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NAS CECIL FIELD  
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SITE MANAGEMENT PLAN NAS CECIL FIELD FL  
10/20/1992  
NAVFAC SOUTHERN

**NAVAL AIR STATION CECIL FIELD  
JACKSONVILLE, FLORIDA**

**SITE MANAGEMENT PLAN**

**20 October 1992**

**Report Prepared by:**

**Department of the Navy  
Southern Division  
Naval Facilities Engineering Command  
1255 Eagle Drive  
Charleston, South Carolina**

## **I. INTRODUCTION**

This Site Management Plan (SMP) was prepared in accordance with the requirements of the Federal Facility Agreement (FFA) between the United States Environmental Protection Agency (USEPA, Florida Department of Environmental Regulation (FDER), and the United States Navy. The FFA is an interagency agreement which is a requirement of Section 120(e) (1) of the Superfund Amendments and Reauthorization Act (SARA). The intent of the plan is to provide: (1) actions necessary to investigate and mitigate potential threats to human health and the environment, (2) a list of initial operable units, (3) a prioritization of operable units, (4) a schedule of work proposed for the current year, and (5) a projected schedule for subsequent calendar years.

The Installation Restoration Program Schedule and 1993 Site Management Plan (SMP) for NAS Cecil Field is being modified to incorporate substantial changes in scope, funding and technical considerations identified during execution of program activities during 1992. The scope of work for investigation sets presented in the 1992 SMP was based on Remedial Investigation goals to define the sources of contamination. Further evaluation of the data from the initial round of field work conducted to date indicates that the contamination at many of the sites do not reflect the volume, variety or source of wastes originally suspected and groundwater characterization will be required. Therefore, emphasis and goals of the 1993 SMP is to investigate source and groundwater concurrently. This approach will expedite the final remedial actions to be taken at the Sites.

## **II. SITE MANAGEMENT STRATEGY**

The CERCLA Remedial Investigation/Feasibility Study (RI/FS) process will be tailored to allow prioritization of sites according to potential threat to human health and the environment. The process will focus on source identification, with delineation of soil/sediment contamination. Groundwater and surface water contamination will be investigated simultaneously and adjustments will be made during the investigations based on the nature and extent of contamination and the complexities associated with site specific conditions.

The program will assess all potential sources of contamination and candidate sites which can be identified and early decisions reached by the FFA parties on clean-up action will be expedited. This process may include Focused Feasibility Studies, Interim Records of Decision and non-time critical removal actions.

The methods and schedules of investigations will reflect a consistent and technically sound approach. The process for conducting the RI/FS Program will be accomplished in accordance with the NAVY/MARINE CORPS INSTALLATION RESTORATION MANUAL (February 1992), guidelines defined in the USEPA GUIDANCE FOR CONDUCTING REMEDIAL INVESTIGATION AND FEASIBILITY STUDIES UNDER CERCLA (1998), and the NATIONAL OIL AND HAZARDOUS SUBSTANCE CONTINGENCY PLAN (NCP) (1982).

The SMP is a dynamic document and will be amended as may be warranted and mutually agreed to by the Navy, USEPA and FDER. The principles upon which the SMP is prepared include; sufficient utilization of resources, flexibility to meet changing and unforeseen conditions, and the ability to focus on site clean-up in a scientific and effective manner.

In this process data are continually assessed and sites are evaluated to determine if contamination is present, if it presents a threat, if it has been delineated, and finally what further action is needed (i.e., delineation, interim removal action, or evaluation of remedial alternatives). The process eliminates lengthy interim report development and review times by allowing continual data assessment and rapid decision-making.

If initial data evaluation shows groundwater and/or surface water to be an immediate threat to human health or the environment, interim actions may be performed to mitigate further transport from the site. If groundwater or surface water contamination is not judged to be an immediate threat, delineation may be

performed on a larger scale by viewing local aquifer and surface water systems as an individual operable unit(s) which may be impacted by several sites simultaneously.

The Navy recognizes the need for facilitated communication between all parties involved in order that the RI/FS process can be expedited. The Navy plans to use Technical Memoranda as the vehicle for written communication between USEPA and FDER. Technical Memorandum will not undergo a formal review process (such as Federal Facilities Agreement primary documents). Agency comments on the Technical Memoranda will be incorporated into the primary documents as appropriate.

Decisions concerning data assessment and actions to be taken will be made during Project Manager meetings, which will include representatives from USEPA, FDER and the Navy. These meetings will provide a forum for discussion of investigative results and proposed actions. The decisions made at the Project Manager meetings may be final with no reporting or review time required.

This approach synthesizes prioritization of sites with a realistic view of dynamic environmental systems. Areas, which are more easily defined, can be identified and treated, thereby removing potential sources of contamination in a timely manner. Flowing groundwater and surface water systems are naturally continuous, without regard for site boundaries, and may be investigated and treated as a single system or set of systems.

Through this approach, the RI/FS process can be responsive to individual site characteristics and technical requirements, without lengthy delays between field actions. This provides the flexibility to address any site, operable unit, or set of operable units separately or collectively. In addition, specific matrices (i.e., soil/sediment, groundwater, surface water, or air) of individual sites, or operable units, can be treated separately if necessary, or a single matrix may be investigated at one time across the entire facility.

### **III. LISTING OF POTENTIAL SOURCES OF CONTAMINATION (PSCs)**

Potential source of contamination (PSCs) at NAS Cecil Field can be separated into two categories, Site Screening PSCs or RI/FS PSCs depending on the level of investigation that has previously been performed at the individual PSCs.

Sites where the potential for contamination has been identified, but little or no confirmation data is available, are classified as Site Screening PSCs. These sites will require initial confirmation and characterization sampling prior to determining if further investigation is necessary. The Site Screening PSCs are listed below but they are not yet a part of the RI/FS process and will not be discussed further in this SMP. Because Site 4 is located in close proximity to OU2, investigations at this Site will be included in the execution of field work for OU2. However, Site 4 will not be added to the RI/FS Sites until information is collected which determines the requirement to do so.

**SITE SCREENING PSCs**

| PSC No. | Site Name                          |
|---------|------------------------------------|
| 4       | Grease Pits                        |
| 6       | Lake Fretwell Rubble Disposal Area |
| 9       | Recent Grease Pits                 |
| 12      | Public Works Disposal Area         |
| 18      | Ammunition Disposal Area           |
| 19      | Rowell Creek Rubble Disposal Area  |

Initial characterization investigations have been performed at the remaining sites listed below. These PSCs will be addressed under the RI/FS process.

**REMEDIAL INVESTIGATION/FEASIBILITY STUDY PSCs**

| PSC No. | Site Name                                  |
|---------|--|
| 1       | Old Landfill                               |
| 2       | Recent Landfill                            |
| 3       | Oil Sludge Disposal Area                   |
| 5       | Oil Disposal Area Northwest                |
| 7       | Old Fire Fighting Training Area            |
| 8       | Boresite Range Fire Fighting Training Area |
| 10      | Rubble Disposal Area                       |
| 11      | Golf Course Pesticide Disposal Area        |
| 14      | Blue 5 Ordnance Disposal Area              |
| 15      | Blue 10 Ordnance Disposal Area             |
| 16      | AIMD Seepage Pit                           |
| 17      | Oil/Sludge Disposal Pit Southwest          |

**IV. OPERABLE UNITS IDENTIFICATION AND INVESTIGATIVE SETS**

The 12 sites requiring RI/FS will initially be divided into operable units based on types of waste disposed or typical profiles of suspected contaminants. These operable units may be re-defined as more data is collected and evaluated. Ultimately, an operable unit will consist of sites, contaminants, or matrices which require similar remedial efforts.

Sites proposed for initial definition of operable units are listed below. The division of these units is generally based on wastes reported to be disposed and suspected contaminants at each site. The operable units are then grouped into sets for investigation. All units and groups may be redefined after further data evaluation. The prioritization of sites for investigation is based on potential threat to human health and the environment.

**Investigative Set 1**

**Operable Unit 1 - Landfills**

PSC 1 - Old Landfill  
PSC 2 - Recent Landfill

**Operable Unit 2 - Oil/Sludge Disposal Areas**

PSC 3 - Oil Sludge Disposal Area  
PSC 5 - Oil Disposal Area Northwest  
PSC 17 - Oil/Sludge Disposal Pit Southwest

**Operable Unit 7 - AIMD Seepage Pit**

PSC 16 - AIMD Seepage Pit

**Screening Site-PSC-4 Grease Pits**

**Investigative Set 2**

**Operable Unit 3 - Fire Training Areas**

PSC 7 - Old Fire Fighting Training area  
PSC 8 - Boresite Range Fire Fighting Training Area

**Investigative Set 3**

**Operable Unit 6 - Pesticide Disposal Area**

PSC 11 - Golf Course Pesticide Disposal Area

**Investigative Set 4**

**Operable Unit 4 - Rubble Disposal Areas**

PSC 10 - Rubble Disposal Area

**Investigative Set 5**

**Operable Unit 5 - Ordnance Disposal Areas**

- PSC 14 - Blue 5 Ordnance Disposal Area
- PSC 15 - Blue 10 Ordnance Disposal Area

This first group of Operable Units (Investigative Set I) was selected for the following reasons:

- historically, landfills and unlined disposal pits have represented a source for significant levels of both groundwater and soil contamination,
- large volume of waste reportedly disposed at these sites,
- geographic proximity of Operable Units 1 and 2, and
- RCRA regulatory requirements (PSC 16).

Investigative sets 2, 3, 4 and 5 are grouped and selected for the following reasons:

- lower volume of waste reportedly disposed at these sites,
- location of sites in restricted areas of the installation, and
- lower mobility of suspected contaminants

**V. INVESTIGATIVE SET 1 BACKGROUND AND STATUS**

The Navy conducted field activities based on an approved workplan for Investigative Set I from October through December 1991. Difficulty was encountered during the field work as source contamination could not easily be separated from the groundwater contamination. Execution of the field activities has indicated that many of the assumptions initially used to design and develop the approved workplan was not sufficiently comprehensive to adequately characterize the OUs. As a result of this field work and the requirement to investigate groundwater at each site a Technical Memorandum for Supplemental Sampling (TMSS) was prepared and submitted to the EPA and FDER in September 1992.

The TMSS presents existing background information for OUs 1, 2 and 7; presents locations and depths of samples collected during the current investigation and summarizes the analytical results; summarizes contamination detected in soil and groundwater at each site; identifies additional information required to characterize site contamination; and presents proposed data collection activities that address additional data requirements to complete the field investigation portion of the Remedial Investigation at NAS Cecil Field.

The objective of the NAS Cecil Field RI/FS investigation at OUs 1,2 and 7 includes the following:

- Determine the nature and extent of contamination in site soils and groundwater.
- Identify contaminants in site soils and groundwater that exceed regulatory standards.

- Assess the potential for contaminant migration to receptors.
- Conduct human health and ecological risk assessments.
- Identify and collect data to support remedial design.

## **VI. INSTALLATION RESTORATION PROGRAM GOALS**

The following goals based on the identified assumptions are presented in an effort to meet milestones identified in the SMP schedules, and to provide for effective use of the Navy Resources.

### **A. Draft RI/FS Report OU 1**

#### **Assumptions:**

- a. Groundwater contamination will not exceed either state or federal contaminate concentration guidelines
- b. No additional unscheduled data collection outside the TMSS
- c. Surface Soils are not contaminated
- d. Risk Assessment can be restricted to the site boundaries
- e. Award Contract by 30 January 1993

### **B. Complete OU 7 Site Characterization**

#### **Assumptions:**

- a. The source of cantamination is restricted to a localized area and the site characterization is not compromised by buildings or runways
- b. The future residential scenario will not be used at this site
- c. The site does not contain DNAPL
- d. Award Contract by 30 January 1993

### **C. Continue Site Characterization Activities at OU 2**

#### **Assumptions:**

- a. Execute TMSS activities
- b. Award Contract by 30 June 1993

### **D. Initiate Treatability Studies at OU 7 and Develop Treatability Study Workplan for Sites 5 and 17**

#### **Assumptions:**

- a. Award Contract by 30 January 1993

- E. Initiate base wide ecological Study and Assessment in order to expedite the record of decision process at individual sites

**Assumptions:**

- a. Concurrence with FFA parties on receptors and definition of ecological health
- b. Contract Award by 30 January 1993

- F. Evaluate base wide groundwater models and select the appropriate groundwater model to expedite remedial action at individual sites

**Assumptions:**

- a. Sign Agreement with USGS 30 January 1993
- b. FFA parties Agree with model selected for use
- c. Award Contract by 30 January 1993

- G. Conduct TRC and NRT meetings

- 1. Availability of Attendees

## VII. SCHEDULE

| <b>General Deliverables (all operable units)</b> | <b>Transmittal Date</b> |
|--|-------------------------|
| Site Management Plan (1993)                      | 1 September 1992        |
| Quarterly Progress Reports                       | 30 October 1992         |
|  | 30 January 1993         |
|  | 30 April 1993           |
|  | 30 July 1993            |

### Investigative Set 1

| <b>1993 Primary Deliverables</b> | <b>Transmittal Date</b> |
|----------------------------------|-------------------------|
| Draft RI/FS Report OU 1          | 09 November 1993        |

| <b>1994 Projected Primary Deliverables</b> | <b>Transmittal Date</b> |
|--|-------------------------|
| Draft Proposed RA Plan OU 1                | 24 March 1994           |
| Prepare Draft ROD OU 1                     | 19 November 1994        |
| Draft RI/RA Report OU 7                    | 07 July 1994            |

|                         |                   |
|-------------------------|-------------------|
| Draft FS Report OU 7    | 06 August 1994    |
| Draft RI/RA Report OU 2 | 27 September 1994 |
| Draft FS Report OU 2    | 27 October 1994   |

**Investigative Set 2**

| <b>1994 Projected Primary Deliverables</b> | <b>Transmittal Date</b> |
|--|-------------------------|
| Draft RI/FS Workplan OU 3                  | 06 August 1994          |

Schedule Name : OUs 1,2,&7 FFA  
 Responsible : Cliff Casey  
 As-of Date : 20-Oct-92

