, and outlined the group's interest in sitting on the RAB.

Mr. Kaden asked what environmental qualifications the CCC could bring to the RAB. Ms. Bradshaw outlined her environmental education through workshops, forums, and summits. She stated that most environmental groups were not represented by scientists and experts but, typically, by grassroots people who studied, researched, and learned for themselves. What she did not already know, she had the contacts to reach the experts for input.

Ms. Bradshaw was asked to leave the room so that a discussion and vote could take place.

Mr. Williams said that Ms. Bradshaw had worked hard for her community, and that the RAB should respect her dedication and her efforts to be informed of the Depot's environmental restoration activities.

Mr. Curtis Smith (a member of the public) asked to make a comment. He was asked by Mr. Williams and Mr. Kaden to wait until the public comment period.

Mr. Truitt commented that the Board was about the restoration of the installation. He remarked that Ms. Bradshaw had attended meetings for two years and had been disruptive to the proceedings and issues which the RAB needed to discuss. He said he was against expanding the Board; but if it should expand, the Board needed people who were going to track the data that was being presented and convey it to the community the way it was being presented, not a diversion away from that as Ms. Bradshaw had done. Mr. Truitt stated that there had not been any evidence from the Agency for Toxic Substances and Disease Registry (ATSDR), the Memphis/Shelby County Health Department, Environmental Protection Agency (EPA), or other regulators reflecting that this installation brought harm to the community. There were some problems with the groundwater at Dunn Field, but actions were being taken to correct that.

Mr. Curtis Smith asked to speak again. Mr. Kaden explained that the vote would be by the RAB, and that the public could comment on the proceedings at the end of the meeting.

Mr. Terry Templeton, Tennessee Department of Environment and Conservation (TDEC), raised a point of clarification that those persons attending as alternates for RAB members could not vote, which was confirmed by Mr. Williams.

Mr. Kaden moved that the RAB vote by ballot to accept the application of the CCC for the open environmental position. Seconded by Mr. Carter Gray.

Motion failed, (7-4 against the motion).

Ms. Bradshaw was called back into the meeting room. During the wait, Mr. Kaden explained for the public that Ms. Bradshaw was invited to sit as a representative for Mr. Kevin Clay when he was not able to attend meetings. Mr. Kaden reminded RAB members to send a substitute to meetings they could not attend.

Mr. Kaden reported the RAB's decision to not fill the environmental position at this time. He noted that Mr. Clay indicated he may consider stepping down from the RAB, leaving a community position available. Mr. Kaden asked Ms. Bradshaw to allow the CCC application to remain on file for any future positions.

Ms. Bradshaw commented on community representation and that this RAB be representative of the group most directly impacted by the restoration activities at the Depot. Ms. Bradshaw asked if it was the RAB procedure to discuss issues of a personal nature in private, without public observance. Ms. Bradshaw noted that, despite the RAB decision, the CCC would continue to actively follow and participate in the Depot Environmental Restoration Program and RAB meetings.

Announcements Glenn Kaden, Facility Co-Chairman

Mr. Kaden explained that RAB meeting procedures allow for public questions at the end of the meeting.

The RAB members introduced themselves and the organization or community group they represented.

Mr. Kaden noted that the Depot advertised this RAB meeting in local newspapers such as the Commercial Appeal, Tri-State Defender, Memphis Flyer, and Silver Star News. The Depot would continue to make announcements of meetings and events to inform the community as broadly as possible. He asked for the RAB or members of the public to let the Depot know if there were any other publications that should be considered for advertisements.

Mr. Kaden introduced the community relations firm Frontline, that has been working with the Depot since October. They would be supporting the RAB and assisting the Depot with maintaining contact with community members. He said that a community relations staff person would be hired by Frontline to work on site. This position would be advertised in the near future. Mr. Kaden asked that if meeting participants knew of anyone who may be a candidate for the position to please inform the Depot environmental staff.

NEW BUSINESS

Finding of Suitability To Lease (FOSL) Glenn Kaden, Facility Co-Chair

Mr. Kaden introduced the FOSL process. He said that in order for the Base Realignment and Closure (BRAC) Cleanup Team (BCT), through the Depot Redevelopment Corporation (DRC), to turn over the property to the community, the Depot must prepare a Finding of Suitability to Lease (FOSL) and following that a Finding of Suitability to Transfer (FOST) in which the deed is turned over.

Mr. Kaden described the FOSL as a detailed document identifying the potential environmental hazards associated with specific divisions of property (parcels and subparcels) and the measures taken to ensure these are no danger to human health and the environment. Three FOSLs (with numerous parcels each) have been completed to date.

