07.02 - 09/29/93 - 01494

FINAL

FISCAL YEAR 1994 SITE MANAGEMENT PLAN FOR MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

CONTRACT TASK ORDER 0099

Prepared For:

DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES
ENGINEERING COMMAND
Norfolk, Virginia

Under:

LANTDIV CLEAN Program
Contract N62470-89-D-4814

Prepared by:

BAKER ENVIRONMENTAL, INC.
Coraopolis, Pennsylvania

SEPTEMBER 29, 1993

TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	1-1
1.1	Description of the Facility	1-1
1.2	Environmental History of the Facility	1-3
1.3	Purpose of the Site Management Plan	1-4
1.4	Site Changes Since the Signing of the 1991 Federal Facilities Agreement	1-4
1.5	Recommended Amendments to the 1991 Federal Facilities Agreement	1-6
1.6	Format of the Site Management Plan	1-6
2.0	OPERABLE UNITS	2-1
2.1	Operable Unit Determination	2-1
2.2	Operable Unit Descriptions	2-4
2.2.1	Operable Unit No. 1 (Sites 21, 24, and 78)	2-4
2.2.2	Operable Unit No. 2 (Sites 6, 9, and 82)	2-6
2.2.3	Operable Unit No. 3 (Site 48)	2-7
2.2.4	Operable Unit No. 4 (Sites 41, 69 and 74)	2-7
2.2.5	Operable Unit No. 5 (Site 2)	2-9
2.2.6	Operable Unit No. 6 (Sites 36, 43, 44, 54, and 86)	2-9
2.2.7	Operable Unit No. 7 (Sites 1, 28, and 30)	2-12
2.2.8	Operable Unit No. 8 (Site 16)	2-13
2.2.9	Operable Unit No. 9 (Sites 65 and 73)	2-14
2.2.10	Operable Unit No. 10 (Site 35)	2-15
2.2.11	Operable Unit No. 11 (Sites 7 and 80)	2-15
2.2.12	Operable Unit No. 12 (Site 3)	2-16
2.2.13	Operable Unit No. 13 (Site 63)	2-17
3.0	OPERABLE UNIT SCOPE OF WORK	3-1
4.0	SITE MANAGEMENT SCHEDULES	4-1
5.0	SITE INSPECTION	5-1
5.1	Introduction	5-1
5.2	Sites	5-1
5.2.1	Site 12 - Explosive Ordnance Disposal (G-4A)	5-1
5.2.2	Site 68 - Rifle Range Dump	5-1
5.2.3	Site 75 - MCAS Basketball Court Site	5-3
5.2.4	Site 76 - MCAS Curtis Road Site	5-3
5.2.5	Site A - MCAS (H) Officer's Housing Area	5-3
5.2.6	Site 84 - Building 45 Area	5-4
5.2.7	Site 85 - Camp Johnson Battery Dump	5-4
5.3	Scope of Work	5-4
5.4	Site Management Schedules	5-5
6.0	REMOVAL/INTERIM REMEDIAL ACTIONS	6-1
7.0	REFERENCES	7-1

LIST OF FIGURES

Number		Page
1-1	Operable Units and Site Locations at MCB Camp Lejeune	1-2

LIST OF TABLES

Number		Page
1-1	IRP Areas of Concern/Sites Identified in the 1991 Federal Facilities Agreement	1-5
2-1	Recommended Operable Units for Marine Corps Base Camp Lejeune, North Carolina	2-2
3-1	Active Operable Unit IRP Activities	3-5
4-1	Site Management Schedule - Sites 21, 24, and 78 (Operable Unit No. 1)	4-2
4-2	Site Management Schedule - Sites 6, 9, and 82 (Operable Unit No. 2)	4-4
4-3	Site Management Schedule - Sites 41, 69, and 74 (Operable Unit No. 4)	4-5
4-4	Site Management Schedule - Site 2 (Operable Unit No. 5)	4-7
4-5	Site Management Schedule - Sites 36, 43, 44, 54, and 86 (Operable Unit No. 6)	4-9
4-6	Site Management Schedule - Sites 1, 28, and 30 (Operable Unit No. 7)	4-10
4-7	Site Management Schedule - Site 16 (Operable Unit No. 8)	4-12
4-8	Site Management Schedule - Sites 65 and 73 (Operable Unit No. 9)	4-13
4-9	Site Management Schedule - Site 35 (Operable Unit No. 10)	4-14
4-10	Site Management Schedule/Interim RI/FS - Site 35 (Operable Unit No. 10)	4-16
4-11	Site Management Schedule - Sites 7 and 80 (Operable Unit No. 11)	4-18
4-12	Site Management Schedule - Sites 3 (Operable Unit No. 12)	4-19
4-13	Site Management Schedule - Site 63 (Operable Unit No. 13)	4-20
4-14	Primary and Secondary Document Submittals for Fiscal Year 1994	4-22
5-1	Disposal Sites Requiring Site Inspections	5-2
5-2	Site Inspection Site Management Schedule - A, 12, 68, 75, 76, 84, and 85	5-6
5-3	Summary of Fiscal Year 1994 Submittals for Site Inspection IRP Sites	5-7