Schedule File : EXTOTEPA

Operable Units 1, 2, AND 7 Normal Review Schedule

| Task Name                 | Start Date | End Date  | Duration  |
|---------------------------|------------|-----------|-----------|
| PROPOSED ACTIVITIES OU1,2 | 16-Aug-92  | 30-Sep-92 | 45.0 days |
| AGENCY EVALUATION         | 30-Sep-92  | 30-Oct-92 | 30.0 days |
| OPTIMIZATION OF DESIGN    | 30-Oct-92  | 29-Nov-92 | 30.0 days |
| CONTRACT NEGOTIATION      | 29-Nov-92  | 29-Dec-92 | 30.0 days |
| OPERABLE UNIT 1           | 29-Nov-92  | 18-Apr-95 | 870.0 day |
| FIELD WORK                | 29-Dec-92  | 12-Jun-93 | 165.0 day |
| FIELD WORK ACTIVITIES     | 29-Dec-92  | 14-Mar-93 | 75.0 days |
| POA PREPARE               | 29-Dec-92  | 13-Jan-93 | 15.0 days |
| SUBCONTRACTING            | 13-Jan-93  | 28-Jan-93 | 15.0 days |
| FIELD WORK PHASE II       | 28-Jan-93  | 14-Mar-93 | 45.0 days |
| ANALYSIS AND DATA MAN     | 14-Mar-93  | 12-Jun-93 | 90.0 days |
| LABORATORY ANALYSIS       | 14-Mar-93  | 13-Apr-93 | 30.0 days |
| DATA VALIDATION/MAN       | 13-Apr-93  | 12-Jun-93 | 60.0 days |
| RISK ASSESSMENT           | 29-Nov-92  | 11-Aug-93 | 255.0 day |
| ECOLOGICAL FIELD SAMP     | 29-Nov-92  | 29-Mar-93 | 120.0 day |
| ECOLOGICAL ASSESSMENT     | 29-Mar-93  | 28-May-93 | 60.0 days |
| HUMAN-RISK ASSESSMENT     | 12-Jun-93  | 11-Aug-93 | 60.0 days |
| RI/FS REPORT              | 11-Aug-93  | 23-Apr-94 | 255.0 day |
| DRAFT RI/FS REPORT        | 11-Aug-93  | 9-Nov-93  | 90.0 days |
| AGENCY REVIEW             | 9-Nov-93   | 24-Dec-93 | 45.0 days |
| RESPONSE TO COMMENTS      | 24-Dec-93  | 7-Feb-94  | 45.0 days |
| PREPARE DRAFT FINAL       | 7-Feb-94   | 24-Mar-94 | 45.0 days |
| FINAL RI REPORT           | 24-Mar-94  | 23-Apr-94 | 30.0 days |
| PROPOSED PLAN             | 7-Feb-94   | 6-Aug-94  | 180.0 day |
| PREPARE PROPOSED PLAN     | 7-Feb-94   | 24-Mar-94 | 45.0 days |
| AGENCY REVIEW             | 24-Mar-94  | 8-Apr-94  | 15.0 days |
| RESPONSE TO COMMENTS      | 8-Apr-94   | 23-May-94 | 45.0 days |
| PREPARE DRAFT FINAL       | 23-May-94  | 7-Jul-94  | 45.0 days |
| FINAL                     | 7-Jul-94   | 6-Aug-94  | 30.0 days |
| PUBLIC COMMENT PERIOD     | 6-Aug-94   | 19-Nov-94 | 105.0 day |
| PREPARE PUBLIC NOTICE     | 6-Aug-94   | 21-Aug-94 | 15.0 days |
| PUBLIC COMMENT PERIOD     | 21-Aug-94  | 5-Oct-94  | 45.0 days |
| PUBLIC MEETING            | 4-Sep-94   | 5-Sep-94  | 1.0 day   |
| RESPONSIVENESS SUMMA      | 5-Oct-94   | 19-Nov-94 | 45.0 days |
| RECORD OF DECISION        | 5-Oct-94   | 18-Apr-95 | 195.0 day |
| DRAFT                     | 5-Oct-94   | 19-Nov-94 | 45.0 days |
| PREPARE DRAFT ROD         | 5-Oct-94   | 19-Nov-94 | 45.0 days |
| ROD REVIEW                | 19-Nov-94  | 18-Apr-95 | 150.0 day |
| AGENCY REVIEW             | 19-Nov-94  | 19-Dec-94 | 30.0 days |
| RESPOND TO COMMENTS       | 19-Dec-94  | 2-Feb-95  | 45.0 days |
| PREPARE DRAFT FINAL       | 2-Feb-95   | 19-Mar-95 | 45.0 days |
| FINAL ROD                 | 19-Mar-95  | 18-Apr-95 | 30.0 days |
| OU #2                     | 14-Mar-93  | 4-May-96  | 1,147.0 d |
| FIELD WORK ROUND I        | 14-Mar-93  | 9-Nov-93  | 240.0 day |
| FIELD WORK ACTIVITIES     | 14-Mar-93  | 11-Aug-93 | 150.0 day |
| (COMPLETION OU1 FIE       | 14-Mar-93  | 14-Mar-93 | 0.0       |
| POA PROPOSED              | 14-Mar-93  | 29-Mar-93 | 15.0 days |
| SUBCONTRACTING            | 29-Mar-93  | 13-Apr-93 | 15.0 days |
| FIELD WORK                | 13-Apr-93  | 11-Aug-93 | 120.0 day |
| ANALYSIS AND DATA MAN     | 11-Aug-93  | 9-Nov-93  | 90.0 days |
| LABORATORY ANALYSIS       | 11-Aug-93  | 10-Sep-93 | 30.0 days |
| DATA VALIDATION/MAN       | 10-Sep-93  | 9-Nov-93  | 60.0 days |
| ROUND II FIELD WORK       | 9-Nov-93   | 29-Jun-94 | 232.0 day |
| TECH. MEMO. ROUND II      | 9-Nov-93   | 24-Dec-93 | 45.0 days |
| AGENCY EVALUATION         | 24-Dec-93  | 23-Jan-94 | 30.0 days |
| OPTIMIZATION OF DESIG     | 23-Jan-94  | 30-Jan-94 | 7.0 days  |
| FIELD WORK ROUND II       | 30-Jan-94  | 29-Jun-94 | 150.0 day |
| FIELD WORK ROUND II       | 30-Jan-94  | 31-Mar-94 | 60.0 days |
| POA PROPOSED              | 30-Jan-94  | 14-Feb-94 | 15.0 days |
| SUBCONTRACTING            | 14-Feb-94  | 1-Mar-94  | 15.0 days |
| FIELD WORK ROUND          | 1-Mar-94   | 31-Mar-94 | 30.0 days |
| ANALYSIS AND DATA M       | 31-Mar-94  | 29-Jun-94 | 90.0 days |
| LABORATORY ANALYS         | 31-Mar-94  | 30-Apr-94 | 30.0 days |
| DATA VALIDATION/M         | 30-Apr-94  | 29-Jun-94 | 60.0 days |
| RI REPORT                 | 29-Jun-94  | 11-Mar-95 | 255.0 day |

|                        |           |           |           |
|------------------------|-----------|-----------|-----------|
| DRAFT RI/BRA REPORT    | 29-Jun-94 | 27-Sep-94 | 90.0 days |
| AGENCY REVIEW          | 27-Sep-94 | 11-Nov-94 | 45.0 days |
| RESPONSE TO COMMENTS   | 11-Nov-94 | 26-Dec-94 | 45.0 days |
| PREPARE DRAFT FINAL    | 26-Dec-94 | 9-Feb-95  | 45.0 days |
| FINAL RI REPORT        | 9-Feb-95  | 11-Mar-95 | 30.0 days |
| FEASIBILITY STUDY      | 29-Mar-93 | 10-Apr-95 | 742.0 day |
| TECHNOLOGIES SCREENIN  | 29-Mar-93 | 27-Jun-93 | 90.0 days |
| SCREENING TECHNOLOG    | 29-Mar-93 | 28-Apr-93 | 30.0 days |
| ALTERNATIVE SCREENI    | 28-Apr-93 | 28-May-93 | 30.0 days |
| DETAIL ANALYSIS        | 28-May-93 | 27-Jun-93 | 30.0 days |
| FEASIBILITY STUDY REP  | 29-Jul-94 | 10-Apr-95 | 255.0 day |
| PREPARE DRAFT FS RE    | 29-Jul-94 | 27-Oct-94 | 90.0 days |
| AGENCY REVIEW          | 27-Oct-94 | 11-Dec-94 | 45.0 days |
| RESPOND TO COMMENTS    | 11-Dec-94 | 25-Jan-95 | 45.0 days |
| PREPARE DRAFT FINAL    | 25-Jan-95 | 11-Mar-95 | 45.0 days |
| FINAL                  | 11-Mar-95 | 10-Apr-95 | 30.0 days |
| PROPOSED PLAN          | 25-Jan-95 | 6-Dec-95  | 315.0 day |
| DRAFT PROPOSED PLAN    | 25-Jan-95 | 23-Aug-95 | 210.0 day |
| PREPARE DRAFT PLAN     | 25-Jan-95 | 11-Mar-95 | 45.0 days |
| AGENCY REVIEW          | 10-Apr-95 | 25-Apr-95 | 15.0 days |
| RESPONSE TO COMMENT    | 25-Apr-95 | 9-Jun-95  | 45.0 days |
| DRAFT PROPOSED PLAN    | 9-Jun-95  | 24-Jul-95 | 45.0 days |
| FINAL                  | 24-Jul-95 | 23-Aug-95 | 30.0 days |
| PUBLIC COMMENT PERIOD  | 23-Aug-95 | 6-Dec-95  | 105.0 day |
| PREPARE PUBLIC NOTI    | 23-Aug-95 | 7-Sep-95  | 15.0 days |
| PUBLIC COMMENT PERI    | 7-Sep-95  | 22-Oct-95 | 45.0 days |
| PUBLIC MEETING         | 21-Sep-95 | 22-Sep-95 | 1.0 day   |
| RESPONSIVENESS SUMM    | 22-Oct-95 | 6-Dec-95  | 45.0 days |
| RECORD OF DECISION     | 22-Oct-95 | 4-May-96  | 195.0 day |
| PREPARE DRAFT ROD      | 22-Oct-95 | 6-Dec-95  | 45.0 days |
| AGENCY REVIEW          | 6-Dec-95  | 5-Jan-96  | 30.0 days |
| RESPOND TO COMMENTS    | 5-Jan-96  | 19-Feb-96 | 45.0 days |
| PREPARE DRAFT FINAL R  | 19-Feb-96 | 4-Apr-96  | 45.0 days |
| FINAL ROD              | 4-Apr-96  | 4-May-96  | 30.0 days |
| OU #7                  | 11-Aug-93 | 13-Jan-96 | 885.0 day |
| FIELD WORK             | 11-Aug-93 | 8-Apr-94  | 240.0 day |
| FIELD WORK             | 11-Aug-93 | 8-Jan-94  | 150.0 day |
| (COMPLETION OF OU 1    | 11-Aug-93 | 11-Aug-93 | 0.0       |
| POA PROPOSED           | 11-Aug-93 | 26-Aug-93 | 15.0 days |
| SUBCONTRACTING         | 26-Aug-93 | 10-Sep-93 | 15.0 days |
| FIELD WORK             | 10-Sep-93 | 8-Jan-94  | 120.0 day |
| ANALYSIS AND DATA MAN  | 8-Jan-94  | 8-Apr-94  | 90.0 days |
| LABORATORY ANALYSIS    | 8-Jan-94  | 7-Feb-94  | 30.0 days |
| DATA VALIDATION/MAN    | 7-Feb-94  | 8-Apr-94  | 60.0 days |
| RI REPORT              | 8-Apr-94  | 4-Dec-94  | 240.0 day |
| DRAFT RI/BRA REPORT    | 8-Apr-94  | 7-Jul-94  | 90.0 days |
| AGENCY REVIEW          | 7-Jul-94  | 21-Aug-94 | 45.0 days |
| RESPONSE TO COMMENTS   | 21-Aug-94 | 5-Oct-94  | 45.0 days |
| PREPARE DRAFT FINAL    | 5-Oct-94  | 19-Nov-94 | 45.0 days |
| FINAL RI REPORT        | 19-Nov-94 | 4-Dec-94  | 15.0 days |
| FEASIBILITY STUDY      | 26-Aug-93 | 18-Jan-95 | 510.0 day |
| TECHNOLOGIES SCREENIN  | 26-Aug-93 | 24-Nov-93 | 90.0 days |
| SCREENING TECHNOLOG    | 26-Aug-93 | 25-Sep-93 | 30.0 days |
| ALTERNATIVE SCREENI    | 25-Sep-93 | 25-Oct-93 | 30.0 days |
| DETAIL ANALYSIS        | 25-Oct-93 | 24-Nov-93 | 30.0 days |
| FEASIBILT Y STUDY REPO | 8-May-94  | 18-Jan-95 | 255.0 day |
| PREPARE DRAFT FS RE    | 8-May-94  | 6-Aug-94  | 90.0 days |
| AGENCY REVIEW          | 6-Aug-94  | 20-Sep-94 | 45.0 days |
| RESPOND TO COMMENTS    | 20-Sep-94 | 4-Nov-94  | 45.0 days |
| PREPARE DRAFT FINAL    | 4-Nov-94  | 19-Dec-94 | 45.0 days |
| FINAL FS               | 19-Dec-94 | 18-Jan-95 | 30.0 days |
| PROPOSED PLAN          | 4-Nov-94  | 16-Aug-95 | 285.0 day |
| DRAFT PROPOSED PLAN    | 4-Nov-94  | 3-May-95  | 180.0 day |
| PREPARE DRAFT PRAP     | 4-Nov-94  | 19-Dec-94 | 45.0 days |
| AGENCY REVIEW          | 19-Dec-94 | 3-Jan-95  | 15.0 days |
| RESPONSE TO COMMENT    | 3-Jan-95  | 17-Feb-95 | 45.0 days |
| DRAFT PROPOSED PLAN    | 17-Feb-95 | 3-Apr-95  | 45.0 days |
| FINAL PROPOSED PLAN    | 3-Apr-95  | 3-May-95  | 30.0 days |
| PUBLIC COMMENT PERIOD  | 3-May-95  | 16-Aug-95 | 105.0 day |
| PREPARE PUBLIC NOTI    | 3-May-95  | 18-May-95 | 15.0 days |
| PUBLIC COMMENT PERI    | 18-May-95 | 2-Jul-95  | 45.0 days |
| PUBLIC MEETING         | 1-Jun-95  | 2-Jun-95  | 1.0 day   |
| RESPONSIVENESS SUMM    | 2-Jul-95  | 16-Aug-95 | 45.0 days |
| RECORD OF DECISION     | 2-Jul-95  | 13-Jan-96 | 195.0 day |
| DRAFT                  | 2-Jul-95  | 16-Aug-95 | 45.0 days |
| PREPARE DRAFT ROD      | 2-Jul-95  | 16-Aug-95 | 45.0 days |

