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# THE MEMPHIS DEPOT
# TENNESSEE

## ADMINISTRATIVE RECORD
## COVER SHEET

**AR File Number** 718

# TECHNICAL MEMORANDUM

*JACOBS FEDERAL PROGRAMS*
*OAK RIDGE, TENNESSEE*

**To: US Army Corps of Engineers-Mobile District**

**From: Kraig Smith, Jacobs Eng.**

**Date: 25 November 2002**

**Subject: Pistol Range Site Remediation Work Plan Addendum**

**Reference: Dunn Field Pistol Range Remediation**
**Jacobs Project Number C5X51112**

Two existing documents will serve as an effective Work Plan for the Pistol Range Remediation The first is the "**Memphis Depot, Dunn Field, Engineering Evaluation/Cost Analysis, Former Pistol Range, Site 60, June 2002 (EE/CA)**" prepared by CH2M-Hill The second document, also prepared by CH2M-Hill is the "**Memphis Depot, Dunn Field, Action Memorandum, Former Pistol Range, Site 60 (Action Memorandum)**" This technical memorandum will serve as an addendum to the above-referenced documents, supplying additional detail where necessary, and highlighting any differences in scope

The proposed Scope of Work is given in Section 3 2 3 of the EE/CA and Section V of the Action Memorandum. The referenced scope will serve as the basis for the Work Plan Details of the final agreed upon scope are given below

## PISTOL RANGE SCOPE OF WORK

### General Requirements

The following are the general requirements for the activities

- Utility clearance will be obtained as necessary prior to any intrusive excavation work
- Any required excavation permits will be obtained
- A demolition permit will be obtained from the City of Memphis prior to the start of any demolition activities
- Temporary sediment barriers shall be installed as necessary to prevent potentially contaminated material from being eroded or transported into an uncontaminated area
- Equipment operators shall verify the locations of all above ground utility lines prior to the start of work
- All work areas will be secured using barriers (e g rope, snow fence) to prevent inadvertent entry
- Surface water will be directed away from excavations Diversion ditches, berms, and grading will be installed and maintained during construction
- Dust control is a very critical aspect of this project A water truck will be used as necessary to reduce dust generation during excavation and loading activities

### Remediation Activities

The Jacobs activities for remediation at the Dunn Field Former Pistol Range, Site 50 will involve work in the following areas

- All the trees and vegetation will be cleared and grubbed in the footprint of the range
- All vegetation, trees and root balls removed shall be chipped with a tub grinder and will be loaded with the excavated soil

- The Pistol Range Building and associated structure including the pistol stand and the building concrete floor will be demolished and disposed of as demolition debris
- The concrete target rack wall will be demolished disposed of as demolition debris
- 12-inches of soil for all areas (except Area C in Figure 1) of contaminated surface soil within the perimeter of Site 60 will be removed where previous sampling suggests the presence of surface soil contamination in excess of residential screening criteria, and the presence of spent bullet and casings have been found
- 24 inches of surface soil from Area C within the perimeter of Site 60, as shown in Figure 1 will be removed as this area served as the bullet stop while the site was used as a pistol range
- The area of excavation will be regraded with adjacent soils in order to provide effective drainage on the restored site
- The entire disturbed area will be hydroseeded

**Sampling Details**

Prior to mobilization to the site, samples will be collected from the excavation area and analyzed for waste disposal characterization Refer to Figure 1 for sample locations as described below

