



## THE MEMPHIS DEPOT TENNESSEE

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### ADMINISTRATIVE RECORD COVER SHEET

AR File Number 254

MEETING MINUTES 254 1  
Restoration Advisory Board  
July 17, 1997  
Defense Distribution Depot Memphis, TN  
Commander's Conference Room

File:  
C.G. 190,300 9

254

The Restoration Advisory Board Meeting was held on July 17, 1997, at the Defense Distribution Depot, Memphis, Tennessee (DDMT) in the Commander's Conference Room. The attendance list is attached.

Mr. Glenn Kaden opened the meeting by welcoming the RAB members and community members.

**Old Business**

**Meeting Minutes - Mondell Williams**

Mr. Williams stated that everyone should have received the June meeting minutes in the mail. Mr. Williams asked if there were any questions or changes regarding the minutes. There were no questions or changes. The minutes were accepted into the record.

**Worker's Compensation - Glenn Kaden**

Mr. Kaden addressed a community member's comment from the last RAB meeting concerning the large number of persons in the obituaries that worked at the Depot. The community member wanted to know if there was a correlation between those deaths and current medical problems that appear to be occurring in the community. Mr. Kaden stated that the Depot had a medical surveillance program to test employees and retirees were included in this program when they were employed. Also, pre-termination physicals were given to persons leaving the Depot who were in the medical surveillance program. Persons having job related injuries should complete a workman's compensation claim so that their report would remain on file. If employees did not report the injury, they had 3 years to report it. If they had an injury that was reported, but did not receive any medical treatment at that time and if the injury started to bother them years later they could fill out a workman's compensation claim (CA1 form). CA2 forms for occupational illnesses were completed if a person believed he had acquired a disease or illness related to his work. The CA2 forms could be completed at any time. Mr. Williams asked if there was a way to get this information to employees who were currently working at the Depot. Mr. Kaden stated that this information would be added to the minutes and employees could call his office or the Personnel Office for more information.

**Federal Facilities Agreement - Dan Spariosu**

Mr. Spariosu commented on Mr. Bradshaw's question from last month's RAB meeting concerning Section 29 of the Federal Facility Agreement (FFA). He provided RAB members with a handout on the Confidentiality Clause. He stated that the FFA was a legal document signed by the state of Tennessee, U.S. Environmental Protection Agency (EPA), and the Defense Logistics Agency on behalf of DDMT that established schedules and procedures of environmental clean-up

processes. The Confidentiality Clause was standard language found in all federal facility agreements with military facilities. Environmental law stated that all environmental analytical data should be available to the public. There were two types of information that a facility could claim to be confidential. These were Confidential Business Information and Classified Information. Confidential Business Information claim forms could be filed with EPA by companies so they did not have to reveal trade secrets to business competitors. Classified information allows military agencies to protect secret or classified information. No Classified Business Information or Classified Information claims had been submitted by DDMT to EPA to date. 254 2

## **New Business**

### **Project Update - Shawn Phillips**

Mr. Phillips discussed five projects that were taking place: 1) Groundwater Remedial Action - The final design was almost complete and would be submitted to a construction contractor in August. The Corps of Engineers would award a contract for construction of the first seven wells to occur at the end of September. 2) Soil Sampling for BRAC & Screening Sites - The data from last October, December, and January had been received from the Corps of Engineers and was being reviewed to determine what needed to be accomplished at the different sites. The data would be evaluated with comparison to background sampling and risk screening criteria. By the end of August, the BRAC Cleanup Team would accomplish its review of all of the different sites. The following recommendations may occur from this review: additional data collection needed, early removal action of contamination, or no further action needed. 3) Chemical Warfare Material Site Characterization - Chuck Twing was still on schedule for an award at the end of July. The contractor could begin work in January, 1998. 4) Quarterly Groundwater Monitoring - The second round of sampling of the groundwater wells at Dunn Field and in the community would occur in September. 5) Pond Risk Assessment - Additional fish sampling could occur in August.

Mr. Williams asked how many warehouses had been cleaned and were ready to be turned over to redevelopment and if the groundwater sampling had been accomplished for a two-year period.

Mr. Phillips could not answer Mr. Williams' question concerning the warehouses at the time but stated he would provide information on this at the next RAB meeting. Mr. Kaden stated that he thought that most of the warehouses were cleared out, but that it would be easy to find out for sure.

Mr. Phillips responded to Mr. Williams' second question stating that a contractor did one round of sampling of all of the monitoring wells in 1993, and CH2M Hill did another sampling in February and March of 1995. Groundwater levels fluctuate due to precipitation occurring at different times of the year. Therefore, groundwater sampling was completed on a quarterly basis. CH2M Hill would sample in September, December and March. This would end one year of sampling. There was an option for two additional rounds of sampling to be completed.

Mr. Williams asked who requests and awards the additional rounds of sampling to be performed.

Mr. Phillips stated the decision rested with the BRAC Cleanup Team (BCT). Ideas for well placement also came from RAB and community members. For example, Mr. Clay suggested that sampling be performed in the community and the Depot implemented this suggestion by adding another monitoring well. This month CH2M Hill would be evaluating the data collected at that site. CH2M Hill would also prepare a quarterly report of all the data collected.

Mr. Clay asked when this information would be released.

Mr. Underberg explained that the information would be released at the end of August or early September.

Mr. Kaden stated that once the information was released, it would be discussed at the RAB meetings.

Mr. Phillips stated that quarterly presentations of the data would be made at upcoming RAB meetings.

Mr. Spariosu stated that because of seasonal changes in weather and rainfall, groundwater level fluctuates. Pump and treat remediation programs were accomplished quarterly so that sampling was completed in each season.