|                       |           |           |           |
|-----------------------|-----------|-----------|-----------|
| ROD REVIEW            | 16-Aug-95 | 13-Jan-96 | 150.0 day |
| AGENCY REVIEW         | 16-Aug-95 | 15-Sep-95 | 30.0 days |
| RESPOND TO COMMENTS   | 15-Sep-95 | 30-Oct-95 | 45.0 days |
| PREPARE DRAFT FINAL   | 30-Oct-95 | 14-Dec-95 | 45.0 days |
| FINAL ROD             | 14-Dec-95 | 13-Jan-96 | 30.0 days |
| OPERABLE UNITS 3      | 7-Jun-94  | 20-Aug-98 | 1,350.0 d |
| ROUND I FIELD WORK    | 7-Jun-94  | 20-Aug-98 | 1,350.0 d |
| WORKPLAN              | 7-Jun-94  | 18-Jan-95 | 225.0 day |
| DRAFT WORKPLAN        | 7-Jun-94  | 6-Aug-94  | 60.0 days |
| AGENCY REVIEW         | 6-Aug-94  | 20-Sep-94 | 45.0 days |
| ADDRESS COMMENTS      | 20-Sep-94 | 4-Nov-94  | 45.0 days |
| PREPARE DRAFT FINAL   | 4-Nov-94  | 19-Dec-94 | 45.0 days |
| WORKPLAN FINAL        | 19-Dec-94 | 18-Jan-95 | 30.0 days |
| ROUND I FIELD WORK    | 18-Jan-95 | 15-Sep-95 | 240.0 day |
| FIELD WORK            | 18-Jan-95 | 17-Jun-95 | 150.0 day |
| POA PROPOSED          | 18-Jan-95 | 2-Feb-95  | 15.0 days |
| SUBCONTRACTING        | 2-Feb-95  | 17-Feb-95 | 15.0 days |
| FIELD WORK            | 17-Feb-95 | 17-Jun-95 | 120.0 day |
| ANALYSIS AND DATA M   | 17-Jun-95 | 15-Sep-95 | 90.0 days |
| LABORATORY ANALYS     | 17-Jun-95 | 17-Jul-95 | 30.0 days |
| DATA VALIDATION/M     | 17-Jul-95 | 15-Sep-95 | 60.0 days |
| ROUND II FIELD WORK   | 15-Sep-95 | 12-May-96 | 240.0 day |
| TECHNICAL MEMO ROUN   | 15-Sep-95 | 14-Nov-95 | 60.0 days |
| AGENCY EVALUATION     | 14-Nov-95 | 14-Dec-95 | 30.0 days |
| OPTIMIZATION OF DES   | 14-Dec-95 | 28-Dec-95 | 14.0 days |
| FIELD WORK            | 14-Nov-95 | 12-May-96 | 180.0 day |
| FIELD WORK ROUND      | 14-Nov-95 | 12-Feb-96 | 90.0 days |
| POA PREPARE           | 14-Nov-95 | 29-Nov-95 | 15.0 days |
| SUBCONTRACTING        | 29-Nov-95 | 14-Dec-95 | 15.0 days |
| FIELD WORK ROUN       | 14-Dec-95 | 12-Feb-96 | 60.0 days |
| ANALYSIS AND DATA     | 12-Feb-96 | 12-May-96 | 90.0 days |
| LABORATORY ANAL       | 12-Feb-96 | 13-Mar-96 | 30.0 days |
| DATA VALIDATION       | 13-Mar-96 | 12-May-96 | 60.0 days |
| RI REPORT             | 12-May-96 | 3-Feb-97  | 255.0 day |
| DRAFT RI/BRA REPORT   | 12-May-96 | 10-Aug-96 | 90.0 days |
| AGENCY REVIEW         | 10-Aug-96 | 24-Sep-96 | 45.0 days |
| RESPONSE TO COMMENT   | 24-Sep-96 | 8-Nov-96  | 45.0 days |
| PREPARE DRAFT FINAL   | 8-Nov-96  | 23-Dec-96 | 45.0 days |
| FINAL RI REPORT       | 23-Dec-96 | 3-Feb-97  | 30.0 days |
| FEASIBILITY STUDY     | 30-Sep-95 | 18-Mar-97 | 510.0 day |
| TREATABILITY STUDY    | 30-Sep-95 | 12-Apr-96 | 195.0 day |
| TECH MEMO TREATAB     | 30-Sep-95 | 29-Nov-95 | 60.0 days |
| SCREENING TECHN       | 30-Sep-95 | 30-Oct-95 | 30.0 days |
| ALTERNATIVE SCR       | 30-Oct-95 | 29-Nov-95 | 30.0 days |
| TREAT TESTS           | 29-Nov-95 | 13-Mar-96 | 105.0 day |
| POA                   | 29-Nov-95 | 14-Dec-95 | 15.0 days |
| SUBCONTRACTING        | 14-Dec-95 | 29-Dec-95 | 15.0 days |
| FIELD WORK            | 29-Dec-95 | 28-Jan-96 | 30.0 days |
| LABORATORY ANAL       | 28-Jan-96 | 13-Mar-96 | 45.0 days |
| DETAIL ANALYSIS       | 13-Mar-96 | 12-Apr-96 | 30.0 days |
| Feasibility Study     | 11-Jun-96 | 18-Mar-97 | 255.0 day |
| Prepare Draft FS      | 11-Jun-96 | 9-Sep-96  | 90.0 days |
| AGENCY REVIEW         | 9-Sep-96  | 24-Oct-96 | 45.0 days |
| RESPOND TO COMME      | 24-Oct-96 | 8-Dec-96  | 45.0 days |
| PREPARE DRAFT FIN     | 8-Dec-96  | 3-Feb-97  | 45.0 days |
| FINAL                 | 3-Feb-97  | 18-Mar-97 | 30.0 days |
| PROPOSED REMEDIAL ACT | 8-Dec-96  | 16-Jan-98 | 285.0 day |
| Draft (PRAP) REMEDI   | 8-Dec-96  | 14-Aug-97 | 180.0 day |
| PREPARE DRAFT PRA     | 8-Dec-96  | 3-Feb-97  | 45.0 days |
| AGENCY REVIEW         | 3-Feb-97  | 25-Feb-97 | 15.0 days |
| RESPONSE TO COMME     | 25-Feb-97 | 29-Apr-97 | 45.0 days |
| PREPARE DRAFT FIN     | 29-Apr-97 | 2-Jul-97  | 45.0 days |
| FINAL                 | 2-Jul-97  | 14-Aug-97 | 30.0 days |
| PUBLIC COMMENT PERI   | 14-Aug-97 | 16-Jan-98 | 105.0 day |
| Prepare Public No     | 14-Aug-97 | 5-Sep-97  | 15.0 days |
| Public Comment Pe     | 5-Sep-97  | 10-Nov-97 | 45.0 days |
| Public Meeting        | 25-Sep-97 | 26-Sep-97 | 1.0 day   |
| Responsiveness Su     | 10-Nov-97 | 16-Jan-98 | 45.0 days |
| Record of Decision    | 10-Nov-97 | 20-Aug-98 | 195.0 day |
| Draft                 | 10-Nov-97 | 16-Jan-98 | 45.0 days |
| Prepare Draft ROD     | 10-Nov-97 | 16-Jan-98 | 45.0 days |
| ROD REVIEW            | 16-Jan-98 | 20-Aug-98 | 150.0 day |
| AGENCY REVIEW         | 16-Jan-98 | 3-Mar-98  | 30.0 days |
| Respond to Commen     | 3-Mar-98  | 5-May-98  | 45.0 days |
| Prepare Draft Fin     | 5-May-98  | 9-Jul-98  | 45.0 days |
| FINAL ROD             | 9-Jul-98  | 20-Aug-98 | 30.0 days |

|                         |           |           |           |
|-------------------------|-----------|-----------|-----------|
| OPERABLE UNIT 6         | 11-Jul-96 | 7-Sep-01  | 1,350.0 d |
| ROUND I FIELD WORK      | 11-Jul-96 | 3-Mar-98  | 465.0 day |
| WORKPLAN                | 11-Jul-96 | 18-Mar-97 | 225.0 day |
| DRAFT WORKPLAN          | 11-Jul-96 | 9-Sep-96  | 60.0 days |
| AGENCY REVIEW           | 9-Sep-96  | 24-Oct-96 | 45.0 days |
| ADDRESS COMMENTS        | 24-Oct-96 | 8-Dec-96  | 45.0 days |
| PREPARE DRAFT FINAL     | 8-Dec-96  | 3-Feb-97  | 45.0 days |
| WORKPLAN FINAL          | 3-Feb-97  | 18-Mar-97 | 30.0 days |
| ROUND I FIELD WORK      | 18-Mar-97 | 3-Mar-98  | 240.0 day |
| FIELD WORK              | 18-Mar-97 | 20-Oct-97 | 150.0 day |
| POA PROPOSED            | 18-Mar-97 | 8-Apr-97  | 15.0 days |
| SUBCONTRACTING          | 8-Apr-97  | 29-Apr-97 | 15.0 days |
| FIELD WORK              | 29-Apr-97 | 20-Oct-97 | 120.0 day |
| ANALYSIS AND DATA M     | 20-Oct-97 | 3-Mar-98  | 90.0 days |
| LABORATORY ANALYS       | 20-Oct-97 | 3-Dec-97  | 30.0 days |
| DATA VALIDATION/M       | 3-Dec-97  | 3-Mar-98  | 60.0 days |
| ROUND II FIELD WORK     | 3-Mar-98  | 16-Feb-99 | 240.0 day |
| TECHNICAL MEMO ROUND    | 3-Mar-98  | 27-May-98 | 60.0 days |
| AGENCY EVALUATION       | 27-May-98 | 9-Jul-98  | 30.0 days |
| OPTIMIZATION OF DESIG   | 9-Jul-98  | 29-Jul-98 | 14.0 days |
| FIELD WORK              | 27-May-98 | 16-Feb-99 | 180.0 day |
| FIELD WORK ROUND II     | 27-May-98 | 2-Oct-98  | 90.0 days |
| POA PREPARE             | 27-May-98 | 17-Jun-98 | 15.0 days |
| SUBCONTRACTING          | 17-Jun-98 | 9-Jul-98  | 15.0 days |
| FIELD WORK ROUND        | 9-Jul-98  | 2-Oct-98  | 60.0 days |
| ANALYSIS AND DATA M     | 2-Oct-98  | 16-Feb-99 | 90.0 days |
| LABORATORY ANALYS       | 2-Oct-98  | 17-Nov-98 | 30.0 days |
| DATA VALIDATION/M       | 17-Nov-98 | 16-Feb-99 | 60.0 days |
| RI REPORT               | 16-Feb-99 | 22-Feb-00 | 255.0 day |
| DRAFT RI/BRA REPORT     | 16-Feb-99 | 23-Jun-99 | 90.0 days |
| AGENCY REVIEW           | 23-Jun-99 | 26-Aug-99 | 45.0 days |
| RESPONSE TO COMMENTS    | 26-Aug-99 | 1-Nov-99  | 45.0 days |
| PREPARE DRAFT FINAL     | 1-Nov-99  | 7-Jan-00  | 45.0 days |
| FINAL RI REPORT         | 7-Jan-00  | 22-Feb-00 | 30.0 days |
| FEASIBILITY STUDY       | 24-Mar-98 | 4-Apr-00  | 510.0 day |
| TREATABILITY STUDY      | 24-Mar-98 | 31-Dec-98 | 195.0 day |
| TECH MEMO TREATABIL     | 24-Mar-98 | 17-Jun-98 | 60.0 days |
| SCREENING TECHNOL       | 24-Mar-98 | 5-May-98  | 30.0 days |
| ALTERNATIVE SCREE       | 5-May-98  | 17-Jun-98 | 30.0 days |
| TREAT TESTS             | 17-Jun-98 | 17-Nov-98 | 105.0 day |
| POA                     | 17-Jun-98 | 9-Jul-98  | 15.0 days |
| SUBCONTRACTING          | 9-Jul-98  | 30-Jul-98 | 15.0 days |
| FIELD WORK              | 30-Jul-98 | 11-Sep-98 | 30.0 days |
| LABORATORY ANALYS       | 11-Sep-98 | 17-Nov-98 | 45.0 days |
| DETAIL ANALYSIS         | 17-Nov-98 | 31-Dec-98 | 30.0 days |
| Feasibility Study       | 30-Mar-99 | 4-Apr-00  | 255.0 day |
| Prepare Draft FS RE     | 30-Mar-99 | 5-Aug-99  | 90.0 days |
| AGENCY REVIEW           | 5-Aug-99  | 8-Oct-99  | 45.0 days |
| RESPOND TO COMMENTS     | 8-Oct-99  | 15-Dec-99 | 45.0 days |
| PREPARE DRAFT FINAL     | 15-Dec-99 | 22-Feb-00 | 45.0 days |
| FINAL                   | 22-Feb-00 | 4-Apr-00  | 30.0 days |
| PROPOSED REMEDIAL ACTIO | 15-Dec-99 | 12-Jan-01 | 270.0 day |
| Draft (PRAP) REMEDIAL   | 15-Dec-99 | 31-Aug-00 | 180.0 day |
| PREPARE DRAFT PRAP      | 15-Dec-99 | 22-Feb-00 | 45.0 days |
| AGENCY REVIEW           | 22-Feb-00 | 14-Mar-00 | 15.0 days |
| RESPONSE TO COMMENT     | 14-Mar-00 | 16-May-00 | 45.0 days |
| PREPARE DRAFT FINAL     | 16-May-00 | 20-Jul-00 | 45.0 days |
| FINAL                   | 20-Jul-00 | 31-Aug-00 | 30.0 days |
| PUBLIC COMMENT PERIOD   | 31-Aug-00 | 12-Jan-01 | 90.0 days |
| Prepare Public Noti     | 31-Aug-00 | 22-Sep-00 | 15.0 days |
| Public Comment Peri     | 22-Sep-00 | 29-Nov-00 | 45.0 days |
| Public Meeting          | 13-Oct-00 | 16-Oct-00 | 1.0 day   |
| Responsiveness Summ     | 29-Nov-00 | 12-Jan-01 | 30.0 days |
| Record of Decision      | 29-Nov-00 | 7-Sep-01  | 195.0 day |
| Draft                   | 29-Nov-00 | 5-Feb-01  | 45.0 days |
| Prepare Draft ROD       | 29-Nov-00 | 5-Feb-01  | 45.0 days |
| ROD REVIEW              | 5-Feb-01  | 7-Sep-01  | 150.0 day |
| AGENCY REVIEW           | 5-Feb-01  | 20-Mar-01 | 30.0 days |
| Respond to Comments     | 20-Mar-01 | 22-May-01 | 45.0 days |
| Prepare Draft Final     | 22-May-01 | 26-Jul-01 | 45.0 days |
| FINAL ROD               | 26-Jul-01 | 7-Sep-01  | 30.0 days |
| OPERABLE UNIT 4         | 11-May-99 | 24-Sep-04 | 1,350.0 d |
| ROUND I FIELD WORK      | 11-May-99 | 20-Mar-01 | 465.0 day |
| WORKPLAN                | 11-May-99 | 4-Apr-00  | 225.0 day |
| DRAFT WORKPLAN          | 11-May-99 | 5-Aug-99  | 60.0 days |
| AGENCY REVIEW           | 5-Aug-99  | 8-Oct-99  | 45.0 days |

