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DRAFT CONSTRUCTION QUALITY PLAN FOR SOIL DEBRIS REMOVAL AT WASTE DUMP  
NAS FORT WORTH TX  
6/1/1993  
METCALF AND EDDY

195000



**NAVAL AIR STATION  
FORT WORTH JRB  
CARSWELL FIELD  
TEXAS**

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**ADMINISTRATIVE RECORD  
COVER SHEET**

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195001

CONSTRUCTION QUALITY PLAN  
FOR  
SOIL/DEBRIS REMOVAL AT THE WASTE DUMP

Carswell Air Force Base, Texas 76127-5000

Metcalf & Eddy, Inc.  
5600 Northwest Central Drive, Suite 102  
Houston, Texas 77092

June 1993

Draft

PREPARED FOR

AIR FORCE BASE DISPOSAL AGENCY  
DISPOSAL MANAGEMENT TEAM  
ENVIRONMENTAL PROGRAMS OFFICE  
CARSWELL AIR FORCE BASE, TEXAS 76127-5000

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE  
BASE CLOSURE RESTORATION DIVISION (AFCEE/ESB)  
8001 INNER CIRCLE DRIVE, SUITE 2  
BROOKS AIR FORCE BASE, TEXAS 78235-5328

195002

CONSTRUCTION QUALITY PLAN

FOR

SOIL/DEBRIS REMOVAL AT OFFSITE WEAPONS STORAGE AREA WASTE DUMP

Air Force Base Disposal Agency  
Carswell Air Force Base, Texas 76127-5000

June 1993

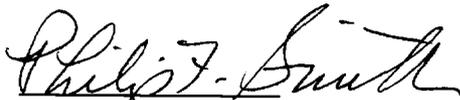
PREPARED BY

Metcalf & Eddy, Inc.  
5600 Northwest Central Drive  
Suite 102  
Houston, Texas 77092

USAF CONTRACT NUMBER: F41624-92-D-8002,

DELIVERY ORDER NO. 0002

CONTRACTOR CONTRACT NO: 012037-0004



Philip E. Smith  
Contractor's  
Project Manager

Christopher D. Hobbins  
Technical Program  
Manager



Stephen F. Alvanas  
Contractor's Regional  
QA Manager

Frank Grey  
Chief Environmental Engineer  
(AFBDA/SWH)  
Air Force Base Disposal Agency  
Carswell AFB, TX 76127-5000

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE  
BASE CLOSURE RESTORATION DIVISION (AFCEE/ESB)  
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BROOKS AIR FORCE BASE, TEXAS 78235-5328

## CONSTRUCTION QUALITY PLAN

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## SECTION ONE INTRODUCTION

Under a contract with the Air Force Center for Environmental Excellence (AFCEE), Brooks AFB, Texas, Metcalf & Eddy (M&E) has been issued a delivery order to remove soil and debris from a waste dump at an offsite weapons storage area associated with Carswell Air Force Base (AFB), Texas.

This Construction Quality Plan (CQP) covers construction quality activities associated with completion of removal activities at the waste site. Following soil sampling and analysis, remedial activities will be conducted according to the findings.

The Construction Quality Plan identifies the site-specific procedures to be used to ensure that the removal performed under the delivery order at Carswell AFB is properly controlled and documented. The plan describes the approach and procedures to be employed to meet the quality, quantity, and schedule of removal requirements, as well as the applicable regulatory requirements.

Specifications have been prepared for work items not covered in other project documents (health and safety, and sampling and analysis plans) to assure overall project quality.

Preparatory phase checklists will be used to assure readiness to initiate and complete removal on schedule. Daily inspection checklists will be used to document the progress of the soil sampling activities. A transportation checklist will be used to assure materials are transported according to all local, state, and federal guidelines.

**SECTION TWO  
PURPOSE AND SCOPE**

The purpose of this CQP is to identify the site-specific personnel, procedures, instructions, records and forms to be used in controlling the quality of removal activities performed under the delivery order for debris removal at Carswell AFB. The plan describes the approach and procedures to be employed to meet the quality, quantity and schedule of removal requirements, as well as the applicable statutory and regulatory requirements.

The CQP will be used by the project staff to control the quality of the removal activities. Separate plans have been prepared to address health and safety (HASP) and sampling and analysis (SAP) activities. All plans are in accordance with M&E's Quality Program Plan (QPP), approved July 13, 1992.