Mr. Kaden stated that he would have regular updates at RAB meetings of the FOSL status until all 187 parcels were documented. The DRC usually dictates the order of the FOSLs, depending on what buildings they want to lease first. A FOSL must be prepared before the property and/or buildings could be leased.

Mr. Brayon asked if the truck traffic on Perry Road was related to the study, the Depot, or a new tenant. He asked what type of businesses were now on site.

Mr. Kaden responded that McAuley's Inc., a candle and popourri manufacturer, leases a building, and it was their vehicles that were seen on Perry Road.

Mr. Gray asked if a building could be demolished once it was approved for lease. Mr. Ramon Torres, EPA, responded that when a property was leased, there were restrictions on the type of use. The DRC had to provide the EPA with the intended end-use of the property. If the tenant's construction or demolition interfered with any removal action or investigation required under the BRAC process or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the lease would not be approved or would include land use restrictions for limited activities.

Ms. Bradshaw asked if investigations for toxicity or soil sampling were conducted on the parcels. Mr. Torres said that there were some areas that required more investigation and that the BCT needed to resolve some contamination issues. Under the Department of Defense (DOD) and EPA regulations, all parts of the property could now be leased. However, the BCT wanted to ensure they were comfortable with the condition of any property prior to its lease.

Ms. Bradshaw asked about conditions of the buildings that had been cleaned and approved for lease. She also asked what type of cleanup was done and how did the buildings become approved. She recalled that there were originally only eight buildings that were clean and identified as suitable for leasing. Ms. Bradshaw asked to what standards were the buildings being

cleaned. Mr. Torres responded that the Depot property had undergone an investigation, including interviews with employees and neighbors, sampling, and researching records. It revealed a history of site use and an inventory of chemicals that could be on the property. Through this investigation, the BCT had a good base of knowledge about the type of contamination that could be in the area.

Ms. Bradshaw asked why some areas had not undergone the same testing as others, and if it would be better to have a broad spectrum of testing. She commented that it appeared the full range of tests were not being undertaken. Ms. Bradshaw noted that if something happened to the people in the community, and if it was later found that tests would have identified it, she would hold the Depot libel.

Ms. Gray stated that some of the reports had only reported the positive hits and not the full range of testing.

Mr. Kaden responded that the records, documentation, and data gave them cues as to how to test. He stated that under CERCLA the BCT must spend the cleanup funds wisely. Mr. Torres added that under the BRAC process decisions were also made based on the historical use of the buildings. As an example, he outlined that some buildings were used to store food and that tests for pesticides were considered appropriate. If the results were within the Occupational Safety and Health Administration (OSHA) screening levels, the building were considered suitable for lease.

Mr. Torres continued that different sampling approaches were considered for this site, such as a bias approach that depended on the historic use of site, available records, and interviews. He noted that full testing and analysis would be undertaken on areas for which no information existed. He said that where information did exist, the BCT would narrow its sampling to save time and use the resources responsibly.

Ms. Bradshaw asked if it would be better to have a thorough understanding of what was there. Mr. Kaden responded that if new information gave additional evidence, they would conduct additional tests. Ms. Bradshaw asked if an accurate record was possible.

Ms. Johnnie Mae Peters asked if the Depot staff could determine that chemicals were used or spilled from records of what was shipped onto the site. Mr. Kaden replied that was correct.

Ms. Bradshaw stated that she had heard reports of former employees dumping off-site. Mr. Kaden responded that there was a possibility that the Depot Environmental Team's investigations could miss something like this, and that he would appreciate any such information Ms. Bradshaw could provide. He stated that under CERCLA, the BCT was only allowed to do so much and that broad testing would not be a responsible use of resources. The FOSL process was very detailed and, at this point, the BCT was confident about leasing any of the buildings. He stated that when the Finding of Suitability to Transfer was prepared, there would be a meeting and the public would have a minimum 30-day comment period in which all comments would be addressed.

Mr. Williams asked that when cleaned, could the status of each building be brought to the attention of the RAB. Mr. Kaden responded that they were not cleaning the buildings but checking to see if they were clean. He reiterated that the FOSL process was very detailed and added that it would help identify any unresolved issues. Mr. Kaden invited people who had questions about any specific buildings to inquire at any time.

Mr. Torres reminded the RAB that the Memphis Depot was both a BRAC and CERCLA site. Some decisions for the site would need to be made under BRAC but that CERCLA liability remains. He agreed that there exists the chance that the BCT could miss something, but that it does not mean it would never be addressed. The government will remain responsible under CERCLA law and BRAC law to continue cleaning up the site.

Mr. Brayon said he hoped that the same type of screening was done for what was coming on site by tenants. Specifically, he asked if the community would be appraised of what was in the leased buildings. Mr. Kaden said he would invite the DRC to discuss to future tenants and reuse.