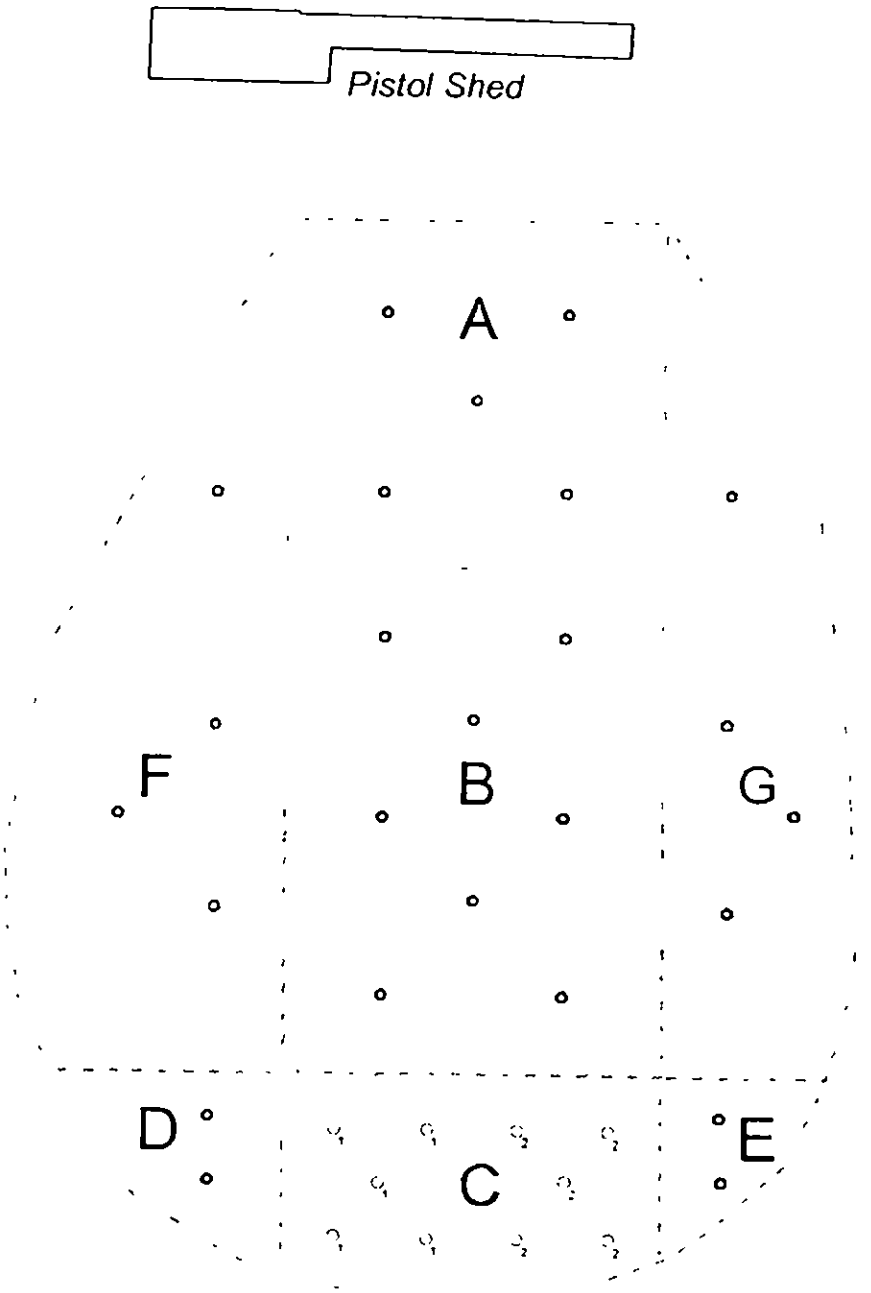
- Area A – 1 sample – composite of 5 samples
- Area B – 1 sample – composite of 8 samples
- Area C – 2 samples – composite of 5 samples each
- Area D,E – 1 sample - composite of 4 samples
- Area F,G – 1 sample – composite of 8 samples

These samples will be analyzed for the complete TCLP suite including lead and will determine which areas of excavated soil will be considered hazardous material, and which will be classified as special waste

Confirmation samples (to be analyzed for total lead concentration only) will be collected following excavation The confirmation samples will consist of the samples outlined above for the waste characterization analysis, plus additional sample locations as shown on Figure 2 and described below Confirmation samples will not be composites but will be discrete samples collected at the composite sample locations as shown on Figure 1

- Area A – Sample locations as per waste characterization plus 4 samples as shown on Figure 2
- Area B Sample locations as per waste characterization
- Area C – Sample locations as per waste characterization plus 4 samples as shown on Figure 2
- Area D, E – Sample locations as per waste characterization plus 2 samples each as shown on Figure 2
- F, G Sample locations as per waste characterization
- Duplicate samples will be collected at the center of Area A, and center of each of the 2 halves of Section C

The confirmation samples will be analyzed for total lead The remedial action goal is to remove surface soil exceeding the residential screening requirements of 400 mg/Kg total lead Additional excavation could be necessary should confirmation sample results exceed the residential screening requirements




Legend

Excavation Boundary

Waste Disposal Characterization Locations

| | | |
|---|---|---|
| A | 1 Sample—Composite of 5 Samples | o |
| B | 1 Sample -Composite of 8 Samples | o |
| C | 2 Samples -Composite of 5 Samples Each | $C_1$, $C_2$ |
| D,E | 1 Sample Composite of 4 Samples | o |
| F,G | 1 Sample -Composite of 8 Samples | o |

