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FINAL PLAN OF ACTION PHASE II FOR REMEDIAL INVESTIGATION FIELD WORK NAS  
WHITING FIELD FL  
3/1/1992  
ABB ENVIRONMENTAL SERVICES, INC

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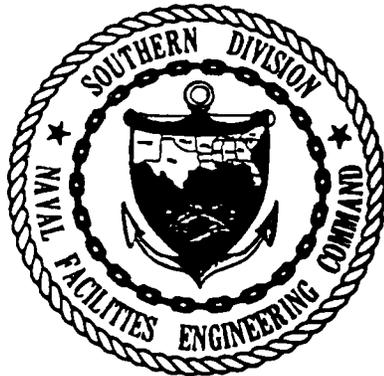


**FINAL**

**PLAN OF ACTION  
PHASE II  
RI FIELD WORK  
NAVAL AIR STATION WHITING FIELD  
MILTON, FLORIDA**

**STATEMENT OF WORK NO. 025  
NAVY CLEAN - DISTRICT I  
CONTRACT NO. N62467-89-D-0317**

**MARCH 1992**



**FINAL  
PLAN OF ACTION**

**Statement of Work (SOW) #25  
Navy CLEAN - District I  
Contract No. N62467-89-D-0317**

**Phase II RI Field Work  
NAS Whiting Field  
Milton, Florida**

**18 March 1992**

**Submitted By:**

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**STATEMENT OF WORK (SOW) #25  
INSTALLATION RESTORATION PROGRAM  
RI PHASE II, NAS WHITING FIELD, MILTON, FLORIDA**

**I. INTRODUCTION**

On 20 December 1991, Southern Division Naval Facilities Engineering Command (SOUTHNAVFAC) forwarded SOW #25 to ABB Environmental Services Inc., requesting a Plan of Action (POA) for the Phase II-A Remedial Investigation (RI) at NAS Whiting Field, Milton, Florida.

This POA describes the scope of services, schedule, and costs estimated to meet the objectives of SOW #25. This proposal for the RI effort includes the following activities:

- Management activities including coordination of field activities, detailed monthly progress reports, Technical Financial Monthly Reports, development and management of the analysis database, field activity reports, and meetings, as appropriate.
- Technical activities including revising of the Draft Final Technical Memorandum based on regulatory comments, management of soil boring and monitoring well installation; conducting geophysical, soil gas, and ecological surveys of the site; conducting sampling and analysis of air, soil, sediment, surface water, and ground water; data validation and evaluation of the analyses results; and writing of a draft Technical Memoranda.

The purpose of this POA is to present the scope of services as proposed in Technical Memorandum No. 6. This finalized POA is designed to meet the objectives, as set forth in the SOW, and as modified by the scoping meeting.

The following sections present the scope of services (Section II), key personnel (Section III), schedule (Section IV), and cost estimates (Section V).

## II. SCOPE OF SERVICES

This POA presents the scope of services to be provided in meeting the objectives of SOW #25, dated 20 December 1991. As requested in that SOW, the level of effort will be directly related to the tasks defined by Technical Memorandum No. 6 for Sites 1, 3, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, Auto Hobby Shop/South Field Maintenance Hanger and Sludge Drying Beds.

Technical Memorandum No. 6 recommended additional investigations to characterize the nature and extent of contamination at the above mentioned sites. The following work breakdown of tasks is designed to meet the objectives of the Phase II Remedial Investigation:

- . Task 1: Project Management
- . Task 2: Field Preparation and Management
- . Task 3: Geophysical Survey
- . Task 4: Soil Gas Survey
- . Task 5: Surface Water and Sediment Sampling
- . Task 6: Test Pitting
- . Task 7: Soil Borings and Monitoring Well Installation
- . Task 8: Soil Sampling
- . Task 9: PCPT/BAT Exploration Program
- . Task 10: Groundwater Sampling
- . Task 11: Water Level Measurement
- . Task 12: Elevation and Location Survey
- . Task 13: Ecological Survey and Public Health Survey
- . Task 14: Data Validation
- . Task 15: Photographic/Graphics Support
- . Task 16: Technical Memoranda Development
- . Task 17: Groundwater Modeling
- . Task 18: Contamination Assessment and No Action Reports
- . Task 19: Baseline Risk Assessment

This POA describes the appropriate scope of service assigned to fulfill these tasks. Where possible, projected scope changes that could potentially affect the cost or schedule of this effort are noted.