Mr. Torres noted that new tenants would be approved by the government before anyone was allowed on the site.

Mr. Kaden described parcel 5.1, Building 274 (cafeteria), where a small strip of land containing PCBs exists. He reported that the BCT was coordinating for the removal of that soil to 12 inches. The property and buildings could be leased, but there would be provisions that the tenant could not dig into the soil. Ms. Peters and Ms. Young expressed concern if 12 inches would be deep enough. Mr. Kaden responded that, due to the nature of the material, it would be and that samples would be taken to ensure that it was deep enough.

Community Work Group

Mr. Kaden introduced the ATSDR's Community Work Group initiative. It was further described by Ms. Bradshaw as a community board of government agency representatives meeting to examine the community health concerns and the relationship to the Depot. She noted that the board would include Center for Disease Control (CDC), ATSDR, EPA, Tennessee Health Department, doctors, toxicologists and local, impacted members of the community within a half mile radius of the Depot. She believed the group would include eight or nine community members.

Mr. Kaden said the Community Work Group was looking for representation from the RAB. Mr. Williams said that he would volunteer, depending on the meeting schedule.

February RAB/Information Session Terry Flynn, Frontline

It was announced by Mr. Terry Flynn that the Memphis Depot would hold a community information session on Thursday, February 19, 1998 at Corry Junior High School, from 6:00 p.m. to 9:30 p.m. He explained that the session would allow representatives of various organizations to update the community on the progress of the environmental restoration program.

The information session would be advertised through the local newspapers. A flyer would be mailed to the Depot's mailing list of approximately 800 people and delivered to the neighborhood residents around the Depot, approximately 4000 homes.

He also announced the next RAB meeting would be held in conjunction with the information session beginning at 6:00 p.m., also at Corry Junior High School.

Dunn Field Characterization Jimmy Duncan, Parsons Engineering Science, Inc., Atlanta

Mr. Kaden introduced Mr. Jimmy Duncan and Mr. Tom Beisel of Parsons Engineering Science, Inc., one of the environmental remediation companies conducting field investigations at Dunn Field. Mr. Jimmy Duncan introduced the RAB to the ways in which his team will verify locations of the disposal pits, sample the soil and groundwater for the presence of chemical warfare materiel and breakdown products, and sample the soil and groundwater for the presence of ordnance and explosives. Parsons will also prepare documents to support an engineering evaluation and cost analysis for the removal action.

Contracted through the Corps of Engineers - Huntsville, Parsons has over 25 years experience in performing hazardous waste investigations. A team of geologists, geophysicists, engineers, and health and safety specialists has been coordinated to evaluate and prepare supporting documentation on this project.

Having already initiated the program, Parsons would accomplish their objectives by conducting geophysical surveys, soil borings, cone penetrometer testing, groundwater monitoring, well installation, and sampling. Geophysical surveys would be accomplished with electromagnetic instruments that could identify metal objects or areas of disturbed soil.

Ms. Peters asked if surveying to a depth of 15 feet was sufficient enough for this investigation. Mr. Duncan replied that the surveying equipment would be able to determine areas of disturbed soil or metal objects below the surface, providing a confirmation of the location of pits and trenches.

Mr. Truitt asked what effect would ferrous manganese have on the surveying instruments. Mr. Duncan replied that the iron content would set off the magnetometer.

Mr. Curtis Smith asked if this was the first time these areas had been surveyed. Mr. Kaden responded that it was not the first time and that the BCT had records and information of what had historically happened at Dunn Field as well as the location of the pits. Mr. Smith asked that if this information had already been collected, why study it more. Mr. Kaden said that the Depot needed to verify and map out exactly where the pits were.

Once the geophysical investigation was complete in Dunn Field, Parsons would construct soil borings and monitoring wells around those areas. They would not drill directly into the pits, but around them to determine if any compounds had migrated away from them. Soil samples would be routinely taken while drilling to determine if any chemical agent had been released from the trench area.

Mr. Duncan reported that Parsons would also install monitoring wells to determine if any explosive and ordnance materials and breakdown products had impacted the groundwater.

Mr. Williams asked for the timeframe of the Dunn Field investigation. Mr. Duncan stated his field crew would begin geophysical surveying during the last week of January. The duration of the program would be approximately 30 working days (six weeks), with additional field monitoring following that. Reporting should be completed by August 1998.

Mr. Duncan continued his presentation by showing photos of equipment that would be used in their program. He reported that when they began to drill, Parsons would use a cone penetrometer rig. It pushed a tube into the ground and tested through that rather than drilling with a rotary drill that could be far more expensive. Mr. Gray asked if the cone penetrometer was effective to the same depths as a rotary drill and was it used just for the soil sampling. Mr. Duncan replied that it was.