Referring to the groundwater modeling, Mr. Phillips stated that the first seven wells were being drilled at the edge of the Depot property and in areas with the highest level of contamination. It was not known exactly how pumping of these seven wells would affect the dynamics of the groundwater.

Mr. Clay asked if there would be sampling for a two year period.

Mr. Underberg responded that they sampled the first quarter in June and would be sampling quarterly through the spring of next year. This would be a total of four rounds of sampling. It would then be determined if more data would be needed. Until a full year of trends and data could be studied, the decision on the need for more sampling could not be made. Mr. Gray stated that the contract was for four rounds of sampling with an option for two additional rounds.

Mr. Clay asked if this was enough sampling.

Mr. Underberg stated that one year of sampling would tell a lot about how the system was operating.

Mr. Kaden stated that more monitoring would be performed if needed.

Mr. Kaden introduced Mr. Greg Underberg of CH2M Hill to the RAB.

**BRAC/Screening Site Process - Greg Underberg, CH2M Hill**

Mr. Underberg stated he would review background sampling, BRAC sampling, screening site sampling, the criteria guidelines being developed to screen the sites, and the process of reviewing the data.

Thirty-five BRAC Parcels were defined within the main installation according to property transfer requirements. The cleanup status of most of the BRAC Parcels was unknown. Each of the BRAC parcels was sampled. He reviewed the map of the BRAC soil sample locations. Seventy surface, 62 subsurface soil, and 3 sediment samples were collected from 29 of the 35 BRAC Parcels. Six parcels were not sampled again since one was covered with concrete and asphalt, and the other five involved sampling within the building. The sample locations were selected to confirm that contamination did not occur in the Parcel. The number, type, and location of the samples were selected jointly by EPA, Tennessee Department of Environmental Conservation (TDEC), DDMT, and Woodward Clyde.

Screening sites were locations where hazardous materials were known or suspected of being handled, but there was no evidence of a release to the environment. Four hundred fifty-one surface and subsurface soil, 24 surface water, and 32 sediment samples were taken at 29 screening site locations during December and January. The sampling approach for the screening sites was to locate the samples in areas where contaminant releases could have occurred. Maps of screening site sample locations were also shown.

Background sampling was performed to characterize the levels of constituents that were associated with the soil and industrial activity in the Memphis area. Sample locations were selected based on areas that were not impacted by DDMT operations. Twenty-two samples were collected from surface soils, subsurface soils, surface water, and sediment. Maps of surface water and sediment sample sites were shown.

Screening criteria used conservative health based and ecologically based assumptions to identify constituents of concern. Two ways one could be impacted by a chemical were toxicity of the chemical and amount of exposure to the chemical. The criteria included soil ingestion and inhalation for residential and industrial land uses, soil to groundwater transfer, drinking water, terrestrial ecology, and aquatic ecology. The conservative criteria were developed by the EPA and TDEC.

The objective of the data evaluation was to determine if no further action should be taken, if additional data collection was needed, or if early removal action of contaminant sources at these parcels was needed.

The evaluation process developed at the last BCT meeting was comprised of the following six steps: Step 1 - review and approve background values. Step 2 - confirm use of the most recent screening. Step 3 - compare chemical data to both background values and screening criteria. Step 4 - prepare comparison tables and identify sites/parcels that exceed criteria. Step 5 - review

site data to determine proper application of criteria. Step 6 - review all site and parcel data and provide recommendations for no further action, additional data collection, or early removal action.

Mr. Williams asked if there was any contamination found at Audubon Park.

Mr. Underberg responded that contamination was found but did not know specific levels.

Mr. Spariosu stated that it exceeded the ecological criteria from sediment but did not exceed the human health criteria.

Mr. Williams asked who was responsible for cleaning up contamination on private property.

Mr. Spariosu responded that the Depot would be responsible for the cleanup.

Mr. English stated that if it was confirmed that the Depot was responsible for the contamination, then the Depot would be responsible for the cleanup.

M Kaden also stated that it is known that contamination was coming onto the Depot from the surrounding area.

Mr. Truitt stated that Audubon Park Lake had been placed off limits. He also asked if the Park Commission would be forced by the state to take remedial action in the cleanup of Audubon Park.

Mr. English responded that he was not sure where the process was on that issue, but the city was involved.

Mr. Williams asked if anyone had informed the Park Commission of this.

Ms. Hooks stated that they were currently working on a solution to bring the lake up to status where it could be used again. She would try to have handouts on where the city was on this issue at the next RAB meeting.

#### **RAB Training - Glenn Kaden**

Mr. Kaden reviewed six ideas on training for RAB members. He asked each member to rank the training in the order of most important to least important. RAB members were encouraged to also list training they thought would be important/necessary. Results of this survey would be provided in a letter with the next meeting minutes.

Mr. Kaden apologized for those who did not receive last month's minutes in a timely manner.

#### **Public Comment Period**

Mr. Kaden asked if there were any comments or questions from the public.

Mr. Clay asked if anyone had looked into why so many large trees had blown down in Dunn Field?

Mr. Kaden stated no.

Ms. Peters stated the trees might have been rotten.

Mr. Truitt stated that in 1991 Mr. Touliatos, owner of Trees by Touliatos, conducted a survey of the trees at the Depot. The trees were labeled with metal tags, and it was determined that many of these trees would have problems in 5-10 years. Mr. Touliatos recommended a Tree Replacement Program to replace these trees.

Mr. Clay stated that he did not agree with Mr. Truitt's statement.

Mr. Kaden stated that the Depot would look into the tree situation.