|                         |           |           |             |
|-------------------------|-----------|-----------|-------------|
| ADDRESS COMMENTS        | 8-Oct-99  | 15-Dec-99 | 45.0 days   |
| PREPARE DRAFT FINAL     | 15-Dec-99 | 22-Feb-00 | 45.0 days   |
| WORKPLAN FINAL          | 22-Feb-00 | 4-Apr-00  | 30.0 days   |
| ROUND I FIELD WORK      | 4-Apr-00  | 20-Mar-01 | 240.0 day   |
| FIELD WORK              | 4-Apr-00  | 6-Nov-00  | 150.0 day   |
| POA PROPOSED            | 4-Apr-00  | 25-Apr-00 | 15.0 days   |
| SUBCONTRACTING          | 25-Apr-00 | 16-May-00 | 15.0 days   |
| FIELD WORK              | 16-May-00 | 6-Nov-00  | 120.0 day   |
| ANALYSIS AND DATA M     | 6-Nov-00  | 20-Mar-01 | 90.0 days   |
| LABORATORY ANALYS       | 6-Nov-00  | 20-Dec-00 | 30.0 days   |
| DATA VALIDATION/M       | 20-Dec-00 | 20-Mar-01 | 60.0 days   |
| ROUND II FIELD WORK     | 20-Mar-01 | 5-Mar-02  | 240.0 day   |
| TECHNICAL MEMO ROUND    | 20-Mar-01 | 13-Jun-01 | 60.0 days   |
| AGENCY EVALUATION       | 13-Jun-01 | 26-Jul-01 | 30.0 days   |
| OPTIMIZATION OF DESIG   | 26-Jul-01 | 15-Aug-01 | 14.0 days   |
| FIELD WORK              | 13-Jun-01 | 5-Mar-02  | 180.0 day   |
| FIELD WORK ROUND II     | 13-Jun-01 | 22-Oct-01 | 90.0 days   |
| POA PREPARE             | 13-Jun-01 | 5-Jul-01  | 15.0 days   |
| SUBCONTRACTING          | 5-Jul-01  | 26-Jul-01 | 15.0 days   |
| FIELD WORK ROUND        | 26-Jul-01 | 22-Oct-01 | 60.0 days   |
| ANALYSIS AND DATA M     | 22-Oct-01 | 5-Mar-02  | 90.0 days   |
| LABORATORY ANALYS       | 22-Oct-01 | 5-Dec-01  | 30.0 days   |
| DATA VALIDATION/M       | 5-Dec-01  | 5-Mar-02  | 60.0 days   |
| RI REPORT               | 5-Mar-02  | 11-Mar-03 | 255.0 day   |
| DRAFT RI/BRA REPORT     | 5-Mar-02  | 11-Jul-02 | 90.0 days   |
| AGENCY REVIEW           | 11-Jul-02 | 13-Sep-02 | 45.0 days   |
| RESPONSE TO COMMENTS    | 13-Sep-02 | 19-Nov-02 | 45.0 days   |
| PREPARE DRAFT FINAL     | 19-Nov-02 | 27-Jan-03 | 45.0 days   |
| FINAL RI REPORT         | 27-Jan-03 | 11-Mar-03 | 30.0 days   |
| FEASIBILITY STUDY       | 10-Apr-01 | 22-Apr-03 | ≈ 510.0 day |
| TREATABILITY STUDY      | 10-Apr-01 | 18-Jan-02 | 195.0 day   |
| TECH MEMO TREATABIL     | 10-Apr-01 | 5-Jul-01  | 60.0 days   |
| SCREENING TECHNOL       | 10-Apr-01 | 22-May-01 | 30.0 days   |
| ALTERNATIVE SCREE       | 22-May-01 | 5-Jul-01  | 30.0 days   |
| TREAT TESTS             | 5-Jul-01  | 5-Dec-01  | 105.0 day   |
| POA                     | 5-Jul-01  | 26-Jul-01 | 15.0 days   |
| SUBCONTRACTING          | 26-Jul-01 | 16-Aug-01 | 15.0 days   |
| FIELD WORK              | 16-Aug-01 | 28-Sep-01 | 30.0 days   |
| LABORATORY ANALYS       | 28-Sep-01 | 5-Dec-01  | 45.0 days   |
| DETAIL ANALYSIS         | 5-Dec-01  | 18-Jan-02 | 30.0 days   |
| Feasibility Study       | 16-Apr-02 | 22-Apr-03 | 255.0 day   |
| Prepare Draft FS RE     | 16-Apr-02 | 22-Aug-02 | 90.0 days   |
| AGENCY REVIEW           | 22-Aug-02 | 28-Oct-02 | 45.0 days   |
| RESPOND TO COMMENTS     | 28-Oct-02 | 3-Jan-03  | 45.0 days   |
| PREPARE DRAFT FINAL     | 3-Jan-03  | 11-Mar-03 | 45.0 days   |
| FINAL                   | 11-Mar-03 | 22-Apr-03 | 30.0 days   |
| PROPOSED REMEDIAL ACTIO | 3-Jan-03  | 2-Feb-04  | 270.0 day   |
| Draft (PRAP) REMEDIAL   | 3-Jan-03  | 19-Sep-03 | 180.0 day   |
| PREPARE DRAFT PRAP      | 3-Jan-03  | 11-Mar-03 | 45.0 days   |
| AGENCY REVIEW           | 11-Mar-03 | 1-Apr-03  | 15.0 days   |
| RESPONSE TO COMMENT     | 1-Apr-03  | 4-Jun-03  | 45.0 days   |
| PREPARE DRAFT FINAL     | 4-Jun-03  | 7-Aug-03  | 45.0 days   |
| FINAL                   | 7-Aug-03  | 19-Sep-03 | 30.0 days   |
| PUBLIC COMMENT PERIOD   | 19-Sep-03 | 2-Feb-04  | 90.0 days   |
| Prepare Public Noti     | 19-Sep-03 | 10-Oct-03 | 15.0 days   |
| Public Comment Peri     | 10-Oct-03 | 17-Dec-03 | 45.0 days   |
| Public Meeting          | 31-Oct-03 | 3-Nov-03  | 1.0 day     |
| Responsiveness Summ     | 17-Dec-03 | 2-Feb-04  | 30.0 days   |
| Record of Decision      | 17-Dec-03 | 24-Sep-04 | 195.0 day   |
| Draft                   | 17-Dec-03 | 24-Feb-04 | 45.0 days   |
| Prepare Draft ROD       | 17-Dec-03 | 24-Feb-04 | 45.0 days   |
| ROD REVIEW              | 24-Feb-04 | 24-Sep-04 | 150.0 day   |
| AGENCY REVIEW           | 24-Feb-04 | 6-Apr-04  | 30.0 days   |
| Respond to Comments     | 6-Apr-04  | 9-Jun-04  | 45.0 days   |
| Prepare Draft Final     | 9-Jun-04  | 12-Aug-04 | 45.0 days   |
| FINAL ROD               | 12-Aug-04 | 24-Sep-04 | 30.0 days   |
| OPERABLE UNIT 5         | 13-Sep-02 | 4-Feb-08  | 1,350.0 d   |
| ROUND I FIELD WORK      | 13-Sep-02 | 22-Jul-04 | 465.0 day   |
| WORKPLAN                | 13-Sep-02 | 7-Aug-03  | 225.0 day   |
| DRAFT WORKPLAN          | 13-Sep-02 | 11-Dec-02 | 60.0 days   |
| AGENCY REVIEW           | 11-Dec-02 | 18-Feb-03 | 45.0 days   |
| ADDRESS COMMENTS        | 18-Feb-03 | 22-Apr-03 | 45.0 days   |
| PREPARE DRAFT FINAL     | 22-Apr-03 | 25-Jun-03 | 45.0 days   |
| WORKPLAN FINAL          | 25-Jun-03 | 7-Aug-03  | 30.0 days   |
| ROUND I FIELD WORK      | 7-Aug-03  | 22-Jul-04 | 240.0 day   |
| FIELD WORK              | 7-Aug-03  | 16-Mar-04 | 150.0 day   |

|                         |           |           |             |
|-------------------------|-----------|-----------|-------------|
| POA PROPOSED            | 7-Aug-03  | 28-Aug-03 | 15.0 days   |
| SUBCONTRACTING          | 28-Aug-03 | 19-Sep-03 | 15.0 days   |
| FIELD WORK              | 19-Sep-03 | 16-Mar-04 | 120.0 day   |
| ANALYSIS AND DATA M     | 16-Mar-04 | 22-Jul-04 | 90.0 days   |
| LABORATORY ANALYS       | 16-Mar-04 | 27-Apr-04 | 30.0 days   |
| DATA VALIDATION/M       | 27-Apr-04 | 22-Jul-04 | 60.0 days   |
| ROUND II FIELD WORK     | 22-Jul-04 | 7-Jul-05  | 240.0 day   |
| TECHNICAL MEMO ROUND    | 22-Jul-04 | 18-Oct-04 | 60.0 days   |
| AGENCY EVALUATION       | 18-Oct-04 | 1-Dec-04  | 30.0 days   |
| OPTIMIZATION OF DESIG   | 1-Dec-04  | 21-Dec-04 | 14.0 days   |
| FIELD WORK              | 18-Oct-04 | 7-Jul-05  | 180.0 day   |
| FIELD WORK ROUND II     | 18-Oct-04 | 1-Mar-05  | 90.0 days   |
| POA PREPARE             | 18-Oct-04 | 8-Nov-04  | 15.0 days   |
| SUBCONTRACTING          | 8-Nov-04  | 1-Dec-04  | 15.0 days   |
| FIELD WORK ROUND        | 1-Dec-04  | 1-Mar-05  | 60.0 days   |
| ANALYSIS AND DATA M     | 1-Mar-05  | 7-Jul-05  | 90.0 days   |
| LABORATORY ANALYS       | 1-Mar-05  | 12-Apr-05 | 30.0 days   |
| DATA VALIDATION/M       | 12-Apr-05 | 7-Jul-05  | 60.0 days   |
| RI REPORT               | 7-Jul-05  | 13-Jul-06 | 255.0 day   |
| DRAFT RI/BRA REPORT     | 7-Jul-05  | 15-Nov-05 | 90.0 days   |
| AGENCY REVIEW           | 15-Nov-05 | 23-Jan-06 | 45.0 days   |
| RESPONSE TO COMMENTS    | 23-Jan-06 | 28-Mar-06 | 45.0 days   |
| PREPARE DRAFT FINAL     | 28-Mar-06 | 31-May-06 | 45.0 days   |
| FINAL RI REPORT         | 31-May-06 | 13-Jul-06 | 30.0 days   |
| FEASIBILITY STUDY       | 12-Aug-04 | 24-Aug-06 | 510.0 day   |
| TREATABILITY STUDY      | 12-Aug-04 | 24-May-05 | 195.0 day   |
| TECH MEMO TREATABIL     | 12-Aug-04 | 8-Nov-04  | 60.0 days   |
| SCREENING TECHNOL       | 12-Aug-04 | 24-Sep-04 | 30.0 days   |
| ALTERNATIVE SCREE       | 24-Sep-04 | 8-Nov-04  | 30.0 days   |
| TREAT TESTS             | 8-Nov-04  | 12-Apr-05 | = 105.0 day |
| POA                     | 8-Nov-04  | 1-Dec-04  | 15.0 days   |
| SUBCONTRACTING          | 1-Dec-04  | 22-Dec-04 | 15.0 days   |
| FIELD WORK              | 22-Dec-04 | 7-Feb-05  | 30.0 days   |
| LABORATORY ANALYS       | 7-Feb-05  | 12-Apr-05 | 45.0 days   |
| DETAIL ANALYSIS         | 12-Apr-05 | 24-May-05 | 30.0 days   |
| Feasibility Study       | 18-Aug-05 | 24-Aug-06 | 255.0 day   |
| Prepare Draft FS RE     | 18-Aug-05 | 29-Dec-05 | 90.0 days   |
| AGENCY REVIEW           | 29-Dec-05 | 7-Mar-06  | 45.0 days   |
| RESPOND TO COMMENTS     | 7-Mar-06  | 9-May-06  | 45.0 days   |
| PREPARE DRAFT FINAL     | 9-May-06  | 13-Jul-06 | 45.0 days   |
| FINAL                   | 13-Jul-06 | 24-Aug-06 | 30.0 days   |
| PROPOSED REMEDIAL ACTIO | 9-May-06  | 6-Jun-07  | 270.0 day   |
| Draft (PRAP) REMEDIAL   | 9-May-06  | 29-Jan-07 | 180.0 day   |
| PREPARE DRAFT PRAP      | 9-May-06  | 13-Jul-06 | 45.0 days   |
| AGENCY REVIEW           | 13-Jul-06 | 3-Aug-06  | 15.0 days   |
| RESPONSE TO COMMENT     | 3-Aug-06  | 6-Oct-06  | 45.0 days   |
| PREPARE DRAFT FINAL     | 6-Oct-06  | 13-Dec-06 | 45.0 days   |
| FINAL                   | 13-Dec-06 | 29-Jan-07 | 30.0 days   |
| PUBLIC COMMENT PERIOD   | 29-Jan-07 | 6-Jun-07  | 90.0 days   |
| Prepare Public Noti     | 29-Jan-07 | 20-Feb-07 | 15.0 days   |
| Public Comment Peri     | 20-Feb-07 | 24-Apr-07 | 45.0 days   |
| Public Meeting          | 12-Mar-07 | 13-Mar-07 | 1.0 day     |
| Responsiveness Summ     | 24-Apr-07 | 6-Jun-07  | 30.0 days   |
| Record of Decision      | 24-Apr-07 | 4-Feb-08  | 195.0 day   |
| Draft                   | 24-Apr-07 | 27-Jun-07 | 45.0 days   |
| Prepare Draft ROD       | 24-Apr-07 | 27-Jun-07 | 45.0 days   |
| ROD REVIEW              | 27-Jun-07 | 4-Feb-08  | 150.0 day   |
| AGENCY REVIEW           | 27-Jun-07 | 9-Aug-07  | 30.0 days   |
| Respond to Comments     | 9-Aug-07  | 15-Oct-07 | 45.0 days   |
| Prepare Draft Final     | 15-Oct-07 | 19-Dec-07 | 45.0 days   |
| FINAL ROD               | 19-Dec-07 | 4-Feb-08  | 30.0 days   |