Mr. Duncan explained that all field workers would be wearing protective clothing during the drilling and soil sampling as a precaution. Ms. Bradshaw asked if the field workers were going to be prepared for any incident or accident and what about the residents around the site. Mr. Duncan responded that in planning and preparing for the field operations, Parsons had to consider the worst case scenario, what types of materials were potentially on site, expected quantities, and how far the agent could spread before it dissipated. The most volatile of the compounds at Dunn Field were considered to have a range of 80 meters. The chemical agents expected to be in the area were mustard, lewisite, phosgene, and cholorpicrin. Phosgene was the most volatile and would spread the quickest, so the maximum credible event was planned with its characteristics in mind.

Ms. Peters asked about the location of the mustard pits. Mr. Kaden replied that the Depot Environmental Team was not certain about the presence of mustard gas. Mr. Templeton added that drilling would occur in locations around the suspected pits, not directly at the sites.

Ms. Peters asked if Parsons would be moving the mustard gas to Arkansas. Mr. Duncan said they would not.

Ms. Bradshaw commented that through the Chemical Working Group in Kentucky, she met with Col. Libby to visit a Utah site to see the procedures of disposal for mustard gas and nerve gas agents. She suggested the RAB ask Col. Libby to a meeting to discuss these aspects of chemical warfare materiels handling. Mr. Kaden said that he would like to wait until it was confirmed that the mustard agent was present.

Mr. Gray commented that he noticed the flame thrower and pistol range were not included in the ordnance investigations and asked if they were also considered ordance. Mr. Kaden said they would not be a part of this particular investigation.

Groundwater Interim Remedial Action Mr. John Lore, OHM Remediation Services

Mr. John Lore, OHM Remediation Services presented his company's plans to assist in the groundwater cleanup at Dunn Field. His team would be installing the groundwater pumping system designed by CH2M Hill and the Corps of Engineers - Huntsville.

He described the system that would create a hydraulic barrier along the northwest portion of Dunn Field to prevent groundwater in the upper aquifer from leaving the site. The hydraulic action would pump the water up, and it would then be diverted to the Memphis sanitary sewer where it would be treated if required.

Mr. Lore outlined that his company would be working on a number of preconstruction activities, the construction of seven recovery wells, installation of the piping and electrical controls to operate the wells, and, if required, construction of up to six additional recovery wells.

Ms. Peters asked if the groundwater would go into the regular city line. Mr. Lore explained that the pipes would be tied into the sanitary sewer, flowing to the sewage treatment plant.

Mr. Lore continued to outline specific details of the procedures his team would use, including a health and safety plan for the protection of his team and for the community. A total of 26 soil samples had been collected along the pipeline route. They were currently being analyzed by the laboratory.

Mr. Gray asked if soil samples were taken to determine if there was surface contamination along the pipeline. Mr. Lore explained that before any soil is excavated, OHM wants to understand what the characteristics of the soil are so that they can determine the appropriate disposal options.

Ms. Peters asked what would happen if one of the pipes burst, allowing the groundwater and sewage to flood the area. Mr. Lore explained that this system must meet the strict safety and engineering standards of the City of Memphis. The type of pipe selected by OHM for the system was high density polyethylene (HDPE), a plastic commonly used for water and natural gas transportation systems. It was specified for this project because of its strength and resistance to breaks or leaks.

The first seven recovery wells were expected to be drilled to 78-92 feet below land surface and were designed to pump between 40-60 gallons of water per minute each. The second sequence of construction was to connect the wells with 2,500 feet of HDPE pipe connected to the City of Memphis sanitary sewer system. A master control building would be constructed to operate the pumps and record data (load and well levels).

Prior to operation of the wells, the discharge would be sampled and analyzed to ensure it was within the expected project parameters and those set by the City of Memphis sanitary sewage treatment facility. Mr. Gray asked how often would this testing be conducted. Mr. Lore explained that his contract was to construct and install the system. Ongoing maintenance was not within the scope of his project, and he was not certain about those requirements.

Mr. Lore reported that OHM's activities began in January. The construction activities should be finished by the end of February. Connecting the seven wells and installing the master control building was expected to be completed by May 1998, and, if required, the installation of additional wells would begin the summer of 1998. Mr. Kaden clarified that the BCT may need more time to study the data to help determine if the additional wells are required.

Mr. Lore showed photographs of the Dunn Field site and the construction that had already occurred.

Public Comment Period

Mr. Frank Demetriev, a member of the observing audience, asked if a person were to drink the untreated water from the recovery wells, would they be drinking contaminated water. Mr. Lore said there could possibly be some compounds above normal levels. He stated that he was not a toxicologist and could not provide information on what was considered acceptable or unacceptable. Mr. Kaden explained that the BCT had already completed some preliminary testing in order to provide information to City officials.