Ms. Bradshaw asked if all samples were checked for all chemicals found on the target compound list.

Mr. Underberg responded that all sampling results would be available in their report.

Ms. Bradshaw asked if CH2M Hill tested for all chemicals and how deep was the sampling.

Mr. Underberg stated he did not know all the constituents that were tested, but it was documented in the reports. Mr. Underberg responded that surface soil samples were taken from 0-1 foot and subsurface samples were taken from 3-5 feet.

Ms. Bradshaw asked if contamination was found would you retest deeper.

Mr. Underberg responded that they would, if locations were found to have exceeded the criteria.

Ms. Bradshaw asked who was responsible for selecting the parcels.

Mr. Kaden stated that the parcels were selected by the redevelopment authority.

Mr. Underberg also stated that CH2M Hill was not involved in the selection of the parcels.

Ms. Bradshaw asked if a full spectrum of tests was done on the samples.

Mr. Underberg stated he did not know but would review the report to find out.

Ms. Bradshaw commented that two labs were chosen to perform the soil sampling in 1996. She stated she was not pleased with this and that one government agency should not choose another

government agency. Concerning the testing done two years ago in the offsite ditches, she stated that they were told if chemicals were found in the soil at six inches then CH2M Hill would retest. She wanted to know why they had not retested, and if it had been rescheduled, when would it be performed. Ms. Bradshaw stated she was worried about human health in the community. She stated the tests should be underway as soon as possible. She stated that tests needed to be done on the trees in Dunn Field and in the community. Ms. Bradshaw stated that no soil sampling was done on Perry Road where the power wires run. She stated most of the PCB's were found in this area. She wanted to know why sampling was not done in this area.

Ms. Bradshaw asked if there had been any testing done on radiation at the Depot. She stated some of the illnesses in the community had been caused by acute exposure to radiation.

Mr. Kaden stated that she was describing chronic exposure symptoms and not acute symptoms. Mr. Kaden also stated that a radiological survey was completed approximately two years ago. He stated only minor sources had been found from such items as watch dials and compass dials.

Ms. Bradshaw asked when Larry Smith's position on the RAB was going to be filled.

Mr. Kaden responded that his position needed to be filled with a representative from an environmental group.

Ms. Bradshaw stated that according to the bylaws, the RAB should have someone from an environmental group or an environmental justice group.

Mr. Kaden responded that was up to the RAB members since the RAB represented the community.

Ms. Bradshaw stated, "The RAB does not represent the community."

Mr. Kaden requested that Ms. Bradshaw put all her questions in writing so that her questions could be better researched and answered.

Mr. Kelly, "Who do you work for sir? (Asked to Mr. Mike Lee)

Mr. Lee stated that he worked for Mr. Kaden at the Depot.

Mr. Kelly, "I find your behavior when she began asking questions to be very unprofessional. I would like to critique that."

Mr. Lee, "I would like to respond that her comments were very erratic and strange."

Mr. Kelly, "O.K., thank you. My first question is.."

Ms. Bradshaw, "Beg your pardon, you need to apologize to me regardless of how strange you think I am."



Mr. Lee, "I didn't say you were strange, just some of your remarks."

Mr. Kelly stated that this is why he didn't want to serve on the RAB when he was asked to several years ago. He had a couple of questions. He asked if there had been a BRAC meeting that was advertised publicly, to include the time, the date, and the location. He also wanted to know why when a member of the community attempted to attend a meeting it was closed to the public. He stated, "When did BRAC meetings become closed to the public? Anyone on this board can answer that."

Mr. Kaden said, "I would be happy to respond to that. The BRAC meetings are closed meetings and not open to the public. They do not fall under the Tennessee State Sunshine Law."

Mr. Kelly, "Just because they do not fall under the law does not mean they shouldn't be open to the public. If you hold closed meetings you are getting a sense of impropriety. Whether it's right or not, when you close the door in somebody's face then that person's thinking there is something going on inside that door they are not telling us."

Mr. Kaden stated that he couldn't help the way people think. The BCT meetings were closed meetings. There were no open invitations provided to the public. This RAB had been invited to attend some of those meetings to see what went on at these meetings.

Mr. Kelly, "Mr. Williams have you been invited to a BCT meeting?"

Mr. Williams, "Yes, I have been to one meeting."

Mr. Kelly stated he had received phone calls from the community complaining that the BCT was shutting out the community. In addition, when the community was cut to a few minutes of comment time during the RAB meeting, then he thought the community was right in their complaints that the community was being cut out of the process.

Mr. Kaden stated the RAB meetings were very busy, and the RAB tried to stay on the Agenda.

Ms. Peters stated we should not have an argument and that we should talk as citizens to each other.

Mr. Kaden stated the BCT meetings were working meetings and the public was not invited to the meetings since sometimes they were rather heated. Minutes were kept of the meetings, and they were available to the public so that people would know what was said. Mr. Kaden stated that perhaps RAB members would be invited to observe future BCT meetings.

Ms. Bradshaw asked when the next BCT meeting would be held.

Mr. Kaden responded that it would be in early August and would be a closed technical meeting lasting several days instead of several hours.

The meeting was adjourned. The next meeting of the RAB was scheduled on August 21, 1997 at 6:00 p.m. in the Commander's Conference Room at the Defense Distribution Depot.