Schedule Name : OUs 1,2,3,4,5,6 EXPEDITED  
 Responsible : Cliff Casey  
 As-of Date : 20-Oct-92

Schedule File : EPXTOTEP

| Task Name                 | Start Date | End Date  | Duration  |
|---------------------------|------------|-----------|-----------|
| PROPOSED ACTIVITIES OU1,2 | 16-Aug-92  | 30-Sep-92 | 45.0 days |
| AGENCY EVALUATION         | 30-Sep-92  | 30-Oct-92 | 30.0 days |
| OPTIMIZATION OF DESIGN    | 30-Oct-92  | 29-Nov-92 | 30.0 days |
| CONTRACT NEGOTIATION      | 29-Nov-92  | 29-Dec-92 | 30.0 days |
| OPERABLE UNIT 1           | 29-Nov-92  | 18-Apr-95 | 870.0 day |
| FIELD WORK                | 29-Dec-92  | 12-Jun-93 | 165.0 day |
| FIELD WORK ACTIVITIES     | 29-Dec-92  | 14-Mar-93 | 75.0 days |
| POA PREPARE               | 29-Dec-92  | 13-Jan-93 | 15.0 days |
| SUBCONTRACTING            | 13-Jan-93  | 28-Jan-93 | 15.0 days |
| FIELD WORK PHASE II       | 28-Jan-93  | 14-Mar-93 | 45.0 days |
| ANALYSIS AND DATA MAN     | 14-Mar-93  | 12-Jun-93 | 90.0 days |
| LABORATORY ANALYSIS       | 14-Mar-93  | 13-Apr-93 | 30.0 days |
| DATA VALIDATION/MAN       | 13-Apr-93  | 12-Jun-93 | 60.0 days |
| RISK ASSESSMENT           | 29-Nov-92  | 11-Aug-93 | 255.0 day |
| ECOLOGICAL FIELD SAMP     | 29-Nov-92  | 29-Mar-93 | 120.0 day |
| ECOLOGICAL ASSESSMENT     | 29-Mar-93  | 28-May-93 | 60.0 days |
| HUMAN-RISK ASSESSMENT     | 12-Jun-93  | 11-Aug-93 | 60.0 days |
| RI/FS REPORT              | 11-Aug-93  | 23-Apr-94 | 255.0 day |
| DRAFT RI/FS REPORT        | 11-Aug-93  | 9-Nov-93  | 90.0 days |
| AGENCY REVIEW             | 9-Nov-93   | 24-Dec-93 | 45.0 days |
| RESPONSE TO COMMENTS      | 24-Dec-93  | 7-Feb-94  | 45.0 days |
| PREPARE DRAFT FINAL       | 7-Feb-94   | 24-Mar-94 | 45.0 days |
| FINAL RI REPORT           | 24-Mar-94  | 23-Apr-94 | 30.0 days |
| PROPOSED PLAN             | 7-Feb-94   | 6-Aug-94  | 180.0 day |
| PREPARE PROPOSED PLAN     | 7-Feb-94   | 24-Mar-94 | 45.0 days |
| AGENCY REVIEW             | 24-Mar-94  | 8-Apr-94  | 15.0 days |
| RESPONSE TO COMMENTS      | 8-Apr-94   | 23-May-94 | 45.0 days |
| PREPARE DRAFT FINAL       | 23-May-94  | 7-Jul-94  | 45.0 days |
| FINAL                     | 7-Jul-94   | 6-Aug-94  | 30.0 days |
| PUBLIC COMMENT PERIOD     | 6-Aug-94   | 19-Nov-94 | 105.0 day |
| PREPARE PUBLIC NOTICE     | 6-Aug-94   | 21-Aug-94 | 15.0 days |
| PUBLIC COMMENT PERIOD     | 21-Aug-94  | 5-Oct-94  | 45.0 days |
| PUBLIC MEETING            | 4-Sep-94   | 5-Sep-94  | 1.0 day   |
| RESPONSIVENESS SUMMA      | 5-Oct-94   | 19-Nov-94 | 45.0 days |
| RECORD OF DECISION        | 5-Oct-94   | 18-Apr-95 | 195.0 day |
| DRAFT                     | 5-Oct-94   | 19-Nov-94 | 45.0 days |
| PREPARE DRAFT ROD         | 5-Oct-94   | 19-Nov-94 | 45.0 days |
| ROD REVIEW                | 19-Nov-94  | 18-Apr-95 | 150.0 day |
| AGENCY REVIEW             | 19-Nov-94  | 19-Dec-94 | 30.0 days |
| RESPOND TO COMMENTS       | 19-Dec-94  | 2-Feb-95  | 45.0 days |
| PREPARE DRAFT FINAL       | 2-Feb-95   | 19-Mar-95 | 45.0 days |
| FINAL ROD                 | 19-Mar-95  | 18-Apr-95 | 30.0 days |
| OU #2                     | 14-Mar-93  | 4-May-96  | 1,147.0 d |
| FIELD WORK ROUND I        | 14-Mar-93  | 9-Nov-93  | 240.0 day |
| FIELD WORK ACTIVITIES     | 14-Mar-93  | 11-Aug-93 | 150.0 day |
| (COMPLETION OU1 FIE       | 14-Mar-93  | 14-Mar-93 | 0.0       |
| POA PROPOSED              | 14-Mar-93  | 29-Mar-93 | 15.0 days |
| SUBCONTRACTING            | 29-Mar-93  | 13-Apr-93 | 15.0 days |
| FIELD WORK                | 13-Apr-93  | 11-Aug-93 | 120.0 day |
| ANALYSIS AND DATA MAN     | 11-Aug-93  | 9-Nov-93  | 90.0 days |
| LABORATORY ANALYSIS       | 11-Aug-93  | 10-Sep-93 | 30.0 days |
| DATA VALIDATION/MAN       | 10-Sep-93  | 9-Nov-93  | 60.0 days |
| ROUND II FIELD WORK       | 9-Nov-93   | 29-Jun-94 | 232.0 day |
| TECH. MEMO. ROUND II      | 9-Nov-93   | 24-Dec-93 | 45.0 days |
| AGENCY EVALUATION         | 24-Dec-93  | 23-Jan-94 | 30.0 days |
| OPTIMIZATION OF DESIG     | 23-Jan-94  | 30-Jan-94 | 7.0 days  |
| FIELD WORK ROUND II       | 30-Jan-94  | 29-Jun-94 | 150.0 day |
| FIELD WORK ROUND II       | 30-Jan-94  | 31-Mar-94 | 60.0 days |
| POA PROPOSED              | 30-Jan-94  | 14-Feb-94 | 15.0 days |
| SUBCONTRACTING            | 14-Feb-94  | 1-Mar-94  | 15.0 days |
| FIELD WORK ROUND          | 1-Mar-94   | 31-Mar-94 | 30.0 days |
| ANALYSIS AND DATA M       | 31-Mar-94  | 29-Jun-94 | 90.0 days |
| LABORATORY ANALYS         | 31-Mar-94  | 30-Apr-94 | 30.0 days |
| DATA VALIDATION/M         | 30-Apr-94  | 29-Jun-94 | 60.0 days |
| RI REPORT                 | 29-Jun-94  | 11-Mar-95 | 255.0 day |

|                        |           |           |           |
|------------------------|-----------|-----------|-----------|
| DRAFT RI/BRA REPORT    | 29-Jun-94 | 27-Sep-94 | 90.0 days |
| AGENCY REVIEW          | 27-Sep-94 | 11-Nov-94 | 45.0 days |
| RESPONSE TO COMMENTS   | 11-Nov-94 | 26-Dec-94 | 45.0 days |
| PREPARE DRAFT FINAL    | 26-Dec-94 | 9-Feb-95  | 45.0 days |
| FINAL RI REPORT        | 9-Feb-95  | 11-Mar-95 | 30.0 days |
| FEASIBILITY STUDY      | 29-Mar-93 | 10-Apr-95 | 742.0 day |
| TECHNOLOGIES SCREENIN  | 29-Mar-93 | 27-Jun-93 | 90.0 days |
| SCREENING TECHNOLOG    | 29-Mar-93 | 28-Apr-93 | 30.0 days |
| ALTERNATIVE SCREENI    | 28-Apr-93 | 28-May-93 | 30.0 days |
| DETAIL ANALYSIS        | 28-May-93 | 27-Jun-93 | 30.0 days |
| FEASIBILITY STUDY REP  | 29-Jul-94 | 10-Apr-95 | 255.0 day |
| PREPARE DRAFT FS RE    | 29-Jul-94 | 27-Oct-94 | 90.0 days |
| AGENCY REVIEW          | 27-Oct-94 | 11-Dec-94 | 45.0 days |
| RESPOND TO COMMENTS    | 11-Dec-94 | 25-Jan-95 | 45.0 days |
| PREPARE DRAFT FINAL    | 25-Jan-95 | 11-Mar-95 | 45.0 days |
| FINAL                  | 11-Mar-95 | 10-Apr-95 | 30.0 days |
| PROPOSED PLAN          | 25-Jan-95 | 6-Dec-95  | 315.0 day |
| DRAFT PROPOSED PLAN    | 25-Jan-95 | 23-Aug-95 | 210.0 day |
| PREPARE DRAFT PLAN     | 25-Jan-95 | 11-Mar-95 | 45.0 days |
| AGENCY REVIEW          | 10-Apr-95 | 25-Apr-95 | 15.0 days |
| RESPONSE TO COMMENT    | 25-Apr-95 | 9-Jun-95  | 45.0 days |
| DRAFT PROPOSED PLAN    | 9-Jun-95  | 24-Jul-95 | 45.0 days |
| FINAL                  | 24-Jul-95 | 23-Aug-95 | 30.0 days |
| PUBLIC COMMENT PERIOD  | 23-Aug-95 | 6-Dec-95  | 105.0 day |
| PREPARE PUBLIC NOTI    | 23-Aug-95 | 7-Sep-95  | 15.0 days |
| PUBLIC COMMENT PERI    | 7-Sep-95  | 22-Oct-95 | 45.0 days |
| PUBLIC MEETING         | 21-Sep-95 | 22-Sep-95 | 1.0 day   |
| RESPONSIVENESS SUMM    | 22-Oct-95 | 6-Dec-95  | 45.0 days |
| RECORD OF DECISION     | 22-Oct-95 | 4-May-96  | 195.0 day |
| PREPARE DRAFT ROD      | 22-Oct-95 | 6-Dec-95  | 45.0 days |
| AGENCY REVIEW          | 6-Dec-95  | 5-Jan-96  | 30.0 days |
| RESPOND TO COMMENTS    | 5-Jan-96  | 19-Feb-96 | 45.0 days |
| PREPARE DRAFT FINAL R  | 19-Feb-96 | 4-Apr-96  | 45.0 days |
| FINAL ROD              | 4-Apr-96  | 4-May-96  | 30.0 days |
| OU #7                  | 11-Aug-93 | 13-Jan-96 | 885.0 day |
| FIELD WORK             | 11-Aug-93 | 8-Apr-94  | 240.0 day |
| FIELD WORK             | 11-Aug-93 | 8-Jan-94  | 150.0 day |
| (COMPLETION OF OU 1    | 11-Aug-93 | 11-Aug-93 | 0.0       |
| POA PROPOSED           | 11-Aug-93 | 26-Aug-93 | 15.0 days |
| SUBCONTRACTING         | 26-Aug-93 | 10-Sep-93 | 15.0 days |
| FIELD WORK             | 10-Sep-93 | 8-Jan-94  | 120.0 day |
| ANALYSIS AND DATA MAN  | 8-Jan-94  | 8-Apr-94  | 90.0 days |
| LABORATORY ANALYSIS    | 8-Jan-94  | 7-Feb-94  | 30.0 days |
| DATA VALIDATION/MAN    | 7-Feb-94  | 8-Apr-94  | 60.0 days |
| RI REPORT              | 8-Apr-94  | 4-Dec-94  | 240.0 day |
| DRAFT RI/BRA REPORT    | 8-Apr-94  | 7-Jul-94  | 90.0 days |
| AGENCY REVIEW          | 7-Jul-94  | 21-Aug-94 | 45.0 days |
| RESPONSE TO COMMENTS   | 21-Aug-94 | 5-Oct-94  | 45.0 days |
| PREPARE DRAFT FINAL    | 5-Oct-94  | 19-Nov-94 | 45.0 days |
| FINAL RI REPORT        | 19-Nov-94 | 4-Dec-94  | 15.0 days |
| FEASIBILITY STUDY      | 26-Aug-93 | 18-Jan-95 | 510.0 day |
| TECHNOLOGIES SCREENIN  | 26-Aug-93 | 24-Nov-93 | 90.0 days |
| SCREENING TECHNOLOG    | 26-Aug-93 | 25-Sep-93 | 30.0 days |
| ALTERNATIVE SCREENI    | 25-Sep-93 | 25-Oct-93 | 30.0 days |
| DETAIL ANALYSIS        | 25-Oct-93 | 24-Nov-93 | 30.0 days |
| FEASIBILITY STUDY REPO | 8-May-94  | 18-Jan-95 | 255.0 day |
| PREPARE DRAFT FS RE    | 8-May-94  | 6-Aug-94  | 90.0 days |
| AGENCY REVIEW          | 6-Aug-94  | 20-Sep-94 | 45.0 days |
| RESPOND TO COMMENTS    | 20-Sep-94 | 4-Nov-94  | 45.0 days |
| PREPARE DRAFT FINAL    | 4-Nov-94  | 19-Dec-94 | 45.0 days |
| FINAL FS               | 19-Dec-94 | 18-Jan-95 | 30.0 days |
| PROPOSED PLAN          | 4-Nov-94  | 16-Aug-95 | 285.0 day |
| DRAFT PROPOSED PLAN    | 4-Nov-94  | 3-May-95  | 180.0 day |
| PREPARE DRAFT PRAP     | 4-Nov-94  | 19-Dec-94 | 45.0 days |
| AGENCY REVIEW          | 19-Dec-94 | 3-Jan-95  | 15.0 days |
| RESPONSE TO COMMENT    | 3-Jan-95  | 17-Feb-95 | 45.0 days |
| DRAFT PROPOSED PLAN    | 17-Feb-95 | 3-Apr-95  | 45.0 days |
| FINAL PROPOSED PLAN    | 3-Apr-95  | 3-May-95  | 30.0 days |
| PUBLIC COMMENT PERIOD  | 3-May-95  | 16-Aug-95 | 105.0 day |
| PREPARE PUBLIC NOTI    | 3-May-95  | 18-May-95 | 15.0 days |
| PUBLIC COMMENT PERI    | 18-May-95 | 2-Jul-95  | 45.0 days |
| PUBLIC MEETING         | 1-Jun-95  | 2-Jun-95  | 1.0 day   |
| RESPONSIVENESS SUMM    | 2-Jul-95  | 16-Aug-95 | 45.0 days |
| RECORD OF DECISION     | 2-Jul-95  | 13-Jan-96 | 195.0 day |
| DRAFT                  | 2-Jul-95  | 16-Aug-95 | 45.0 days |
| PREPARE DRAFT ROD      | 2-Jul-95  | 16-Aug-95 | 45.0 days |