Mr. Demetriev stated that the ATSDR health assessment showed the area was contaminated but that no one would be drinking this water. He stated that he had learned recently that in the early days of the Depot the people living in the area near recovery wells 3 -9 were drinking from well water and not the City's water. He said it seemed like a dishonest statement by ATSDR, and he believed the neighbors had something about which to complain. Mr. Kaden agreed that if there was contamination before the residents went on the City's water supply (he believed this was 1955), then it may have been in those wells. However, he noted that it had not been determined when contamination to the area occurred. While the Depot could research when the burials occurred, they did not know when the leakage occurred.

Mr. Demetriev said that the health assessment made a statement that no one had been drinking this water. He said the ATSDR statement was designed to convince people that nobody would be exposed to any contaminants, and that it was a cover-up because no one can absolutely say that was true. Mr. Kaden said he believed the report meant that no one was drinking it now. He

added that Mr. Ben Moore was present from ATSDR. Mr. Moore affirmed that Mr. Kaden's comments were correct. He said the health assessment was implying that since the residents are now on city water, no one would be drinking from the aquifer. He said the health assessment statement did not contain erroneous information, and ATSDR was not trying to mislead the public.

Ms. Bradshaw recalled her family drinking well water when she was growing up.

Mr. Moore says the public health assessment referred to past exposure and potential future exposure, and the health assessment probably stated that it was a past exposure. Mr. Kaden asked Mr. Moore to bring this issue to the attention of ATSDR.

Mr. Demetriev then referred to Mr. Truitt's comments that he had never heard any information presented to the RAB that this facility caused harm to anyone. Mr. Truitt reaffirmed his statement.

The community member asked for clarification that if there was something in the water at that time, was the Depot saying that there was nothing in the water now. Mr. Kaden clarified that the Depot knows there are compounds in the groundwater now from the sampling. The BCT was conducting interim remedial actions to prevent the compounds from migrating off the site and then they would remove the source of the contaminants.

An audience member asked if there was any information about off-site dumping. Mr. Kaden said that the Depot's investigations had not revealed evidence or information about this. He stated that the Depot had locations to dispose of materials and would not need to go off the Depot property.

Ms. Bradshaw asked for a hearing before the pumping and treating began so the community could understand the issues. She said that because soil was going to be unearthed and groundwater was going to run into their system, the public needed to be informed. Mr. Kaden replied that an Interim Record of Decision (IROD) public meeting and public comment period had already occurred. Ms. Denise Cooper, Memphis Depot, recalled that a public meeting was held in December 1995 on the Interim Remedial Action. She noted that Mr. Roscoe Dixon, present at this RAB meeting, was also present at the public meeting at which the proposed project was described, including alternatives, number of wells to consider, and their locations. She reminded the RAB and audience of the public information session to be held February 19, 1998, at which the public could continue to ask questions of all the contractors and regulators.

Ms. Bradshaw stated that a complete analysis was not proposed then. She also stated her belief that the Depot was not informing the community of the step-by-step procedures. She said the RAB was not representative of the community, and the Depot was not reaching the people that needed the information the most. Mr. Kaden expressed that there were certain regulations the Depot had to follow. He noted that the newsletter was one method of conveying information to the community, especially the neighbors. The Information Session was also a good opportunity to ask questions. Ms. Bradshaw said this information was not being discussed in the detail that it

should be. She expressed concern for the municipal water supply and the condition of the sewer pipes. Mr. Kaden noted that the water in the sewage system was in many ways worse than what the Depot was adding to the system.

Ms. Bradshaw said that her community wanted the water clean before going into the City's system. Mr. Kaden replied that the contaminants going into the system were well within the guidelines for protecting human health. Ms. Bradshaw asked that the minutes reflect her statement of the concern for the health and well-being of the community. If anything happened, she would hold Mr. Kaden, TDEC, and EPA accountable. She said it won't necessarily be the agency she would hold responsible, but Mr. Kaden personally for making the decision. She said that she knows that criminal action could be brought against anyone.

Ms. Bradshaw asked if the Memphis Environmental Laboratory (not certain of the proper name) was sampling water in December. She asked where the analytical report was. Mr. Kaden replied that he was not familiar with this and that USGS conducted testing of the wells on Kyle Street and Rozell Road. Ms. Bradshaw said that it was a local laboratory in Memphis, called Memphis Environmental Laboratory Service sampling at the wells. Mr. Kaden asked if it was CH2M Hill. Mr. Torres asked when she observed this. She stated it was November or December. Mr. Templeton stated that sampling had been ongoing since June and those documents might not be out yet. Ms. Bradshaw raised concern for air exposure when the wells were open. Mr. Kaden said he hoped it was the quarterly monitoring conducted by CH2M Hill and that it was his understanding that they were not subcontracting. There was often a lag between the time reports are finalized and then delivered to the repositories. Upon request, the reports could be made available before they went to the repository.