LIST OF ACRONYMS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DEHNR	Department of Environment, Health, and Natural Resources
EPA	Environmental Protection Agency
FFA	Federal Facility Agreement
FS	Feasibility Study
FY	Fiscal Year
HPIA	Hadnot Point Industrial Area
IAS	Initial Assessment Study
IRA	Interim Remedial Action
IRP	Installation Restoration Program
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
NACIP	Navy Assessment and Control of Installation Pollutants
NPL	National Priorities List
OU	Operable Unit
PCB	Polychlorinated Biphenyl
POL	Petroleum, Oil, and Lubricants
PRAP	Proposed Remedial Action Plan
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
SI	Site Inspection
SMP	Site Management Plan
TS	Treatability Study
VOC	Volatile Organic Compound
WTP	Water Treatment Plant or Wastewater Treatment Plant

1.0 INTRODUCTION

This report presents the Fiscal Year 1994 update of the Site Management Plan (SMP) for Marine Corps Base (MCB) Camp Lejeune, North Carolina (Installation). The purpose of the SMP is to present the planned activities to be conducted at the Installation during Fiscal Year 1994 and to provide projection for long-term progress at the facility in accordance with the Department of the Navy's Installation Restoration Program (IRP). This report has been prepared by Baker Environmental, Inc. (Baker) for the Atlantic Division, Naval Facilities Engineering Command (LANTDIV).

1.1 Description of the Facility

MCB Camp Lejeune is located in Onslow County, North Carolina (see Figure 1-1). There are six major Marine Corps and two Navy Commands aboard MCB Camp Lejeune: Marine Corps Base owns all the real estate, operates entry-level formal training schools, and provides support and training for tenant commands; Headquarters Nucleus, II Marine Expeditionary Force (II MEF) coordinates operational planning for Fleet Marine Commands; 2d Marine Division (2d MAR DIV) is the ground combat element of the Force; 2d Force Service Support Group (2d FSSG) is the service and support element of the Force; 2d Surveillance, Reconnaissance and Intelligence Group (2d SRIG) obtains, produces, and releases information and intelligence during planning and execution of exercises and combat operations; 6th Marine Expeditionary Brigade (6th MEB) provides the planning staff for the Fleet Marine Force associated with Maritime Prepositioning Ships Squadron-I; the Naval Hospital and the Naval Dental Clinic provide primary medical and dental care to Marines and sailors stationed at Camp Lejeune and medical care to their families.

The Marine Corps Air Station, New River, and Camp Geiger are considered as a single urban area possessing two separate missions and supported by two unrelated groups of personnel. The MCAS, New River encompasses 2,772 acres and is located in the northwestern section of the Complex and lies approximately five miles south of Jacksonville. The Air Station includes air support activities, troop housing, and personnel support facilities, all of which immediately surround the aircraft operations and maintenance areas.

Camp Geiger, located directly north of MCAS, New River contains a mixture of troop housing, personnel support, and training uses.