|                       |           |           |           |
|-----------------------|-----------|-----------|-----------|
| ROD REVIEW            | 16-Aug-95 | 13-Jan-96 | 150.0 day |
| AGENCY REVIEW         | 16-Aug-95 | 15-Sep-95 | 30.0 days |
| RESPOND TO COMMENTS   | 15-Sep-95 | 30-Oct-95 | 45.0 days |
| PREPARE DRAFT FINAL   | 30-Oct-95 | 14-Dec-95 | 45.0 days |
| FINAL ROD             | 14-Dec-95 | 13-Jan-96 | 30.0 days |
| OPERABLE UNITS 3      | 7-Jun-94  | 20-Aug-98 | 1,350.0 d |
| ROUND I FIELD WORK    | 7-Jun-94  | 20-Aug-98 | 1,350.0 d |
| WORKPLAN              | 7-Jun-94  | 18-Jan-95 | 225.0 day |
| DRAFT WORKPLAN        | 7-Jun-94  | 6-Aug-94  | 60.0 days |
| AGENCY REVIEW         | 6-Aug-94  | 20-Sep-94 | 45.0 days |
| ADDRESS COMMENTS      | 20-Sep-94 | 4-Nov-94  | 45.0 days |
| PREPARE DRAFT FINAL   | 4-Nov-94  | 19-Dec-94 | 45.0 days |
| WORKPLAN FINAL        | 19-Dec-94 | 18-Jan-95 | 30.0 days |
| ROUND I FIELD WORK    | 18-Jan-95 | 15-Sep-95 | 240.0 day |
| FIELD WORK            | 18-Jan-95 | 17-Jun-95 | 150.0 day |
| POA PROPOSED          | 18-Jan-95 | 2-Feb-95  | 15.0 days |
| SUBCONTRACTING        | 2-Feb-95  | 17-Feb-95 | 15.0 days |
| FIELD WORK            | 17-Feb-95 | 17-Jun-95 | 120.0 day |
| ANALYSIS AND DATA M   | 17-Jun-95 | 15-Sep-95 | 90.0 days |
| LABORATORY ANALYSIS   | 17-Jun-95 | 17-Jul-95 | 30.0 days |
| DATA VALIDATION/M     | 17-Jul-95 | 15-Sep-95 | 60.0 days |
| ROUND II FIELD WORK   | 15-Sep-95 | 12-May-96 | 240.0 day |
| TECHNICAL MEMO ROUN   | 15-Sep-95 | 14-Nov-95 | 60.0 days |
| AGENCY EVALUATION     | 14-Nov-95 | 14-Dec-95 | 30.0 days |
| OPTIMIZATION OF DES   | 14-Dec-95 | 28-Dec-95 | 14.0 days |
| FIELD WORK            | 14-Nov-95 | 12-May-96 | 180.0 day |
| FIELD WORK ROUND      | 14-Nov-95 | 12-Feb-96 | 90.0 days |
| POA PREPARE           | 14-Nov-95 | 29-Nov-95 | 15.0 days |
| SUBCONTRACTING        | 29-Nov-95 | 14-Dec-95 | 15.0 days |
| FIELD WORK ROUN       | 14-Dec-95 | 12-Feb-96 | 60.0 days |
| ANALYSIS AND DATA     | 12-Feb-96 | 12-May-96 | 90.0 days |
| LABORATORY ANAL       | 12-Feb-96 | 13-Mar-96 | 30.0 days |
| DATA VALIDATION       | 13-Mar-96 | 12-May-96 | 60.0 days |
| RI REPORT             | 12-May-96 | 3-Feb-97  | 255.0 day |
| DRAFT RI/BRA REPORT   | 12-May-96 | 10-Aug-96 | 90.0 days |
| AGENCY REVIEW         | 10-Aug-96 | 24-Sep-96 | 45.0 days |
| RESPONSE TO COMMENT   | 24-Sep-96 | 8-Nov-96  | 45.0 days |
| PREPARE DRAFT FINAL   | 8-Nov-96  | 23-Dec-96 | 45.0 days |
| FINAL RI REPORT       | 23-Dec-96 | 3-Feb-97  | 30.0 days |
| FEASIBILITY STUDY     | 30-Sep-95 | 18-Mar-97 | 510.0 day |
| TREATABILITY STUDY    | 30-Sep-95 | 12-Apr-96 | 195.0 day |
| TECH MEMO TREATAB     | 30-Sep-95 | 29-Nov-95 | 60.0 days |
| SCREENING TECHN       | 30-Sep-95 | 30-Oct-95 | 30.0 days |
| ALTERNATIVE SCR       | 30-Oct-95 | 29-Nov-95 | 30.0 days |
| TREAT TESTS           | 29-Nov-95 | 13-Mar-96 | 105.0 day |
| POA                   | 29-Nov-95 | 14-Dec-95 | 15.0 days |
| SUBCONTRACTING        | 14-Dec-95 | 29-Dec-95 | 15.0 days |
| FIELD WORK            | 29-Dec-95 | 28-Jan-96 | 30.0 days |
| LABORATORY ANAL       | 28-Jan-96 | 13-Mar-96 | 45.0 days |
| DETAIL ANALYSIS       | 13-Mar-96 | 12-Apr-96 | 30.0 days |
| Feasibility Study     | 11-Jun-96 | 18-Mar-97 | 255.0 day |
| Prepare Draft FS      | 11-Jun-96 | 9-Sep-96  | 90.0 days |
| AGENCY REVIEW         | 9-Sep-96  | 24-Oct-96 | 45.0 days |
| RESPOND TO COMMEN     | 24-Oct-96 | 8-Dec-96  | 45.0 days |
| PREPARE DRAFT FIN     | 8-Dec-96  | 3-Feb-97  | 45.0 days |
| FINAL                 | 3-Feb-97  | 18-Mar-97 | 30.0 days |
| PROPOSED REMEDIAL ACT | 8-Dec-96  | 16-Jan-98 | 285.0 day |
| Draft (PRAP) REMEDI   | 8-Dec-96  | 14-Aug-97 | 180.0 day |
| PREPARE DRAFT PRA     | 8-Dec-96  | 3-Feb-97  | 45.0 days |
| AGENCY REVIEW         | 3-Feb-97  | 25-Feb-97 | 15.0 days |
| RESPONSE TO COMME     | 25-Feb-97 | 29-Apr-97 | 45.0 days |
| PREPARE DRAFT FIN     | 29-Apr-97 | 2-Jul-97  | 45.0 days |
| FINAL                 | 2-Jul-97  | 14-Aug-97 | 30.0 days |
| PUBLIC COMMENT PERI   | 14-Aug-97 | 16-Jan-98 | 105.0 day |
| Prepare Public No     | 14-Aug-97 | 5-Sep-97  | 15.0 days |
| Public Comment Pe     | 5-Sep-97  | 10-Nov-97 | 45.0 days |
| Public Meeting        | 25-Sep-97 | 26-Sep-97 | 1.0 day   |
| Responsiveness Su     | 10-Nov-97 | 16-Jan-98 | 45.0 days |
| Record of Decision    | 10-Nov-97 | 20-Aug-98 | 195.0 day |
| Draft                 | 10-Nov-97 | 16-Jan-98 | 45.0 days |
| Prepare Draft ROD     | 10-Nov-97 | 16-Jan-98 | 45.0 days |
| ROD REVIEW            | 16-Jan-98 | 20-Aug-98 | 150.0 day |
| AGENCY REVIEW         | 16-Jan-98 | 3-Mar-98  | 30.0 days |
| Respond to Commen     | 3-Mar-98  | 5-May-98  | 45.0 days |
| Prepare Draft Fin     | 5-May-98  | 9-Jul-98  | 45.0 days |
| FINAL ROD             | 9-Jul-98  | 20-Aug-98 | 30.0 days |

|                         |           |           |           |
|-------------------------|-----------|-----------|-----------|
| OPERABLE UNIT 6         | 11-Jul-96 | 7-Sep-01  | 1,350.0 d |
| ROUND I FIELD WORK      | 11-Jul-96 | 3-Mar-98  | 465.0 day |
| WORKPLAN                | 11-Jul-96 | 18-Mar-97 | 225.0 day |
| DRAFT WORKPLAN          | 11-Jul-96 | 9-Sep-96  | 60.0 days |
| AGENCY REVIEW           | 9-Sep-96  | 24-Oct-96 | 45.0 days |
| ADDRESS COMMENTS        | 24-Oct-96 | 8-Dec-96  | 45.0 days |
| PREPARE DRAFT FINAL     | 8-Dec-96  | 3-Feb-97  | 45.0 days |
| WORKPLAN FINAL          | 3-Feb-97  | 18-Mar-97 | 30.0 days |
| ROUND I FIELD WORK      | 18-Mar-97 | 3-Mar-98  | 240.0 day |
| FIELD WORK              | 18-Mar-97 | 20-Oct-97 | 150.0 day |
| POA PROPOSED            | 18-Mar-97 | 8-Apr-97  | 15.0 days |
| SUBCONTRACTING          | 8-Apr-97  | 29-Apr-97 | 15.0 days |
| FIELD WORK              | 29-Apr-97 | 20-Oct-97 | 120.0 day |
| ANALYSIS AND DATA M     | 20-Oct-97 | 3-Mar-98  | 90.0 days |
| LABORATORY ANALYS       | 20-Oct-97 | 3-Dec-97  | 30.0 days |
| DATA VALIDATION/M       | 3-Dec-97  | 3-Mar-98  | 60.0 days |
| ROUND II FIELD WORK     | 3-Mar-98  | 16-Feb-99 | 240.0 day |
| TECHNICAL MEMO ROUND    | 3-Mar-98  | 27-May-98 | 60.0 days |
| AGENCY EVALUATION       | 27-May-98 | 9-Jul-98  | 30.0 days |
| OPTIMIZATION OF DESIG   | 9-Jul-98  | 29-Jul-98 | 14.0 days |
| FIELD WORK              | 27-May-98 | 16-Feb-99 | 180.0 day |
| FIELD WORK ROUND II     | 27-May-98 | 2-Oct-98  | 90.0 days |
| POA PREPARE             | 27-May-98 | 17-Jun-98 | 15.0 days |
| SUBCONTRACTING          | 17-Jun-98 | 9-Jul-98  | 15.0 days |
| FIELD WORK ROUND        | 9-Jul-98  | 2-Oct-98  | 60.0 days |
| ANALYSIS AND DATA M     | 2-Oct-98  | 16-Feb-99 | 90.0 days |
| LABORATORY ANALYS       | 2-Oct-98  | 17-Nov-98 | 30.0 days |
| DATA VALIDATION/M       | 17-Nov-98 | 16-Feb-99 | 60.0 days |
| RI REPORT               | 16-Feb-99 | 22-Feb-00 | 255.0 day |
| DRAFT RI/BRA REPORT     | 16-Feb-99 | 23-Jun-99 | 90.0 days |
| AGENCY REVIEW           | 23-Jun-99 | 26-Aug-99 | 45.0 days |
| RESPONSE TO COMMENTS    | 26-Aug-99 | 1-Nov-99  | 45.0 days |
| PREPARE DRAFT FINAL     | 1-Nov-99  | 7-Jan-00  | 45.0 days |
| FINAL RI REPORT         | 7-Jan-00  | 22-Feb-00 | 30.0 days |
| FEASIBILITY STUDY       | 24-Mar-98 | 4-Apr-00  | 510.0 day |
| TREATABILITY STUDY      | 24-Mar-98 | 31-Dec-98 | 195.0 day |
| TECH MEMO TREATABIL     | 24-Mar-98 | 17-Jun-98 | 60.0 days |
| SCREENING TECHNOL       | 24-Mar-98 | 5-May-98  | 30.0 days |
| ALTERNATIVE SCREE       | 5-May-98  | 17-Jun-98 | 30.0 days |
| TREAT TESTS             | 17-Jun-98 | 17-Nov-98 | 105.0 day |
| POA                     | 17-Jun-98 | 9-Jul-98  | 15.0 days |
| SUBCONTRACTING          | 9-Jul-98  | 30-Jul-98 | 15.0 days |
| FIELD WORK              | 30-Jul-98 | 11-Sep-98 | 30.0 days |
| LABORATORY ANALYS       | 11-Sep-98 | 17-Nov-98 | 45.0 days |
| DETAIL ANALYSIS         | 17-Nov-98 | 31-Dec-98 | 30.0 days |
| Feasibility Study       | 30-Mar-99 | 4-Apr-00  | 255.0 day |
| Prepare Draft FS RE     | 30-Mar-99 | 5-Aug-99  | 90.0 days |
| AGENCY REVIEW           | 5-Aug-99  | 8-Oct-99  | 45.0 days |
| RESPOND TO COMMENTS     | 8-Oct-99  | 15-Dec-99 | 45.0 days |
| PREPARE DRAFT FINAL     | 15-Dec-99 | 22-Feb-00 | 45.0 days |
| FINAL                   | 22-Feb-00 | 4-Apr-00  | 30.0 days |
| PROPOSED REMEDIAL ACTIO | 15-Dec-99 | 12-Jan-01 | 270.0 day |
| Draft (PRAP) REMEDIAL   | 15-Dec-99 | 31-Aug-00 | 180.0 day |
| PREPARE DRAFT PRAP      | 15-Dec-99 | 22-Feb-00 | 45.0 days |
| AGENCY REVIEW           | 22-Feb-00 | 14-Mar-00 | 15.0 days |
| RESPONSE TO COMMENT     | 14-Mar-00 | 16-May-00 | 45.0 days |
| PREPARE DRAFT FINAL     | 16-May-00 | 20-Jul-00 | 45.0 days |
| FINAL                   | 20-Jul-00 | 31-Aug-00 | 30.0 days |
| PUBLIC COMMENT PERIOD   | 31-Aug-00 | 12-Jan-01 | 90.0 days |
| Prepare Public Noti     | 31-Aug-00 | 22-Sep-00 | 15.0 days |
| Public Comment Peri     | 22-Sep-00 | 29-Nov-00 | 45.0 days |
| Public Meeting          | 13-Oct-00 | 16-Oct-00 | 1.0 day   |
| Responsiveness Summ     | 29-Nov-00 | 12-Jan-01 | 30.0 days |
| Record of Decision      | 29-Nov-00 | 7-Sep-01  | 195.0 day |
| Draft                   | 29-Nov-00 | 5-Feb-01  | 45.0 days |
| Prepare Draft ROD       | 29-Nov-00 | 5-Feb-01  | 45.0 days |
| ROD REVIEW              | 5-Feb-01  | 7-Sep-01  | 150.0 day |
| AGENCY REVIEW           | 5-Feb-01  | 20-Mar-01 | 30.0 days |
| Respond to Comments     | 20-Mar-01 | 22-May-01 | 45.0 days |
| Prepare Draft Final     | 22-May-01 | 26-Jul-01 | 45.0 days |
| FINAL ROD               | 26-Jul-01 | 7-Sep-01  | 30.0 days |
| OPERABLE UNIT 4         | 11-May-99 | 24-Sep-04 | 1,350.0 d |
| ROUND I FIELD WORK      | 11-May-99 | 20-Mar-01 | 465.0 day |
| WORKPLAN                | 11-May-99 | 4-Apr-00  | 225.0 day |
| DRAFT WORKPLAN          | 11-May-99 | 5-Aug-99  | 60.0 days |
| AGENCY REVIEW           | 5-Aug-99  | 8-Oct-99  | 45.0 days |