Ms. Bradshaw asked the minute taker to ensure that the official record of this meeting indicated her unhappiness with the proceedings, and that the minutes from the previous meeting on October 16, 1997 were not reviewed and accepted at the beginning of this meeting.

Ms. Bradshaw also stated that she believed a statement by Ms. Young was left out of the minutes from the October 16, 1997 meeting. It was noted by the minute taker who will review the audiotape for accuracy.

Mr. Kaden agreed that the approval of the minutes was an oversight and should have been accomplished. He noted that it would be the first order of business at the next RAB meeting. He indicated that the meetings were recorded for the purpose of creating minutes.

Mr. Demetriev stated that the RAB meetings as structured do not allow for sufficient public comment. He felt that the public should be able to ask questions of presenters during each segment. He stated his belief that it was wrong that during the vote for a new RAB member a question by Mr. Smith could not be raised. He said it was comparable to the RAB making their decision and saying public be damned. The public could comment afterwards, but the RAB had already made its decision.

Mr. Kaden responded that RAB meetings operate in the same way as many other groups, such as city councils. Because the RAB was voting, Mr. Kaden acknowledged the comment and reiterated that the RAB was following procedures agreed upon at a previous meeting. He stated that the RAB would look into the procedures.

Meeting Adjourned

Next Meeting to be held Thursday, February 19, 1998 6:00 - 7:30 p.m. Corry Junior High School 2230 Corry Road, Memphis

Attendance List Restoration Advisory Board Members

Mr. Glenn Kaden Facility Co-Chair
Mr. Mondell Williams Community Co-Chair

Mr. James Webb MLG&W

Mr. Dave Bond
Citizen Representative
Mr. Eugene Brayon
Citizen Representative
Ms. Elizabeth Young
Citizen Representative

Mr. Carter Gray Memphis/Shelby County Health Department

Mr. Ulysses Truitt Citizen Representative

Mr. Ramon Torres EPA
Mr. Terry Templeton for Mr. Jordan English TDEC

Ms. Doris Bradshaw for Mr. Kevin Clay Citizen Representative

Others In Attendance

Mr. Russell Ray Anderson Citizen

Mr. Phil Amido Defense Depot Memphis

Mr. James Balton Citizen

Mr. Tom Beisel Parsons Engineering Sciences, Inc.

Mr. Edward Boadey
Mr. Melvin Brooks
Citizen
Mr. John Coleman
Citizen

Ms. Denise CooperDefense Depot MemphisMr. John DeBackBase Transition OfficeMr. Roscoe DixonState Representative

Mr. Jimmy Duncan Parsons Engineering Sciences, Inc.

Mr. Herman Ewing Citizen

Mr. Terry Flynn

Ms. Carolyn Gains

Ms. Jennifer Hall

Frontline Communications

Defense Depot Memphis

Frontline Communications

Mr. Maynard Jordan Citizen

Mr. Michael Lee Defense Depot Memphis

Mr. Paul Lewis AFGE Local 2501

Mr. John Lore OHM Remediation Services

Mr. Benjamin Moore Agency for Toxic Substances and Disease

Registry (ATSDR)

Mr. John Nichols

Ms. Georgina Oliver

Mr. Robert Oliver

Ms. Frankie M. Porter

Citizen

Citizen

Citizen

Ms. Dorothy Richards

Mr. Carter Smith Mr. Wilson Walters

Ms. S. N. Wheeler Mr. Eddie Wright Mr. Mark Yates

Rev. Christopher Young

U.S. Army Engineering - Huntsville Support

Center Citizen

U.S. Army Engineering - Huntsville Support

Center Citizen Citizen

Office of Congressman Harold Ford Jr.

Citizen

Site Characterization at Operable Unit 1, Dunn Field, Defense Distribution Depot Memphis

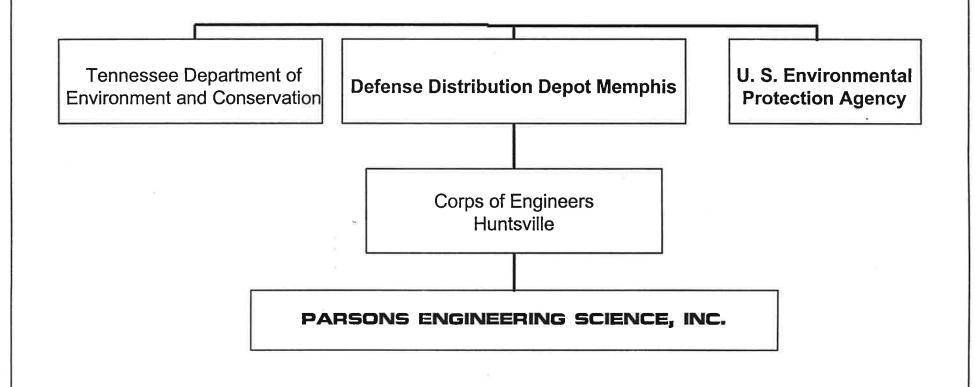
Restoration Advisory Board January 22, 1998 Meeting

Parsons Engineering Science, Inc.