## SECTION THREE QUALITY CONTROL ORGANIZATION

### 3.1 Key Personnel

The key personnel responsible for controlling quality on the project are shown in Figure 3-1. The Site Superintendent is the primary person responsible for implementing all site specific plans (CQP, SAP, HASP). The Site Superintendent will be onsite during all field activities and will be responsible for inspecting, monitoring, documenting and reporting on related activities on a daily basis.

### 3.2 Responsibility and Authority

Table 3-1 lists the key personnel in the quality control organization and describes their responsibilities and authority.

<b>TABLE 3-1. KEY PERSONNEL RESPONSIBILITY AND AUTHORITY</b>		
<b>Title</b>	<b>Name</b>	<b>Responsibility/Authority</b>
Program Manager	J C Goldman, Jr.	Responsible for the overall management of the Program Management Office. Ensures conformance with contract requirements and reports contract performance.
Regional Remedial Construction Manager/Project Manager	Philip E. Smith	Responsible for ensuring all activities are conducted in accordance with AFCEE-approved plans and within the overall contractual obligations. Monitors the project budget and schedule; ensures the availability of personnel, equipment, and services, and participates in all phases of the project.
Site Superintendent/ Health & Safety Officer	J. E. Bentkowski	Responsible for managing the implementation of all work under this task order. Assigns project staff; reviews all project deliverables; and manages the delivery order budget and schedule. Responsible for oversight and administration of health and safety issues.
QA/QC Manager	Christine Hettinger	Ensures that QA objectives are met and verifies the quality of analytical data. Responsible for ongoing surveillance of project activities and has the authority to recommend that work be stopped when work appears to jeopardize data quality.

## SECTION FOUR CONTROL PROCEDURES

### 4.1 Inspection and Testing

M&E's CQP incorporates the two key phases of inspection:

- . Preparatory Phase, performed before beginning removal work
- . Daily, performed daily for the duration of the removal work

In addition, a complete inspection is performed by the Site Superintendent prior to and following completion of the removal work.

**4.1.1 Preparatory Phase.** Prior to the start of sampling, the Site Superintendent will perform a preparatory review and inspection to assure the satisfactory status of all items necessary for successful initiation and execution of sampling activities. The checklist shown in Appendix A will be used to document the Preparatory Inspection.

**4.1.2 Daily.** At the beginning of the removal and daily thereafter, the Site Superintendent will conduct an inspection to verify that work is being performed in accordance with contract requirements, control testing is being performed or has been provided for, and that the quality of work is acceptable. The checklist shown in Appendix B will be used to document the Daily Inspection. Additional sampling and testing procedures are discussed in the project specifications contained in the SAP and HASP.

**4.1.2 Completion Inspections.** At the substantial completion of all work or any defined increment of work (such as separate completion dates or elements of subcontracted work), the Site Superintendent will conduct a Pre-Final Inspection and develop a punch list of items that do not conform to the approved plans and specifications. A list of deficiencies will be included in the CQP documentation, and will include the estimated date by which the deficiencies will be corrected.

The Site Superintendent will conduct a Final Inspection to ensure that all deficiencies identified in the Pre-Final Inspection have been corrected. The completion inspections and any required deficiency corrections will be accomplished within the time stated for completion of the entire project, or any particular increment thereof.

### 4.2 Control of Submittals

The need for vendor submittals is not anticipated during execution of this task order.

### 4.3 Schedule Control

Before the start of field activities, M&E will establish a schedule with major milestones. This schedule will include delivery of major items of equipment, as well as site work and installation tasks. Subcontractors will be required, as a part of their bid, to submit detailed schedules for completing their portions of the work. These will be integrated into the master schedule. This schedule will be used by the Site Superintendent to track and control the progress of the project. Each month, the Site Superintendent will forward to the Project Manager a report of actual progress versus scheduled progress, with a detailed explanation of any actual or anticipated delays, and the actions being taken or required to correct the schedule slippage, if necessary. Depending on the nature of the delay, measures such as extended work hours, more equipment or manpower, expedited equipment delivery, and other actions will be considered for maintaining project schedule.

### 4.4 Waste Handling and Disposal

The core activity associated with this field work is the handling and disposal of soil and debris from the waste dump at the offsite weapons storage area. It is planned that a subcontractor will use a large track-hoe or similar equipment to load the soil/debris into trucks. The trucks and the track-hoe will stay on the upper portion of the site with the track-hoe scooping the debris from the pile and loading the trucks. During the course of the loading a small dozer may be required to consolidate the debris within the reach of the track-hoe.