#### Restoration Advisory Board Members

Mr. Glenn Kaden	DDMT, Facility Co-Chairman
Mr. Mondell Williams	Community Co-Chairman
Mr. Dann Spariosu	EPA
Mr. Jordan English	TDEC
Mr. John Garrison	Citizen Representative
Ms. Johnnie Mae Peters	Citizen Representative
Mr. Carter Gray	Memphis/Shelby County Health Department
Ms. Veronica Smith	Citizen Representative
Mr. Kevin Clay	Citizen Representative
Mr. Dave Bond	Citizen Representative
Mr. Eugene Brayon	Citizen Representative
Ms. Elizabeth Young	Citizen Representative
Mr. Ulysses Truitt	Citizen Representative
Ms. Janet Hooks	Memphis City Council
Mr. James Webb	Memphis Light, Gas and Water

#### Others in Attendance

Ms. Doris Bradshaw	Citizen
Mr. Kenny Kelly, Sr.	Citizen
Mr. John F. Williams	Citizen
Mr. Russell Ray Anderson	Citizen
Mr. Julian Savage	U.S. Army Corps of Engineers
Mr. Mike Dobbs	DDRE
Mr. John DeBack	DDMT
Mr. Shawn Phillips	DDMT
Mr. Mike Lee	DDMT
Ms. Denise Cooper	DDMT
Ms. Georgetta Phipps	DDMT
Mr. Greg Underberg	CH2M Hill
Ms. Sue Estes	ME3, L.L.C.
Ms. Vanessa Colebaugh	ME3, L.L.C.

**Defense Logistics Agency  
Defense Distribution Depot Memphis**

**Restoration Advisory Board**

**Agenda**

**July 17, 1997**

**DDMT Commander's Conference Room  
2163 Airways Boulevard  
Memphis, Tennessee**

**Welcome and Introduction**

Mr. Glenn Kaden  
BEC, DDMT-DE  
Facility Co-Chairman

**Old Business**

Meeting Minutes Review

Mr. Mondell Williams  
Community Co-Chairman

Worker's Compensation

5 Min

Mr. Glenn Kaden

Federal Facilities Agreement

15 Min

Dr. Dann Spariosu  
EPA, Region 4

**New Business:**

Project Update

15 Min

Mr. Shawn Phillips  
DDMT-DE Remedial Project Mgr

BRAC/Screening Site Process

20 Min

Mr. Greg Underberg  
CH2M Hill

RAB Training

10 Min

Mr. Glenn Kaden

Public Comment Period

15 Min

Meeting Adjourned

DDMT RAB

July 17, 1997

**DDMT FEDERAL FACILITY AGREEMENT****Confidentiality Clause**

The DDMT environmental investigations and cleanup are proceeding under a "Federal Facility Agreement" (FFA) that has been signed by the Defense Logistics Agency, the U.S. Environmental Protection Agency (EPA) and the Tennessee Department of Environmental Conservation (TDEC). The FFA is a legal document which describes how DLA will proceed with environmental work and which environmental laws and rules apply to the cleanup process. Section 29 of the FFA describes when and how particular types of information might be kept confidential, primarily so that DLA would not be compelled to violate national security laws. Similar confidentiality sections are found in almost all FFAs between the regulatory agencies and military facilities.

There are two types of information which a military facility may claim to be "confidential."

**1. Confidential Business Information**

Any entity required by law to submit information to regulatory agencies has the right to request that confidential business information not be released to the public. The purpose of this is so that companies do not have to reveal trade secrets or patented processes to their business competitors. I have not been able to find any example in the southeast region where such a claim has ever been submitted to EPA by a federal facility. In theory, a federal facility could file such a claim to protect a 'trade secret' process developed by one of its private contractors. Financial information related to the competitive contract bidding process must also, by law, be kept confidential to maintain the integrity of the process.

*DDMT has never filed a "confidential business information" claim with EPA.*

**2. Classified Information**

Military agencies have the legal obligation to protect "secret" or "classified" information from public exposure in order to protect the lives of American servicemen. In cases where a hazardous waste disposal site may be in a "classified" area, for example, the military may have the obligation to clean up the site while not releasing information about the site to the public. However, EPA has investigators who maintain the highest level of security clearance and can therefore gain access to any classified information or area.

*DDMT has not filed any classified information claims with EPA. DDMT has no classified areas within the facility.*

DDMT RAB

July 17, 1997

**CONCLUSIONS**

For various reasons, federal agencies are required by law to maintain the confidentiality of various types of information. This does not include environmental or analytical data. The "Confidential Information" section in the Federal Facility Agreement for DDMT is typical of all FFAs at military facilities. However, because claims of confidential or classified information have never been filed by DDMT to date, *all data gathered in environmental investigations and all environmental documents are available to the public.*

Dann Spariosu  
Remedial Project Manager  
US Environmental Protection Agency  
(404) 986-8552

A. DLA may possess information which is subject to a confidentiality claim as established by DLA pursuant to regulation found at 32 C.F.R. Part 55 2(b). In the event that DLA submits information to other Parties pursuant to this Agreement which is subject to a confidentiality claim, such information shall be clearly designated by DLA as confidential. If no confidentiality claim accompanies the information when it is submitted, the information may be made available to the public without further notice to DLA.

B. Upon receipt of material claimed as confidential, EPA shall review the confidentiality claim pursuant to 40 C.F.R. Part 2, and shall make an independent confidentiality determination. DLA prior confidentiality determination shall be relevant to, but shall not control, EPA's confidentiality determination.

C. In the event that EPA determines that information submitted by DLA pursuant to this Agreement contains confidential business information ("CBI"), EPA shall manage such information according to EPA procedures for the management of CBI.