Paragraph 2.12 of the SOW requires ABB-ES to expect "to perform tasks on short notice." This expectation is reasonable to the extent that these tasks are already delineated in the Work Plan and will be shown in the approved schedule accompanying this POA. Any tasks over and above those called out in the Work Plan will be outside the scope of this POA and, as such, will constitute a change in scope to the SOW.

Paragraph 4.2.1 requires ABB-ES to "notify both the Navy RPM and IR Coordinator immediately upon discovery of any significant new site conditions, including imminent hazard or substantial endangerment." This POA is written for the site conditions as they are currently known to exist. While "any significant new site conditions" will be addressed and handled appropriately, they must, by definition, fall outside the scope of this POA and will have to be dealt with accordingly.

The following tasks and subtasks have been defined in order to fulfill the objectives of the SOW and the Work Plan:

**Task 1: Project Management**

- o Subtask 1.1 Finalize Planning Documents
- o Subtask 1.2 Record Search
- o Subtask 1.3 Site Visits and Field Audits
- o Subtask 1.4 Day to Day Project Management
- o Subtask 1.5 Meetings
- o Subtask 1.6 Community Relations Plan Implementation

**Task 2: Field Preparation and Management**

- o Subtask 2.1 Kick-off Meeting
- o Subtask 2.2 Field Team Preparation
- o Subtask 2.3 Site Visit/Set-up
- o Subtask 2.4 Demobilization
- o Subtask 2.5 Health and Safety
- o Subtask 2.6 Laboratory Analysis

**Task 3: Geophysical Survey**

- o Subtask 3.1 Field Preparation
- o Subtask 3.2 Geophysical Survey
- o Subtask 3.3 Review and Evaluation of Subcontractor Geophysical Report

**Task 4: Soil Gas Survey**

- o Subtask 4.1 Field Preparation
- o Subtask 4.2 Soil Gas Sample Collection
- o Subtask 4.3 Review and Evaluation of Subcontractor Soil Gas Report

**Task 5: Surface Water and Sediment Sampling**

- o Subtask 5.1 Field Preparation
- o Subtask 5.2 Sample Collection
- o Subtask 5.3 Sample Analyses
- o Subtask 5.4 Data Validation/Evaluation

**Task 6: Test Pitting**

- o Subtask 6.1 Field Preparation
- o Subtask 6.2 Perform Test Pitting/Soil Sample Collection

**Task 7: Soil Borings and Monitoring Well Installation**

- o Subtask 7.1 Field Preparation
- o Subtask 7.2 Drill Soil Borings
- o Subtask 7.3 Install Monitoring Wells

**Task 8: Soil Sampling**

- o Subtask 8.1 Field Preparation
- o Subtask 8.2 Sample Collection
- o Subtask 8.3 Sample Analyses
- o Subtask 8.4 Data Validation/Evaluation

**Task 9: PCPT/BAT Exploration Program**

- o Subtask 9.1 Field Preparation
- o Subtask 9.2 PCPT/BAT Explorations

**Task 10: Groundwater Sampling**

- o Subtask 10.1 Field Preparation
- o Subtask 10.2 Sample Collection
- o Subtask 10.3 Sample Analyses
- o Subtask 10.4 Data Validation/Evaluation

**Task 11: Water Level Measurement**

- o Subtask 11.1 Field Preparation
- o Subtask 11.2 Water Level Measurements
- o Subtask 11.3 Data Evaluation