Approximately 20 percent of the loads of the excavated material will be screened with a photoionizing detector to confirm the presence or absence of volatile organic compounds. The loaded materials shall consist of solids with no free liquids. The material shall be covered while in the trucks and during the transportation for offsite disposal. The soil/debris shall be disposed in a Type II non-hazardous landfill if the screening confirms the absence of volatile organic compounds. If this is not confirmed, the Site Superintendent shall notify the Project Manager so that other disposal methods can be evaluated. Excavation shall be suspended while the evaluation is conducted.

## SECTION FIVE DOCUMENTATION AND REPORTING

M&E will maintain daily records of daily control operations, activities, and tests performed including the work of subcontractors and suppliers. Records will be kept in field diaries, inspector's daily reports, and special forms developed for the purpose. These records will include factual evidence that required quality control activities and/or tests have been performed.

In addition, the Site Superintendent will keep a master diary. This diary will contain a brief daily summary of all occurrences such as important conferences, telephone conversations, observations, comments of subcontractors, and instructions issued by the Site Superintendent or received from higher authority. All incidents indicating present or potential differences with subcontractors that might result in a dispute or claim will be recorded in the diary with full details as to time, place, materials, quantities, persons present, and so forth.

The diary will be kept neat and clean, with entries that are legible and concise. No pages will be left blank. Each page will bear the date of the day to which the entry pertains. Entries that pertain to more than one day will not be combined on one page. If the entries for one day require more than one page, consecutively numbered pages will be used as are necessary to include the data. Pages must be numbered consecutively in indelible ink and no numbers skipped. No pages should be torn out of the book, and no erasures made. In case of error, the incorrect information will be crossed out with a single line and the correct data entered following it. If no work is performed on a weekend, it should be noted. Every calendar day must be reported.

Upon completion of the project, the Site Superintendent will return the diary promptly to the office so that the field records are available for review and use after he or she has left the project.

### **5.1 Preparatory Phase Reports**

The Preparatory Inspection Checklist (Appendix A) document the preliminary inspection that is conducted at the beginning of removal activities. This inspection ensures that the materials and equipment are available for the successful initiation of removal activities. All forms are part of the permanent project records and will accompany the other records when they are transferred to the home office for permanent storage.

### **5.2 Daily Inspection Checklist**

The Site Superintendent will document the progress of the work in the Daily Inspection Checklist (Appendix B). The project manager will review the reports daily to ensure that they include all information required to reconstruct the day's activities, and completely

support subsequent decisions and conclusions. The daily report should be detailed enough to reconstruct the progress of construction from start to finish.

The daily reports will be prepared in duplicate, one copy retained in the field office files and the original forwarded to the home office.

### **5.3 Other Documentation and Reports**

Other documentation and reports refer to photographs, closure reports, manifests, test reports (Appendix G), waste transportation checklists (Appendix I), etc. that may be generated during the course of field activities. All relevant documents and reports become part of the permanent project records. Following completion of the field activities, a final report will be prepared and submitted to AFCEE, Carswell AFB, and all applicable regulatory agencies. The final report will include a summary of findings including locations of sampling; copies of photographs documenting site activities; copies of permits, manifests, laboratory analysis reports; and other relevant documentation that was generated during the implementation of the Delivery Order.

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**APPENDIX A**

**PREPARATORY PHASE INSPECTION CHECKLIST**

PREPARATORY INSPECTION CHECKLIST

Contract No.: \_\_\_\_\_ Date: \_\_\_\_\_

Specification Paragraph or Section:

Description and Location of Work Inspected:

REFERENCE CONTRACT DRAWINGS:

A. PERSONNEL PRESENT

NAME	POSITION	COMPANY
1.		
2.		
3.		
4.		