|                         |           |           |           |
|-------------------------|-----------|-----------|-----------|
| ADDRESS COMMENTS        | 8-Oct-99  | 15-Dec-99 | 45.0 days |
| PREPARE DRAFT FINAL     | 15-Dec-99 | 22-Feb-00 | 45.0 days |
| WORKPLAN FINAL          | 22-Feb-00 | 4-Apr-00  | 30.0 days |
| ROUND I FIELD WORK      | 4-Apr-00  | 20-Mar-01 | 240.0 day |
| FIELD WORK              | 4-Apr-00  | 6-Nov-00  | 150.0 day |
| POA PROPOSED            | 4-Apr-00  | 25-Apr-00 | 15.0 days |
| SUBCONTRACTING          | 25-Apr-00 | 16-May-00 | 15.0 days |
| FIELD WORK              | 16-May-00 | 6-Nov-00  | 120.0 day |
| ANALYSIS AND DATA M     | 6-Nov-00  | 20-Mar-01 | 90.0 days |
| LABORATORY ANALYS       | 6-Nov-00  | 20-Dec-00 | 30.0 days |
| DATA VALIDATION/M       | 20-Dec-00 | 20-Mar-01 | 60.0 days |
| ROUND II FIELD WORK     | 20-Mar-01 | 5-Mar-02  | 240.0 day |
| TECHNICAL MEMO ROUND    | 20-Mar-01 | 13-Jun-01 | 60.0 days |
| AGENCY EVALUATION       | 13-Jun-01 | 26-Jul-01 | 30.0 days |
| OPTIMIZATION OF DESIG   | 26-Jul-01 | 15-Aug-01 | 14.0 days |
| FIELD WORK              | 13-Jun-01 | 5-Mar-02  | 180.0 day |
| FIELD WORK ROUND II     | 13-Jun-01 | 22-Oct-01 | 90.0 days |
| POA PREPARE             | 13-Jun-01 | 5-Jul-01  | 15.0 days |
| SUBCONTRACTING          | 5-Jul-01  | 26-Jul-01 | 15.0 days |
| FIELD WORK ROUND        | 26-Jul-01 | 22-Oct-01 | 60.0 days |
| ANALYSIS AND DATA M     | 22-Oct-01 | 5-Mar-02  | 90.0 days |
| LABORATORY ANALYS       | 22-Oct-01 | 5-Dec-01  | 30.0 days |
| DATA VALIDATION/M       | 5-Dec-01  | 5-Mar-02  | 60.0 days |
| RI REPORT               | 5-Mar-02  | 11-Mar-03 | 255.0 day |
| DRAFT RI/BRA REPORT     | 5-Mar-02  | 11-Jul-02 | 90.0 days |
| AGENCY REVIEW           | 11-Jul-02 | 13-Sep-02 | 45.0 days |
| RESPONSE TO COMMENTS    | 13-Sep-02 | 19-Nov-02 | 45.0 days |
| PREPARE DRAFT FINAL     | 19-Nov-02 | 27-Jan-03 | 45.0 days |
| FINAL RI REPORT         | 27-Jan-03 | 11-Mar-03 | 30.0 days |
| FEASIBILITY STUDY       | 10-Apr-01 | 22-Apr-03 | 510.0 day |
| TREATABILITY STUDY      | 10-Apr-01 | 18-Jan-02 | 195.0 day |
| TECH MEMO TREATABIL     | 10-Apr-01 | 5-Jul-01  | 60.0 days |
| SCREENING TECHNOL       | 10-Apr-01 | 22-May-01 | 30.0 days |
| ALTERNATIVE SCREE       | 22-May-01 | 5-Jul-01  | 30.0 days |
| TREAT TESTS             | 5-Jul-01  | 5-Dec-01  | 105.0 day |
| POA                     | 5-Jul-01  | 26-Jul-01 | 15.0 days |
| SUBCONTRACTING          | 26-Jul-01 | 16-Aug-01 | 15.0 days |
| FIELD WORK              | 16-Aug-01 | 28-Sep-01 | 30.0 days |
| LABORATORY ANALYS       | 28-Sep-01 | 5-Dec-01  | 45.0 days |
| DETAIL ANALYSIS         | 5-Dec-01  | 18-Jan-02 | 30.0 days |
| Feasibility Study       | 16-Apr-02 | 22-Apr-03 | 255.0 day |
| Prepare Draft FS RE     | 16-Apr-02 | 22-Aug-02 | 90.0 days |
| AGENCY REVIEW           | 22-Aug-02 | 28-Oct-02 | 45.0 days |
| RESPOND TO COMMENTS     | 28-Oct-02 | 3-Jan-03  | 45.0 days |
| PREPARE DRAFT FINAL     | 3-Jan-03  | 11-Mar-03 | 45.0 days |
| FINAL                   | 11-Mar-03 | 22-Apr-03 | 30.0 days |
| PROPOSED REMEDIAL ACTIO | 3-Jan-03  | 2-Feb-04  | 270.0 day |
| Draft (PRAP) REMEDIAL   | 3-Jan-03  | 19-Sep-03 | 180.0 day |
| PREPARE DRAFT PRAP      | 3-Jan-03  | 11-Mar-03 | 45.0 days |
| AGENCY REVIEW           | 11-Mar-03 | 1-Apr-03  | 15.0 days |
| RESPONSE TO COMMENT     | 1-Apr-03  | 4-Jun-03  | 45.0 days |
| PREPARE DRAFT FINAL     | 4-Jun-03  | 7-Aug-03  | 45.0 days |
| FINAL                   | 7-Aug-03  | 19-Sep-03 | 30.0 days |
| PUBLIC COMMENT PERIOD   | 19-Sep-03 | 2-Feb-04  | 90.0 days |
| Prepare Public Noti     | 19-Sep-03 | 10-Oct-03 | 15.0 days |
| Public Comment Peri     | 10-Oct-03 | 17-Dec-03 | 45.0 days |
| Public Meeting          | 31-Oct-03 | 3-Nov-03  | 1.0 day   |
| Responsiveness Summ     | 17-Dec-03 | 2-Feb-04  | 30.0 days |
| Record of Decision      | 17-Dec-03 | 24-Sep-04 | 195.0 day |
| Draft                   | 17-Dec-03 | 24-Feb-04 | 45.0 days |
| Prepare Draft ROD       | 17-Dec-03 | 24-Feb-04 | 45.0 days |
| ROD REVIEW              | 24-Feb-04 | 24-Sep-04 | 150.0 day |
| AGENCY REVIEW           | 24-Feb-04 | 6-Apr-04  | 30.0 days |
| Respond to Comments     | 6-Apr-04  | 9-Jun-04  | 45.0 days |
| Prepare Draft Final     | 9-Jun-04  | 12-Aug-04 | 45.0 days |
| FINAL ROD               | 12-Aug-04 | 24-Sep-04 | 30.0 days |
| OPERABLE UNIT 5         | 13-Sep-02 | 4-Feb-08  | 1,350.0 d |
| ROUND I FIELD WORK      | 13-Sep-02 | 22-Jul-04 | 465.0 day |
| WORKPLAN                | 13-Sep-02 | 7-Aug-03  | 225.0 day |
| DRAFT WORKPLAN          | 13-Sep-02 | 11-Dec-02 | 60.0 days |
| AGENCY REVIEW           | 11-Dec-02 | 18-Feb-03 | 45.0 days |
| ADDRESS COMMENTS        | 18-Feb-03 | 22-Apr-03 | 45.0 days |
| PREPARE DRAFT FINAL     | 22-Apr-03 | 25-Jun-03 | 45.0 days |
| WORKPLAN FINAL          | 25-Jun-03 | 7-Aug-03  | 30.0 days |
| ROUND I FIELD WORK      | 7-Aug-03  | 22-Jul-04 | 240.0 day |
| FIELD WORK              | 7-Aug-03  | 16-Mar-04 | 150.0 day |

|                         |           |           |           |
|-------------------------|-----------|-----------|-----------|
| POA PROPOSED            | 7-Aug-03  | 28-Aug-03 | 15.0 days |
| SUBCONTRACTING          | 28-Aug-03 | 19-Sep-03 | 15.0 days |
| FIELD WORK              | 19-Sep-03 | 16-Mar-04 | 120.0 day |
| ANALYSIS AND DATA M     | 16-Mar-04 | 22-Jul-04 | 90.0 days |
| LABORATORY ANALYS       | 16-Mar-04 | 27-Apr-04 | 30.0 days |
| DATA VALIDATION/M       | 27-Apr-04 | 22-Jul-04 | 60.0 days |
| ROUND II FIELD WORK     | 22-Jul-04 | 7-Jul-05  | 240.0 day |
| TECHNICAL MEMO ROUND    | 22-Jul-04 | 18-Oct-04 | 60.0 days |
| AGENCY EVALUATION       | 18-Oct-04 | 1-Dec-04  | 30.0 days |
| OPTIMIZATION OF DESIG   | 1-Dec-04  | 21-Dec-04 | 14.0 days |
| FIELD WORK              | 18-Oct-04 | 7-Jul-05  | 180.0 day |
| FIELD WORK ROUND II     | 18-Oct-04 | 1-Mar-05  | 90.0 days |
| POA PREPARE             | 18-Oct-04 | 8-Nov-04  | 15.0 days |
| SUBCONTRACTING          | 8-Nov-04  | 1-Dec-04  | 15.0 days |
| FIELD WORK ROUND        | 1-Dec-04  | 1-Mar-05  | 60.0 days |
| ANALYSIS AND DATA M     | 1-Mar-05  | 7-Jul-05  | 90.0 days |
| LABORATORY ANALYS       | 1-Mar-05  | 12-Apr-05 | 30.0 days |
| DATA VALIDATION/M       | 12-Apr-05 | 7-Jul-05  | 60.0 days |
| RI REPORT               | 7-Jul-05  | 13-Jul-06 | 255.0 day |
| DRAFT RI/BRA REPORT     | 7-Jul-05  | 15-Nov-05 | 90.0 days |
| AGENCY REVIEW           | 15-Nov-05 | 23-Jan-06 | 45.0 days |
| RESPONSE TO COMMENTS    | 23-Jan-06 | 28-Mar-06 | 45.0 days |
| PREPARE DRAFT FINAL     | 28-Mar-06 | 31-May-06 | 45.0 days |
| FINAL RI REPORT         | 31-May-06 | 13-Jul-06 | 30.0 days |
| FEASIBILITY STUDY       | 12-Aug-04 | 24-Aug-06 | 510.0 day |
| TREATABILITY STUDY      | 12-Aug-04 | 24-May-05 | 195.0 day |
| TECH MEMO TREATABIL     | 12-Aug-04 | 8-Nov-04  | 60.0 days |
| SCREENING TECHNOL       | 12-Aug-04 | 24-Sep-04 | 30.0 days |
| ALTERNATIVE SCREE       | 24-Sep-04 | 8-Nov-04  | 30.0 days |
| TREAT TESTS             | 8-Nov-04  | 12-Apr-05 | 105.0 day |
| POA                     | 8-Nov-04  | 1-Dec-04  | 15.0 days |
| SUBCONTRACTING          | 1-Dec-04  | 22-Dec-04 | 15.0 days |
| FIELD WORK              | 22-Dec-04 | 7-Feb-05  | 30.0 days |
| LABORATORY ANALYS       | 7-Feb-05  | 12-Apr-05 | 45.0 days |
| DETAIL ANALYSIS         | 12-Apr-05 | 24-May-05 | 30.0 days |
| Feasibility Study       | 18-Aug-05 | 24-Aug-06 | 255.0 day |
| Prepare Draft FS RE     | 18-Aug-05 | 29-Dec-05 | 90.0 days |
| AGENCY REVIEW           | 29-Dec-05 | 7-Mar-06  | 45.0 days |
| RESPOND TO COMMENTS     | 7-Mar-06  | 9-May-06  | 45.0 days |
| PREPARE DRAFT FINAL     | 9-May-06  | 13-Jul-06 | 45.0 days |
| FINAL                   | 13-Jul-06 | 24-Aug-06 | 30.0 days |
| PROPOSED REMEDIAL ACTIO | 9-May-06  | 6-Jun-07  | 270.0 day |
| Draft (PRAP) REMEDIAL   | 9-May-06  | 29-Jan-07 | 180.0 day |
| PREPARE DRAFT PRAP      | 9-May-06  | 13-Jul-06 | 45.0 days |
| AGENCY REVIEW           | 13-Jul-06 | 3-Aug-06  | 15.0 days |
| RESPONSE TO COMMENT     | 3-Aug-06  | 6-Oct-06  | 45.0 days |
| PREPARE DRAFT FINAL     | 6-Oct-06  | 13-Dec-06 | 45.0 days |
| FINAL                   | 13-Dec-06 | 29-Jan-07 | 30.0 days |
| PUBLIC COMMENT PERIOD   | 29-Jan-07 | 6-Jun-07  | 90.0 days |
| Prepare Public Noti     | 29-Jan-07 | 20-Feb-07 | 15.0 days |
| Public Comment Peri     | 20-Feb-07 | 24-Apr-07 | 45.0 days |
| Public Meeting          | 12-Mar-07 | 13-Mar-07 | 1.0 day   |
| Responsiveness Summ     | 24-Apr-07 | 6-Jun-07  | 30.0 days |
| Record of Decision      | 24-Apr-07 | 4-Feb-08  | 195.0 day |
| Draft                   | 24-Apr-07 | 27-Jun-07 | 45.0 days |
| Prepare Draft ROD       | 24-Apr-07 | 27-Jun-07 | 45.0 days |
| ROD REVIEW              | 27-Jun-07 | 4-Feb-08  | 150.0 day |
| AGENCY REVIEW           | 27-Jun-07 | 9-Aug-07  | 30.0 days |
| Respond to Comments     | 9-Aug-07  | 15-Oct-07 | 45.0 days |
| Prepare Draft Final     | 15-Oct-07 | 19-Dec-07 | 45.0 days |
| FINAL ROD               | 19-Dec-07 | 4-Feb-08  | 30.0 days |

