



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

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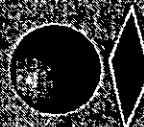
Soil Removal and Building Cleanup Old Paint Shop and Maintenance Areas BRAC Parcels 35 and 28

Presented to
The Memphis Depot
Memphis, Tennessee
May 20, 1999

Presented by



U.S. Army Engineering
and Support Center,
Huntsville

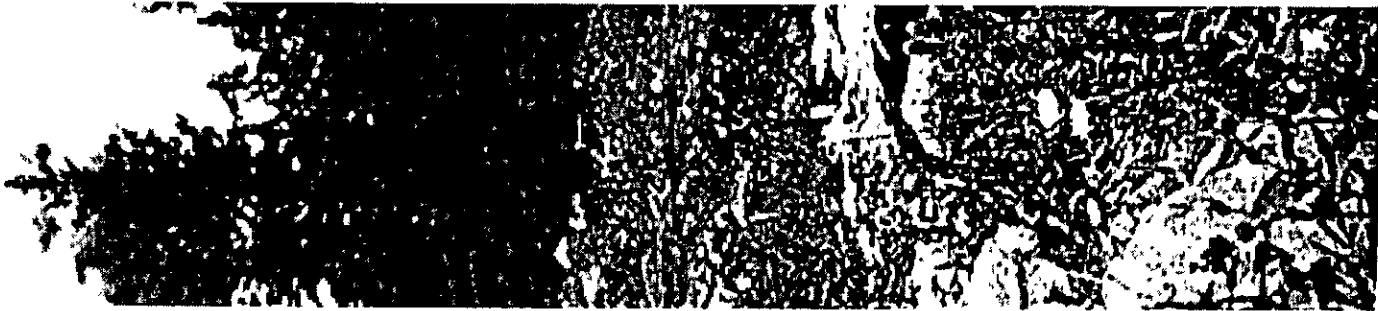


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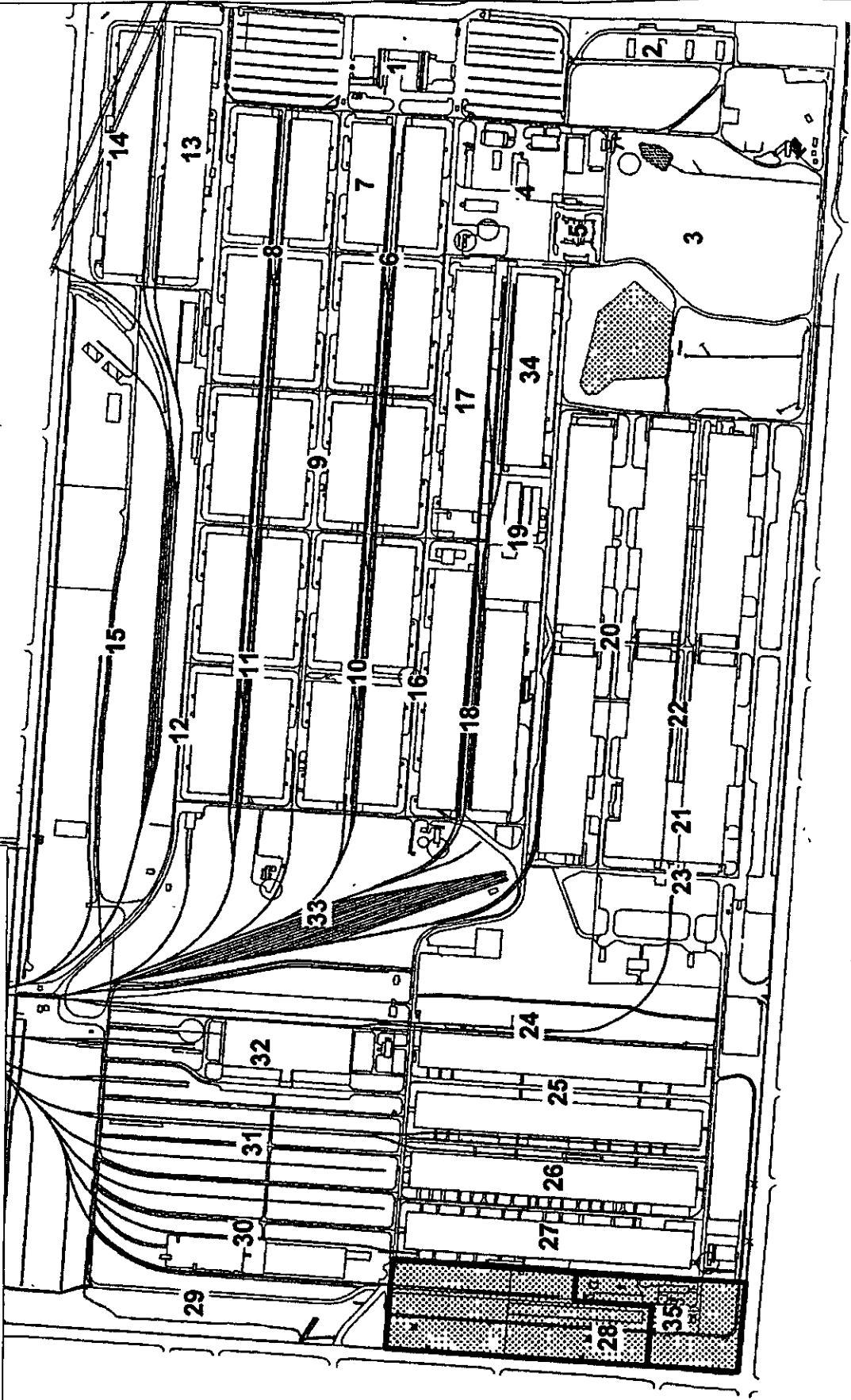
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Presentation Topics