- \_\_\_ Applicable plans and specs have been prepared/reviewed
  - \_\_\_ Health & Safety Plan approved
  - \_\_\_ Sampling and Analysis Plan approved
  - \_\_\_ Construction Quality Plan approved
- \_\_\_ Badges, passes, entry permits obtained
- \_\_\_ Staging area identified and secured
- \_\_\_ Decontamination area identified and prepared
- \_\_\_ Field office installed
- \_\_\_ Required materials are on hand and conform to requirements (see attached list)
- \_\_\_ Required equipment is on hand and conform to requirements (see attached list)
- \_\_\_ Permits have been obtained
- \_\_\_ Laboratory procured and alerted
- \_\_\_ Materials testing service procured (if required)
- \_\_\_ Waste accumulation points identified
- \_\_\_ Utilities identified, disconnection completed or arranged

\_\_\_\_\_  
Site Superintendent

## PREPARATORY INSPECTION CHECKLIST (continued)

## PURCHASED MATERIALS

	Description
___	35mm Film
___	PID Calibration Gas
___	Barricade Tape
___	Zip-lock Baggies
___	Field Books
___	Paper Towels
___	Nitrile Gloves
___	Ear Plugs
___	Drinks Concentrate
___	Toilet Paper
___	Hand Soap
___	Lotion
___	Hose
___	Wash Tub
___	Lab Markers

## PREPARATORY INSPECTION CHECKLIST (continued)

## REQUIRED EQUIPMENT

Description

## Sampling Rental Equipment

- \_\_\_ Rental Vehicle
- \_\_\_ Radiation Meter

## Owned Equipment

- \_\_\_ PID Meter
- \_\_\_ First Aid Kit, 1 each
- \_\_\_ Camera, 35 mm

**DAILY INSPECTION CHECKLIST**

Date: \_\_\_\_\_

Report No.: \_\_\_\_\_

Contract No.: \_\_\_\_\_

Name and Location of Project: \_\_\_\_\_

WEATHER: (Cler) (P. Cloudy) Temperature: \_\_\_\_\_

Rainfall \_\_\_\_\_ Inches

Min. \_\_\_\_\_ Max. \_\_\_\_\_

Contractor/Subcontractors	Area of Responsibility
a.	
b.	
c.	
d.	
e.	
f.	
g.	

1. **WORK PERFORMED TODAY:** (Indicate time, location, and description of work performed. Refer to work performed by prime and/or subcontractors by letter in Table above.

## DAILY INSPECTION CHECKLIST (cont'd)

2. PREPARATORY INSPECTION FOR NEXT ITEM OR WORK: Materials/shop drawings approved, required control testing arranged, all preliminary work has been accomplished as per plans and specifications.

- 
3. INITIAL INSPECTION: Address quality of workmanship, assure control testing and materials being used in all work are in compliance with plans and specifications.

- 
4. FOLLOW-UP INSPECTIONS: Assure control testing performed as required and all work performed continues to be in compliance with plans and specifications.

DAILY INSPECTION CHECKLIST (cont'd)

5. **VERBAL INSTRUCTIONS RECEIVED:** List any instructions given by Government personnel on construction deficiencies, retesting required, etc., with action to be taken.

- 
6. **REMARKS:** Cover any conflicts in plans, specifications, or instructions or any delay to the job attributable to weather conditions.

- 
7. **RESULTS OF SAFETY INSPECTION:** Note safety violations and corrective action taken. Indicate phase of work where violations occurred.

DAILY INSPECTION CHECKLIST (cont'd)

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8. **UPCOMING WORK:** Indicate next major phase of work anticipated and approximate date of Preparatory Inspection meeting to cover this work

---

**EQUIPMENT DATA:** Indicate items of construction equipment, other than hand tools, at the job site and whether or not used.

---

**CONTRACTOR'S VERIFICATION:** The above report is complete and correct and all material and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

WASTE TRANSPORTATION CHECKLIST

195022

Contract No.: \_\_\_\_\_

Date: \_\_\_\_\_

Specification Paragraph or Section: \_\_\_\_\_

\_\_\_ A route selection report has been submitted and approved by AFCEE.

Prior to leaving the site, a load inspection of all shipments will be conducted by the site superintendent. A load inspection report will be submitted to the Contracting Officer's Technical Representative, which will verify and provide written documentation of the following:

\_\_\_ A complete and accurate manifest

\_\_\_ Labeling is in accordance with DOT regulations specified by 49 CFR

\_\_\_ When required, a Bill of Lading is traceable to the manifest

\_\_\_ A statement is available indicating that the driver is physically fit to perform his duties

\_\_\_ The driver has written documentation in his possession of completion of any required safety training and health monitoring

\_\_\_ The driver's log book is current

\_\_\_ A certificate of insurance is in force

\_\_\_\_\_  
Site Superintendent

**FINAL PAGE**

**ADMINISTRATIVE RECORD**

**FINAL PAGE**

**FINAL PAGE**

**ADMINISTRATIVE RECORD**

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