N

Scale 1:360

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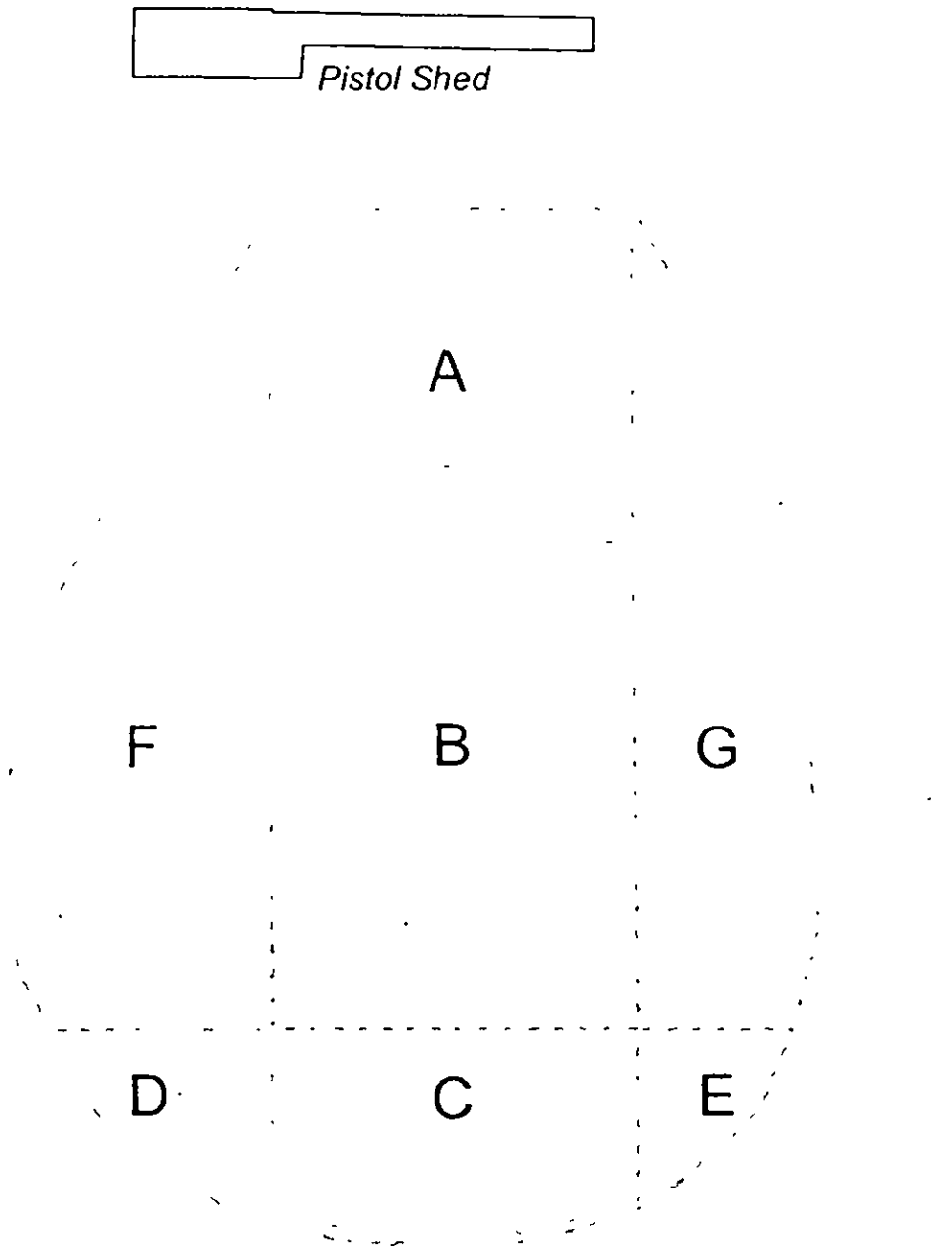
Waste Disposal Characterization Samples

Memphis DOMT

Memphis, Tennessee

12602 NZ K:\Projects\Memphis\...

Figure 1




Legend

Note Confirmation samples will consist of the 35 waste characterization sampling locations shown on Figure 1 plus the additional locations shown above

Excavation Boundary

Confirmation Samples

N

0 15 30 Feet

Scale 1 366

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Confirmation Samples

Memphis DDMT

Memphis Tennessee

11/27/02 NZ /GIS/projects/Memphis/Projects/Pistol_range/Figure 2.mxd

Figure 2

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