D. In the event that EPA determines that information submitted by DLA pursuant to this Agreement does not contain CBI as established pursuant to 40 C.F.R. Part 2, the Parties to this Agreement recognize that the conflicting confidentiality determinations made by EPA and DLA give rise to a unique inter-agency dispute. Therefore, in the event of such conflicting determinations, EPA and DLA agree to jointly elevate the resulting dispute to their respective offices of General Counsel for assistance in resolving the dispute. The Parties agree to abide by the final inter-agency resolution of the dispute resulting from such elevation, including appropriate management of the information in question in accordance with the resolution of the dispute.

E. Nothing in this Agreement shall serve as a limitation on DLA's right to classify information for national security purposes pursuant to the national security provisions referenced in Section 120(j)(2) of CERCLA, 42 U.S.C. Section 9620(j)(2), or to seek Site-specific Presidential orders under Section 120(j)(1) of CERCLA, 42 U.S.C. Section 9620(j)(1). Except as otherwise provided by Section 120(j)(1) of CERCLA, 42 U.S.C. Section 9620(j)(1), analytical data shall not be claimed as confidential by DLA.

F. If Federal law so requires, such information shall not be publicly disclosed by TDEC pursuant to applicable Tennessee laws. If no claim of confidentiality accompanies the information when it is submitted, the information may be made available to the public without further notice to DLA.

DDMT

# Restoration Advisory Board

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## Environmental Project Status

Shawn Phillips

July 17, 1997

# Environmental Project Update

## Groundwater Interim Remedial Action

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- Final Design for first seven wells should be submitted by CH2M Hill in early August
- Design will be forwarded to construction contractor in mid-August
- Award of construction on first seven wells anticipated to occur at the end of September
- Contractor will start installing recovery wells after all their workplans/safety plans have been approved
- Performance data from these seven wells will be evaluated through modeling before installing additional wells



# Environmental Project Update

## BRAC and Screening Sites

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- Soil sampling and analysis for BRAC & Screening Sites complete
- Evaluation & comparison to background data and risk screening criteria underway
  - » Background sampling from last year
  - » Risk Screening criteria is from various sources, but primarily EPA Region III Risk Based Concentrations (RBCs)
- Draft Letter Report due out by end of August
- All Screening and BRAC Sites will be recommended for one of three categories:
  - » Additional Data Collection
  - » Early Removal Action
  - » No further action

# Environmental Project Update

## Other Projects

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- Chemical Warfare Material Site Characterization should be awarded at the end of July and the contractor should begin fieldwork in January 1998
- Quarterly Groundwater Monitoring (station-wide) second round of sampling will occur in September
- Additional Fish Sampling to confirm results of earlier Baseline Risk Assessment should occur in August with the results available in October