Project Description

- Field investigation to verify disposal area locations
- Field investigation to sample soils and groundwater

Project Organization

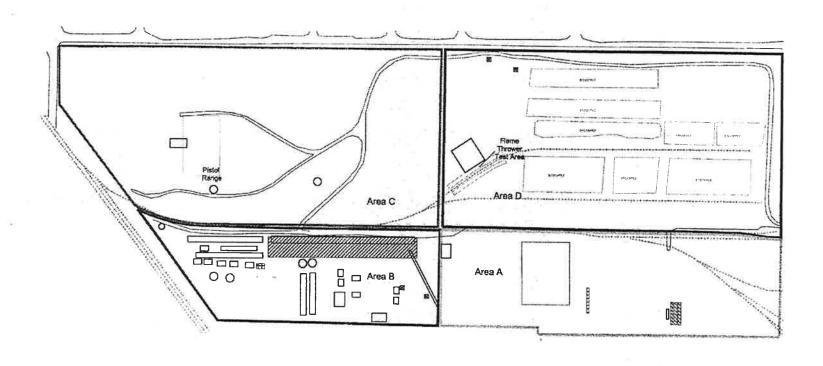


Objectives of the Field Investigation

- Verify location of disposal pits and trenches
- Sample soil and groundwater for presence of chemical warfare materiels and breakdown products
- Sample soil and groundwater for presence of ordnance, explosive materiel, and breakdown products
- Preparation of documents to support an Engineering Evaluation and Cost Analysis

Parsons Engineering Science, Inc.

Site Map



LEGEND

Investigation Sites

POSSIBLE SITE OF JULY 1946 DESTRUCTION OF GERMAN MUSTARD BOMBS

1955-1956 AREA USED TO BURY CHEMICAL ID SETS AND XXCC -3 IMPREGNITE.

POSSIBLE BURIAL OF DANC, CHAORIMATED LIME AND RH195.

USATHAMA IDENTIFIED BURIAL OF CHEMICAL ID SETS

Other Pits and Trenches

Other Pits and Trenches

POWERLINE TOWERS ROADS

RAJEROADS

How will we accomplish the objectives:

- Geophysical survey
- Soil borings and/or cone penetrometer testing
- Groundwater monitoring well installation

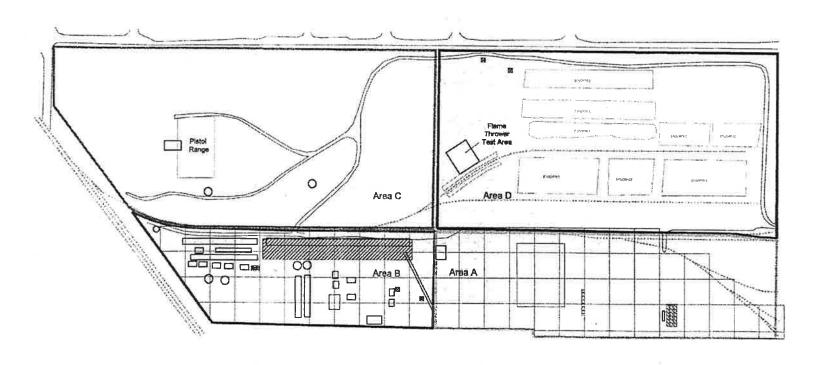
Parsons Engineering Science, Inc.

Geophysical Survey

- Locate metal objects buried in pits and trenches (magnetometer or electromagnetic 61)
 - Locate areas of disturbed soil (electromagnetic 31)

Parsons Engineering Science, Inc.