- **Overview of the removal area**
- **Why is removal necessary?**
- **Criteria for selecting removal action**
- **Preferred alternative**

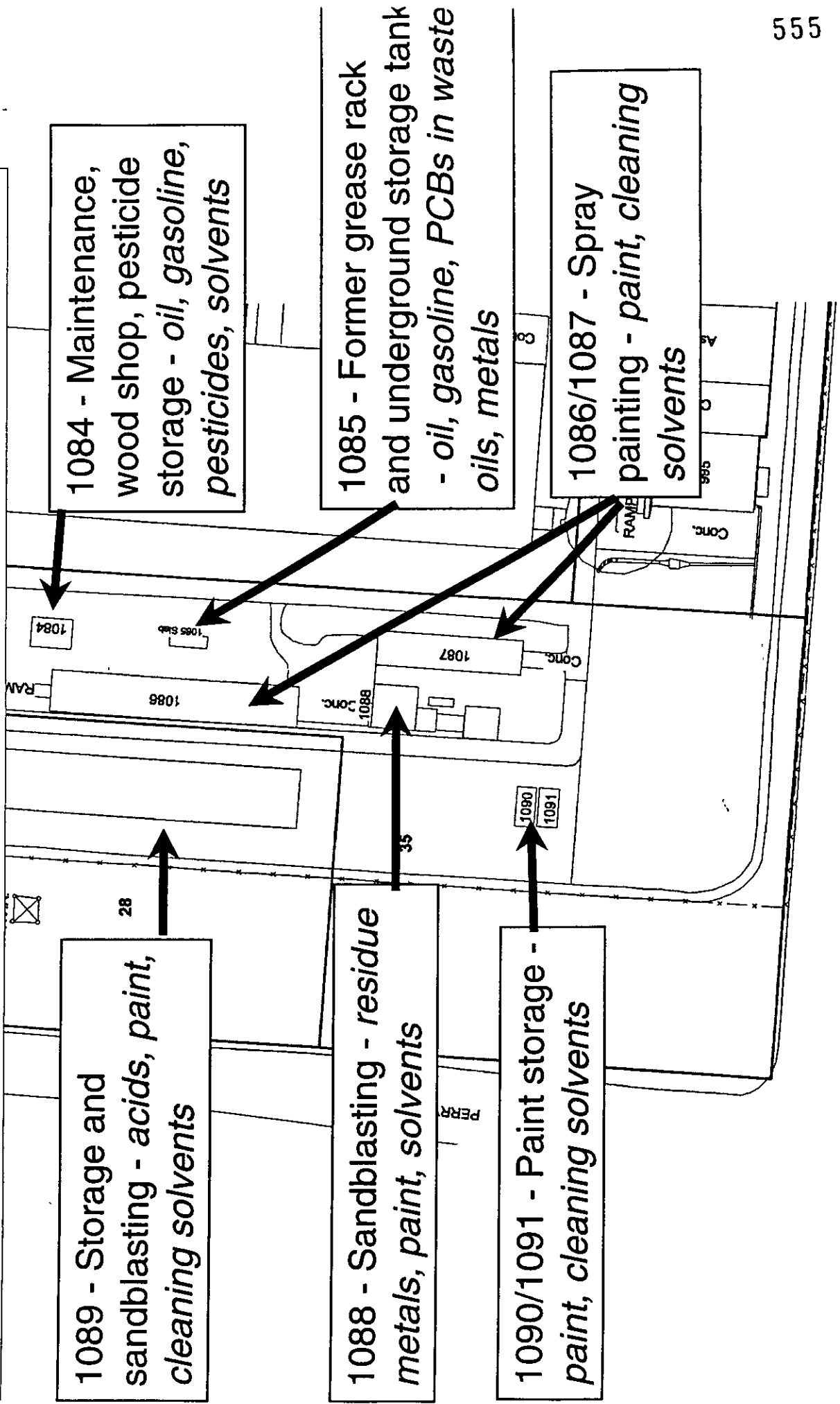
Site Location



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Building Operations and Materials



Environmental Characterization

**Samples collected in December 1996,
January 1997 and October 1998**

- 64 Surface soils**
- 11 Borings**
- 3 Groundwater wells sampled 5 times each**

Need for Removal Action

Sample data compared to decision criteria

- Background chemical concentrations
- EPA Region III risk-based criteria for industrial and residential land use
 - *Industrial criteria applied inside perimeter fence*
 - *Residential criteria applied outside perimeter fence*
 - *Both are screening criteria providing preliminary evaluation of risk*

• Areas identified where sample data exceed industrial or residential criteria

- Aluminum, antimony, arsenic, benzo(a)pyrene, iron, lead, and phenanthrene exceed industrial risk-based criteria
- Aluminum, antimony, arsenic, benzo(a)pyrene, total chromium, iron, lead, and phenanthrene exceeded residential risk-based criteria

Cleanup now to expedite reuse

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Sampling Location
(Contaminants Exceeding Industrial Screening Criteria)
Monitoring Well Location
BRAC Parcel Boundary
Estimated Extent of Contamination

	Grassy Area
	Concrete Area
	Gravel Area
	Asphalt Area
	Building



Removal Action Objectives

- Reduce potential risk to long-term site users**
- Technically appropriate and feasible to accomplish using common practices**
- Minimize volumes of materials to be removed and landfilled offsite**
- Reasonable and acceptable cost**
- Expedited implementation to meet BRAC parcel transfer schedule**
- No long-term operations or maintenance**

Evaluation Criteria

Effectiveness

- Ability to achieve objectives
- Protectiveness of human health and environment
- Meet applicable or relevant and appropriate requirements (ARARs)