**EARLY ASSESSMENT AND REMOVAL INITIATIVE  
NAS CECIL FIELD  
OCTOBER 1992**

- I. INTRODUCTION.** In an effort to expedite the remedial action process at NAS Cecil Field, the Navy has begun to identify sites that are candidates for the removal action process. The Golf Course Pesticide Disposal Area, Site 11 (OU6), has been identified as an appropriate site for a removal action.
- II. OBJECTIVES.** The objectives under this program for 1993 are:
1. To obtain an Interim Record of Decision (IROD) at Site 11 for source removal;
  2. To produce documents in support of a removal action at Site 11 as specified in the National Contingency Plan; and,
  3. To supply the removal action documents to the Navy's Remedial Action Contract (RAC) contractor for implementation.
- III. SITE 11 BACKGROUND.** The Golf Course Pesticide Disposal Area, Site 11, was used for the disposal of empty and full drums containing pesticide products from the early 1970's until 1978. Drums were buried in a pit that was approximately 40 feet by 40 feet. The pit was located at the Golf Course between fairways 11 and 17 (Figure 1).

Previous studies indicate that approximately 250 to 400 unrinsed, empty, five-gallon drums of pesticides were crushed and disposed of within this pit. In addition, the pit reportedly received two to three full 30-gallon drums, one of which was reported to have contained nemagon (1,2-debromo-3-chloropropane), and 10 to 15 full or partially full five-gallon drums of pesticides, fungicides, and herbicides.

A Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) was performed in 1987 by Harding Lawson and Associates. RFI activities included a geophysical survey of the site, the installation of two monitoring wells, collection and analysis of two groundwater samples, and sampling and analysis of subsurface soil.

A geophysical survey of the site was performed using a Scintrex-Integrated Geophysical System (i.e., a magnetometer equipped with a very low frequency (VLF) sensor) and a Geonics Model EM-31 Electromagnetic Terrain Conductivity Meter. Two areas of anomalies were identified by the magnetometer survey. The VLF data remained at or below background levels. The EM-31 was used to ensure that soil boring and monitoring well locations were free of utility equipment and buried metal.

Two monitoring wells were installed and screened from 13 to 43 feet. Groundwater samples were collected and analyzed for "modified" priority pollutants including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), selected heavy metals (i.e., cadmium, chromium, and lead), pesticides and polychlorinated biphenyls (PCBs), pH, and specific conductance. The only chemicals detected were chromium

(332 and 40 ug/l) and lead (573 and 59 ug/l). The current maximum contaminant level (MCL) for chromium and lead is 50 ug/l each.

Six soil samples were collected from a depth of three to five feet below land surface (bls). These six samples were composited into two samples and analyzed for "modified" priority pollutants including VOCs, SVOCs, selected heavy metals (i.e., cadmium, chromium, and lead), pesticides and PCBs, and total solids. Analytical results from soil samples collected at the site indicate the presence of methylene chloride (<5 and 24 ug/kg), toluene (<5 and 16 ug/kg), 1,1,1-trichloroethane (24 and 39 ug/kg), and lead (6,000 and 8,300 ug/kg).

**IV. SCOPE.** The Navy will initiate the removal action process for Site 11 (OU 6) by implementing a one-day meeting for representatives from the Navy, the U.S. Environmental Protection Agency Region IV (EPA), the Florida Department of Environmental Regulation (FDER), the Navy's RAC administrator (i.e., NEESA), and the RAC Disposal Contractor. The purpose of this meeting will be to define responsibilities of involved agencies and to review the removal action schedule and removal action process.

The Navy will continue the removal action process for Site 11 (OU 6) by preparing an Engineering Evaluation/Cost Analysis (EE/CA). The purpose of the EE/CA is to identify removal action objectives, to identify and evaluate removal alternatives that will achieve these objectives, and to recommend, based on the evaluation, the alternative that best meets the evaluation criteria. The EE/CA and supporting documentation will be made available to the public. The public will have 30 days to review the document and provide comments to NAS Cecil Field. All public comments will be addressed in a Responsiveness Summary. In addition, an Action Memorandum will be produced to substantiate the need for a removal action at the site. The Action Memorandum will be published concurrent with the Responsiveness Summary.

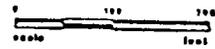
A limited amount of field activities will be conducted prior to the completion of the EE/CA. Activities to be performed during the limited field investigation include a magnetometer survey and an EM-31 survey. The purpose of the surveys will be to confirm the location of buried drums. The results of this investigation will be presented in the EE/CA. An initial review of available data indicates that the level of protection required for remedial action contractors during excavation will be Level C with full skin protection.

Once the Action Memorandum has been signed by the appropriate parties, the Navy will prepare a Design Plan for the removal action. This plan will include the technical specifications, cost estimate, schedule, and drawings for the removal action.

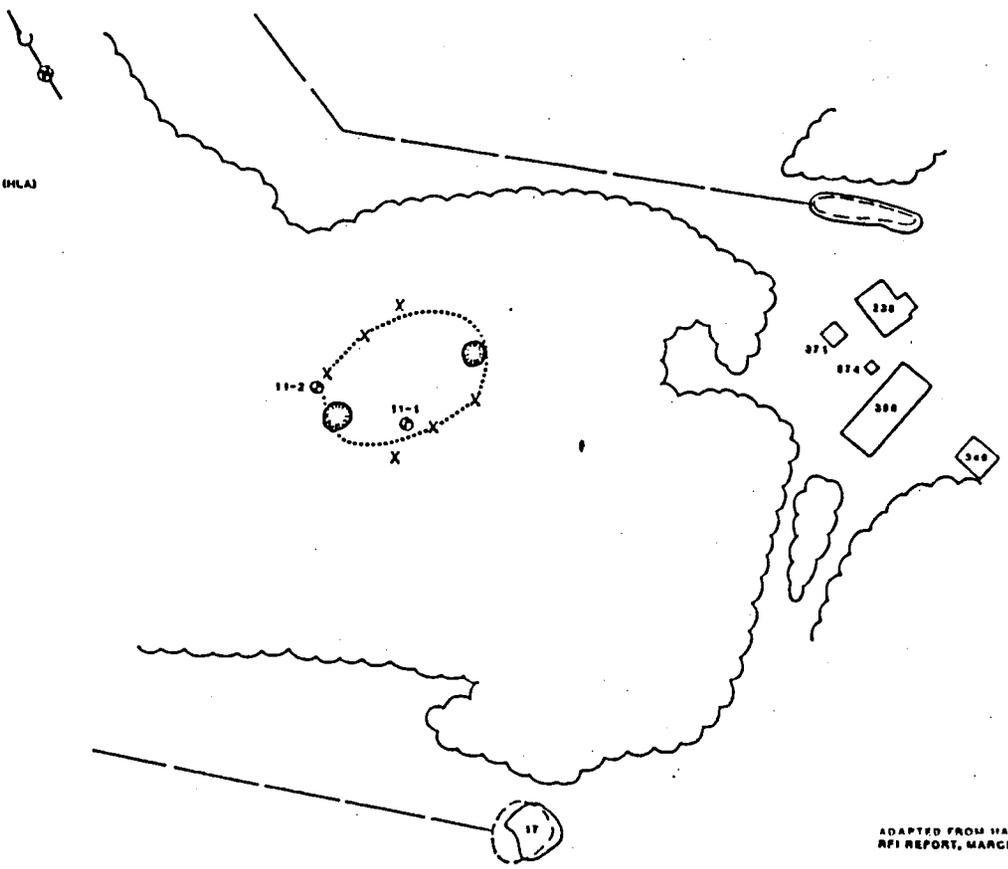
**V. ASSUMPTIONS.** In order to initiate a removal action for Site 11 (OU 6) at NAS Cecil Field during 1993, the following assumptions were used:

1. The removal action will be initiated once Site 11 has been adequately characterized for removal action purposes.
2. The Navy will secure the services of the RAC Disposal Contractor.

**VI. SCHEDULE.** The attached timeline presents the schedule for the removal action at Site 11.



- LEGEND**
- ..... WASTE DISPOSAL SITE
  - ⊙ GROUND WATER MONITORING WELL (HLA)
  - X SOIL SAMPLE
  - ||||| AREA OF MAGNETIC ANOMALIES



ADAPTED FROM HARDING LAWSON,  
RFI REPORT, MARCH 17, 1988

Site Map - Previous Sampling Location/  
Geophysical Data



SITE 11

Schedule Name : Site 11 Removal Action

Responsible : Cliff Casey

As-of Date : 21-Oct-92 8:00a

Schedule File : SITE11

| Task Name                      | Start Date | End Date  | Duration  |
|--------------------------------|------------|-----------|-----------|
| -----                          | -----      | -----     | -----     |
| Removal Action                 | 30-Jan-93  | 29-Nov-93 | 303.0 day |
| Kick-off Meeting               | 30-Jan-93  | 31-Jan-93 | 1.0 day   |
| EE/CA AND DRAFT FINAL IROD     | 31-Jan-93  | 6-Jul-93  | 156.0 day |
| Preparation of EE/CA - ABB     | 31-Jan-93  | 1-Apr-93  | 60.0 days |
| Preparation of IROD - ABB-ES   | 17-Mar-93  | 1-Apr-93  | 15.0 days |
| Agency Review DF EE/CA & IROD  | 1-Apr-93   | 15-Apr-93 | 14.0 days |
| Revisions - ABB-ES             | 15-Apr-93  | 22-Apr-93 | 7.0 days  |
| TRC Meetings                   | 22-Apr-93  | 23-Apr-93 | 1.0 day   |
| Prepare Fact Sheet - Navy      | 23-Apr-93  | 30-Apr-93 | 7.0 days  |
| Finalize & Dist. Fact Sht-Navy | 30-Apr-93  | 7-May-93  | 7.0 days  |
| Pub. EE/CA Availability - Navy | 30-Apr-93  | 7-May-93  | 7.0 days  |
| Pubic Comment (EE/CA & IROD)   | 7-May-93   | 6-Jul-93  | 60.0 days |
| Make Admin. Record Available   | 7-May-93   | 14-May-93 | 7.0 days  |
| Action Memo & Final IROD       | 6-Jul-93   | 24-Aug-93 | 49.0 days |
| Preparation - ABB-ES           | 6-Jul-93   | 27-Jul-93 | 21.0 days |
| Review - Navy, EPA, FDER, Faci | 27-Jul-93  | 10-Aug-93 | 14.0 days |
| Revisions - ABB-ES             | 10-Aug-93  | 17-Aug-93 | 7.0 days  |
| Distribute Act.Memo. & F. IROD | 17-Aug-93  | 24-Aug-93 | 7.0 days  |
| IROD Finalized                 | 24-Aug-93  | 24-Aug-93 | 0.0       |
| Responsive Sum. EE/CA & IROD   | 6-Jul-93   | 24-Aug-93 | 49.0 days |
| Preparation - ABB-ES           | 6-Jul-93   | 27-Jul-93 | 21.0 days |
| Review - Navy, EPA, FDER, Faci | 27-Jul-93  | 10-Aug-93 | 14.0 days |
| Revisions - ABB-ES             | 10-Aug-93  | 17-Aug-93 | 7.0 days  |
| Distribute Responsiveness Sum. | 17-Aug-93  | 24-Aug-93 | 7.0 days  |
| Draft Design Plan (35%)        | 6-Jun-93   | 26-Aug-93 | 81.0 days |
| Preparation - ABB-ES           | 6-Jun-93   | 5-Aug-93  | 60.0 days |
| Review - Navy, EPA, FDER, Faci | 5-Aug-93   | 26-Aug-93 | 21.0 days |
| Final Design Plan (100%)       | 26-Aug-93  | 29-Nov-93 | 95.0 days |
| Preparation - ABB-ES           | 26-Aug-93  | 25-Oct-93 | 60.0 days |
| Agency Review                  | 25-Oct-93  | 8-Nov-93  | 14.0 days |
| Revisions - ABB-ES             | 8-Nov-93   | 15-Nov-93 | 7.0 days  |
| Finalize - ABB-ES              | 15-Nov-93  | 29-Nov-93 | 14.0 days |

TIME LINE Task Report