**Task 12: Elevation and Location Survey**

**Task 13: Ecological Survey and Public Health Survey**

**Task 14: Data Validation**

**Task 15: Photographic/Graphics Support**

**Task 16: Technical Memoranda**

- o Subtask 16.1 Draft Technical Memoranda
- o Subtask 16.2 Response to Navy Draft Comments
- o Subtask 16.3 Draft Final Technical Memoranda
- o Subtask 16.4 Response to Navy Draft Final Comments
- o Subtask 16.5 Final Technical Memoranda

**Task 17: Groundwater Modeling**

**Task 18: Contamination Assessment and No Action Reports**

**Task 19: Baseline Risk Assessment**

The following paragraphs describe the level of effort required to fulfill the objectives of each work element, as described in the Work Plan. Except as noted herein, each task will be conducted as described in Technical Memorandum No. 6.

**Task 1: Project Management**

ABB-ES will provide project management consistent with the needs of the project's objectives and ABB-ES' total quality management program. For costing and scheduling purposes, this effort is broken down as reflected in the following subtasks.

ABB-ES will provide full time oversight for the duration of this project (as defined by the SOW and this POA). The expected duration is 24 months. It is assumed that the TOM, PA and technical lead will be involved in all aspects of the project and the LOE for full time oversight by these individuals is included in this Task.

### Subtask 1.1 Finalize Planning Documents

This task includes finalizing Technical Memorandum Number 6 once Navy comments have been received. Technical Memorandum No. 6 presents the scope of the RI Phase II-A field investigation.

The key personnel and LOE for this estimate will be: Senior Scientist - 40 hours; Technical Expert - 16 hours, Engineer - 40 hours, CAD Operator - 24 hours, Technical Editor - 16 hours, Senior Engineer - 16 hours, and Word Processor - 24 hours.

### Subtask 1.2 Record Search

Since the end of the RI Phase I field program in April 1991, many areas of concern (AOCs) including waste oil tanks and sludge disposal areas have been identified and included in the Phase II-A RI. An extensive search of Whiting Field Public Works Department's records (files, drawings, etc.) will be conducted to obtain background and locational information on the newly discovered AOCs and any other potential AOCs that have not been identified to date. Results and findings of the record search will be documented and presented to the Navy in memorandum form.

The key personnel and LOE for this task will be: Technical Expert - 80 hours, Senior Scientist - 80 hours, and Clerk/Word Processor - 24 hours.

### Subtask 1.3 Site Visits and Field Audits

**Site Visits** - The Task Order Manager (TOM) and the Technical Leader will make a three day site visit (including travel time) to initiate the field work effort. This visit will include a kick-off meeting for all field personnel and contractors, as well as necessary liaison with the facility personnel. See Subtask 2.1 for a description of this meeting and the projected participants. This initial site visit is critical to promote an equal understanding of the project objectives, which forms the foundation for the entire RI/FS effort. Additionally, there are nine planned, field trips, for task oversight and problem resolutions should they arise.

**Field Audits** - Three two day (travel time included) audits of field conditions will be conducted during in the field work effort to assess conformance with site work plans and compliance with regulatory directives, as well as to ascertain any necessary changes to the work effort so that program objectives are met. The first audit will be conducted at field work initiation, with a second audit midway through the program. A third audit is scheduled to coincide with the projected audit by regulatory agency. These audits will be conducted by the QA Manager, the Health and Safety Manager (H&S), and the Technical Expert.

The key personnel and LOE for this effort will be: H&S Manager - 56 hours; QA Manager - 72 hours; and Technical Expert - 56 hours.

### Subtask 1.4 Day-to-Day Project Management

**Sub-Contracts** - ABB-ES has solicited competitive bids for services which will be procured via subcontract. Subsequent to award of the CTO, the TOM and the Senior Engineer will coordinate with the Contracts Manager to update specifications and assist in the negotiations. The LOE for this is included in the day-to-day project management section described below.