Implementability

- Technical feasibility
- Availability of resources
- Administrative feasibility

Cost

- Construction
- Service
- Equipment and material
- Transport and disposal

Scope of Proposed Removal Action

Clean Buildings 1086, 1087, 1088, 1089, 1090, and 1091, including equipment

Remove and dispose of Building 1084

Remove and dispose of contaminated soil, building sump sediment, and debris

Remove concrete, subsurface soil, and hydraulic fluid tank at Building 1085

Remove up to 12 inches of soil where criteria are exceeded

Proposed Surface Soil Excavation Area

LEGEND

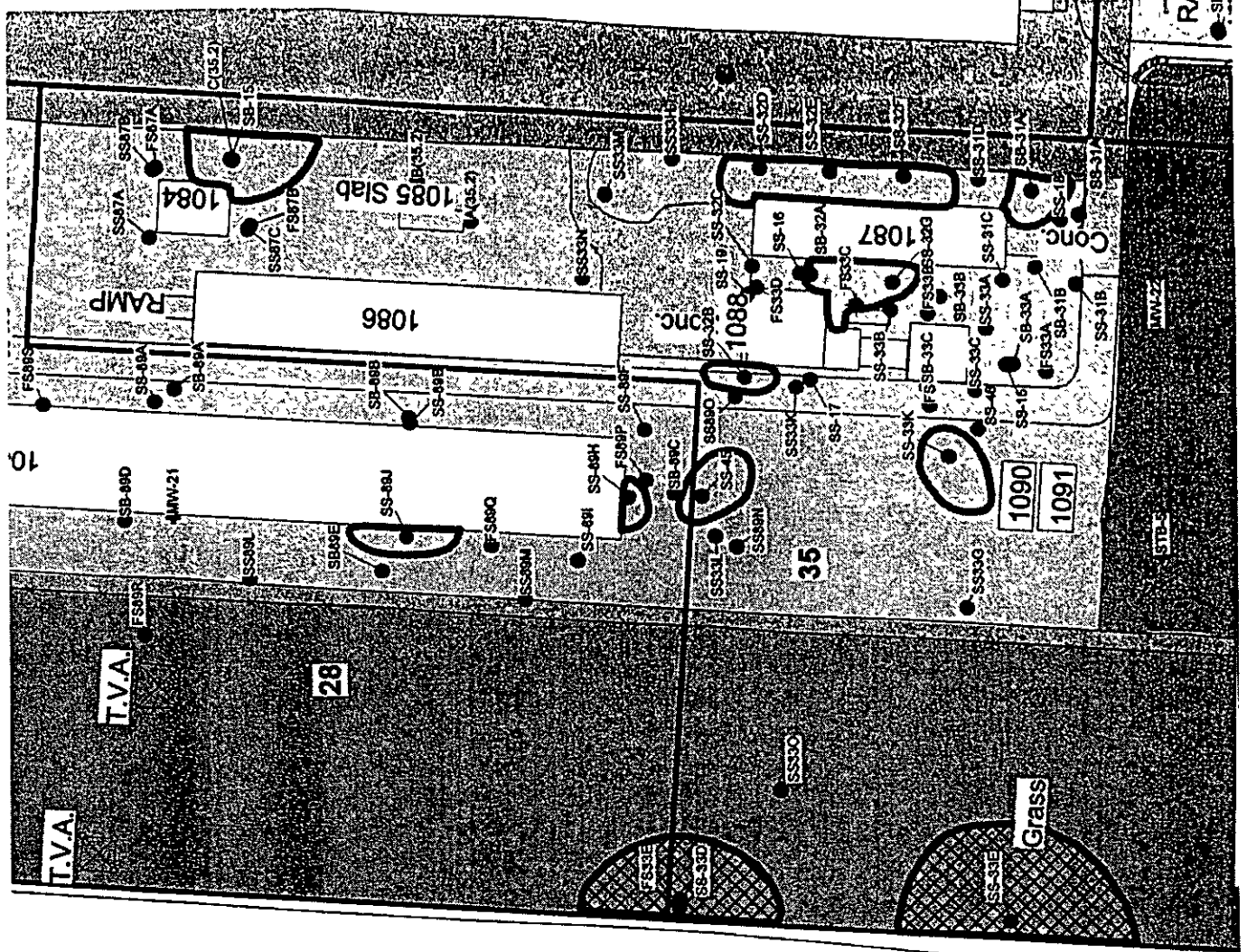
- Sampling Location
 (Contaminants Exceeding Industrial Screening Criteria)
- + Monitoring Well Location
- BRAC Parcel Boundary
- Estimated Extent of Contamination

Land Use Categories

- Grassy Area
- Concrete Area
- Gravel Area
- Asphalt Area
- Building

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PERRY ROAD



Proposed Action Meets Objectives

Potential risks reduced by removing contaminated soil and cleaning structures

Common removal and cleanup practices

Removal volumes minimized by removing only soil above criteria, leaving cleaned structures in-place

Removal expedites transfer of BRAC parcels

Removal does not require long-term operations and maintenance

Removal is cost effective since usable structures are left

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ADMINISTRATIVE RECORD

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