Geophysical Survey Location

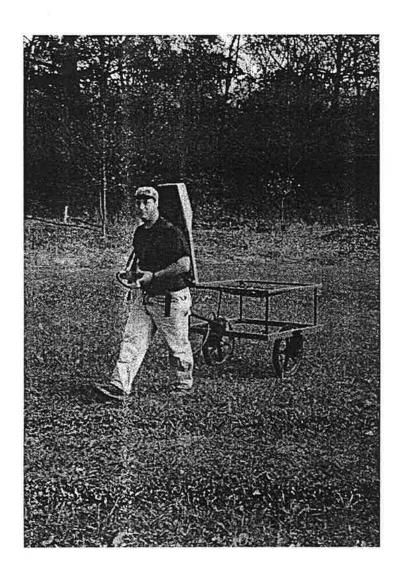


Investigation Sites Possible site of July 1946 destruction of German Mustard Bombs 1955-1958 AREA USED TO BURY CHEMICAL ID SETS AND XXCC-3 IMPREGNITE. POSSIBLE BURIAL OF DANC, CHLORINATED LIME AND RH195. AREA B AREA C AREA C AREA C AREA D Other Pits and Trenches Geophysical Investigation Grids AREA D Other Features ROADS RAILROADS

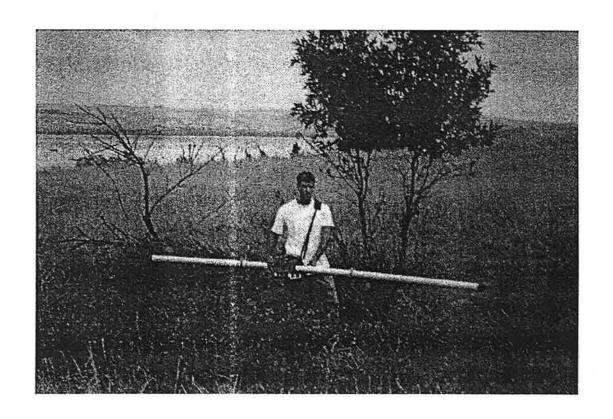
Magnetometer Instrument



Electromagnetic 61 Instrument



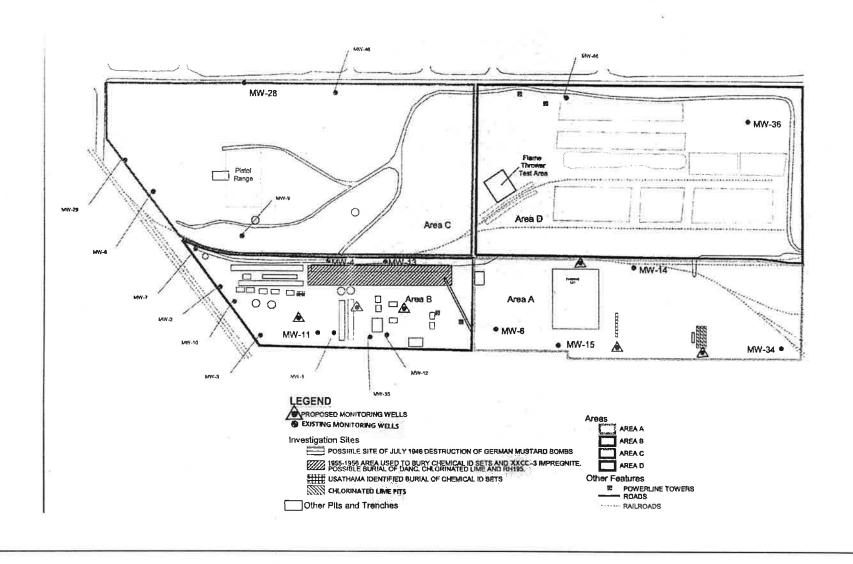
Electromagnetic 31 Instrument



Soil Boring and Well Installation

- Install six groundwater monitoring wells to a depth of approximately 80 feet below land surface
- Soil sampling and analysis
- Groundwater sampling and analysis

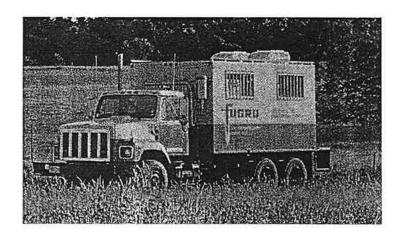
Soil Boring/Monitoring Well Locations



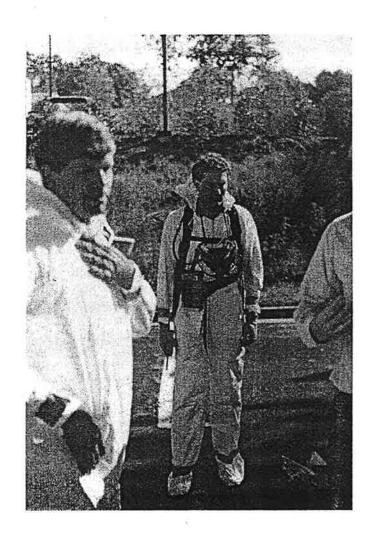
Drilling Equipment



Cone Penetrometer Testing



Personal Protective Equipment



Schedule

- Field investigation will begin last week of January 1998
- Duration of field investigation will be approximately 30 working days
- Project will be completed August 1998