# BRAC and Screening Site Evaluation Process

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**Greg Underberg**

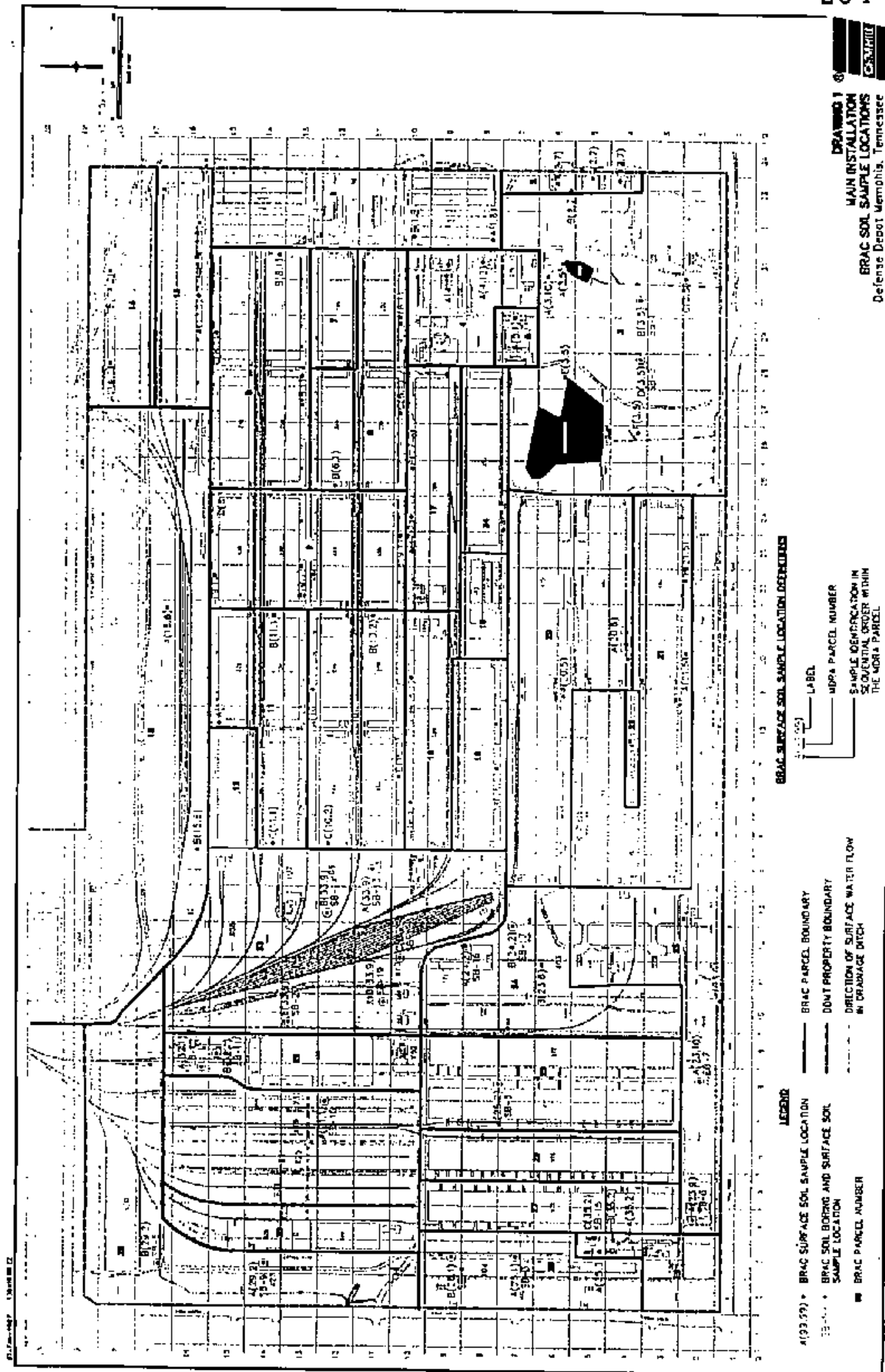
**CH2M HILL**

**July 17, 1997**

# Overview of BRAC Sampling

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- BRAC data collected as part of the Base Relocation and Closure Process.
- 35 BRAC Parcels were defined within the main installation according to property transfer requirements.
- Status of most BRAC Parcels was assumed to be unknown.
- Environmental sampling required to evaluate each Parcel.



# ● Overview of BRAC Sampling ●

## (continued)

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- 70 Surface, 62 subsurface soil, and 3 sediment samples taken from 29 BRAC Parcels during October, 1996.
- Sample locations were selected to confirm that there is no environmental impact that would prevent transfer of Parcels.
- The number, type, and location of samples were selected jointly by EPA, TDEC, DDMT, and Woodward Clyde.

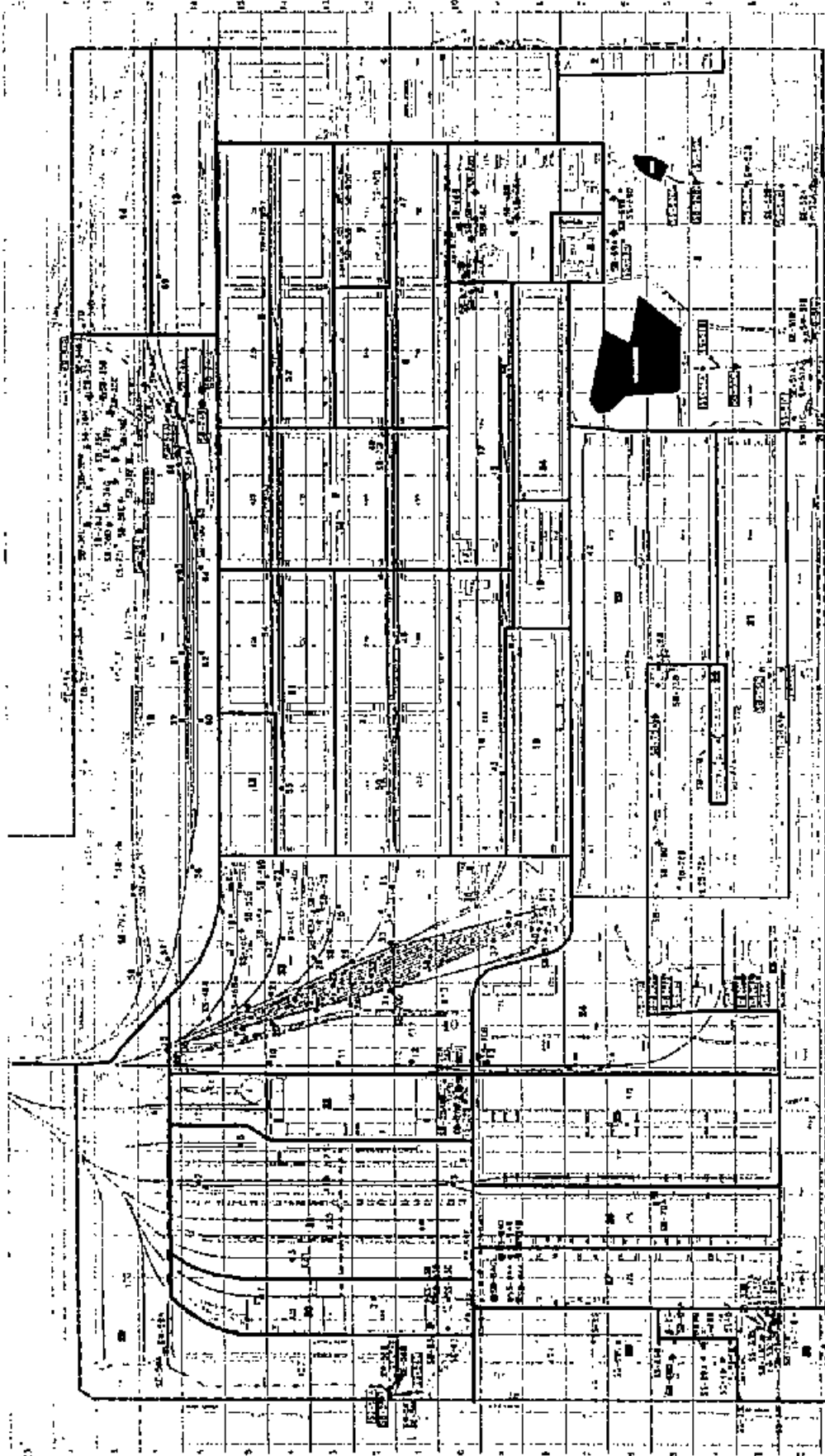
# Overview of Screening

## Site Sampling

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- Screening sites are locations where hazardous materials were known or suspected to be handled, but releases to the environment have not been confirmed.
- 451 Soil, 24 surface water, and 32 sediment samples were taken at 29 Screening Site locations during December and January.

**DRAFT**  
**DRAWING 1**  
**MAIN INSTALLATION**  
**SCREENING SITES SAMPLE LOCATIONS**  
 Defense Depot, Memphis, Tennessee



- LEGEND**
- BRAC PARCEL NUMBER
  - BRAC PARCEL BOUNDARY
  - DBAT PROPERTY BOUNDARY
  - DIRECTION OF SURFACE WATER FLOW
  - IN DRAINAGE DITCH
  - SITE 21 SURFACE SOIL SAMPLE
  - SITE 21 SURFACE SOIL SAMPLE
  - SURFACE SOIL
  - SOIL BORING
  - SEDIMENT SAMPLE
  - STORMWATER SAMPLE
  - INDIANASSAY TESTING



## ● Overview of Screening Site ●

### Sampling (continued)

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- Sampling locations were in areas where potential contaminant releases would have been detected.
- Location and type of samples were selected jointly by EPA, TDEC, DDMT, USACE, and CH2M HILL.

# ● Overview of Background ●

## Sampling

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- Background sampling was performed to characterize levels of constituents in the local Memphis Area.
- Sampling locations were selected in locations assumed unaffected by DDMT operations.
- Twenty-two samples were collected each from surface soils, subsurface soils, surface water, and sediment.



FIGURE 2-2  
BACKGROUND SURFACE WATER  
AND SEDIMENT LOCATIONS  
Defense Depot, Memphis, Tennessee

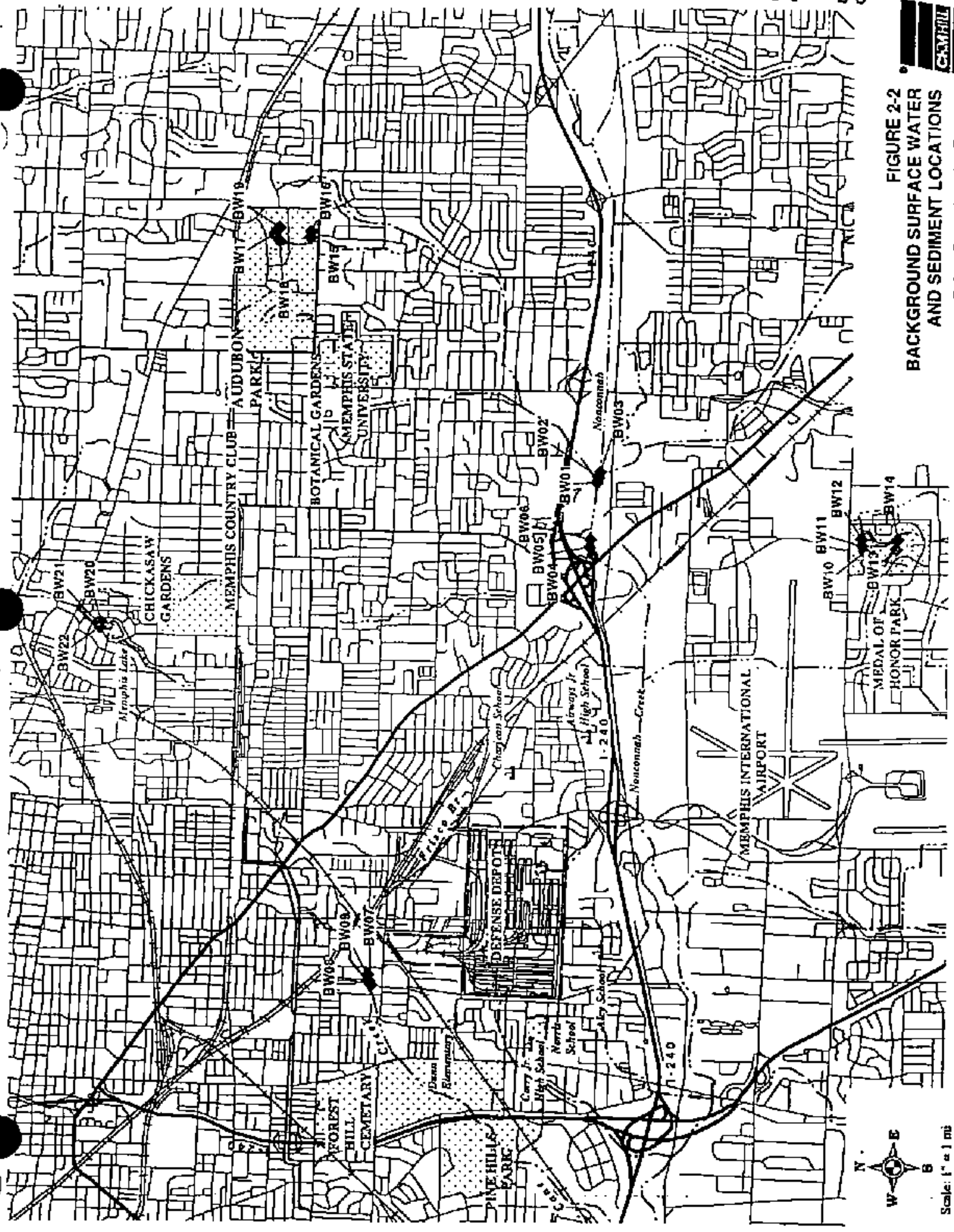
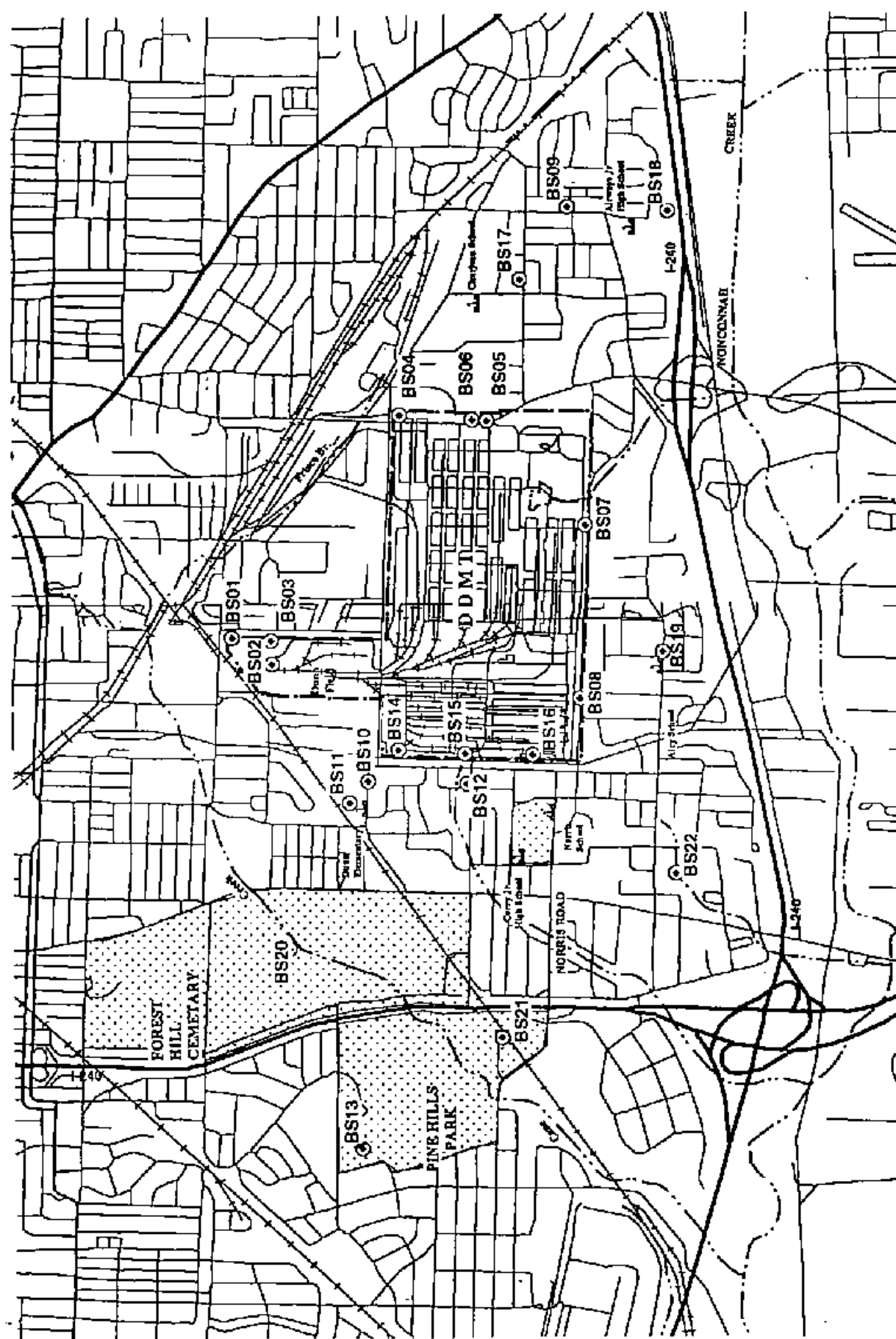




FIGURE 2-1  
BACKGROUND SOIL SAMPLING LOCATIONS  
Defense Depot Memphis, Tennessee



# Development of Screening Criteria

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Screening criteria use conservative health based and ecologically based assumptions to identify constituents of concern:

- » Soil ingestion and inhalation for both residential and industrial land uses.
- » Soil to groundwater transfer.
- » Drinking water.
- » Terrestrial ecology.
- » Aquatic ecology.

# Objectives of Data Evaluation

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Determine Sites and Parcels that require:

- » No Further Action -- Constituent levels do not exceed criteria
- » Additional Data Collection -- Constituent levels exceed criteria and the extent of contamination must be evaluated.
- » Early Removal Action -- Site can be easily remediated or constituent levels exceed criteria to the degree that expedited removal of contaminant sources is needed.

# BRAC and Screening Site

## Evaluation Process

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- 1) Review and approve background values.
- 2) Confirm use of most recent screening criteria.
- 3) On a site-by-site basis, compare chemical data to both background values and screening criteria.
- 4) Prepare comparison tables and identify Sites/Parcels that exceed criteria.

## BRAC and Screening Site Evaluation Process (continued)

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- 5) Review site data to determine proper application of criteria. For example, if ecological criteria are exceeded, are ecological populations present?
- 6) The BCT will review all Site and Parcel data and provide recommendations for No Further Action, additional data collection, or Early Removal Action.



# BRAC and Screening Sites

## Review Schedule

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- Currently reviewing and, if necessary, will revise background values.
- Late July: Confirm screening criteria.
- Early August: BCT, DDMT, USACE, and CH2M HILL staff review BRAC and Screening Sites and provide recommendations.

**FINAL PAGE**

**ADMINISTRATIVE RECORD**

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**ADMINISTRATIVE RECORD**

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