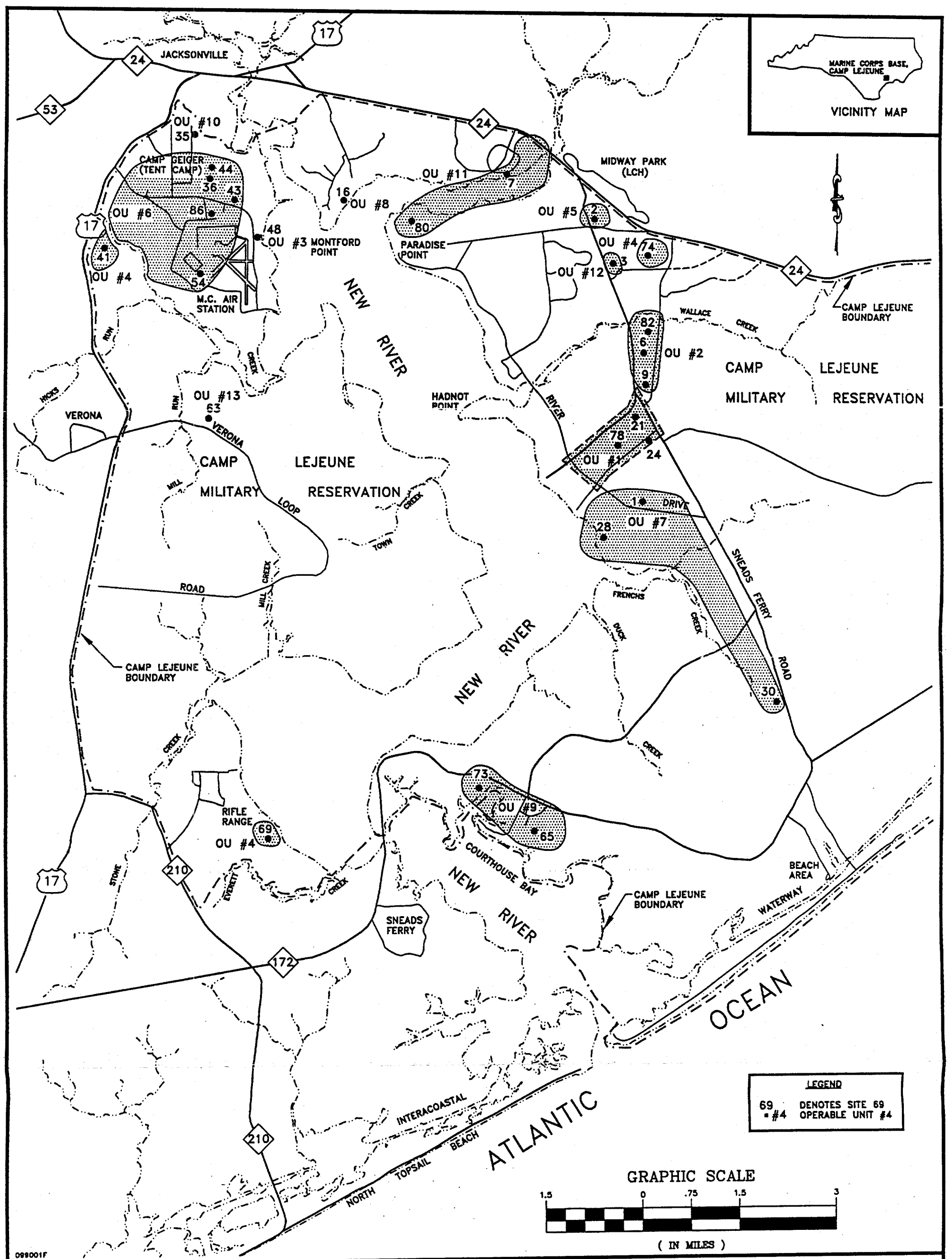


FIGURE 1-1
OPERABLE UNITS AND SITE LOCATIONS AT
MARINE CORPS BASE CAMP LEJEUNE

MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

01494KK01Z

The facility currently covers approximately 234 square miles and is bisected by the New River. The Atlantic Ocean forms the southeastern boundary of the facility. The City of Jacksonville is located immediately northwest of the facility. Within 15 miles are three large, publicly-owned tracts of land: Croatian National Forest, Hoffman Forest, and Camp Davis Forest. The remaining land use surrounding the facility is agricultural. Estuaries along the coast support commercial fishing. Tourism and residential resort areas have stimulated the regional economy. The facility is located in the Atlantic Coastal Plain on generally flat topography.

1.2 Environmental History of the Facility

The facility has been actively involved in various environmental investigation and remediation programs since 1983, beginning with the Navy Assessment and Control of Installation Pollutants (NACIP) Program. The first study conducted under the NACIP to investigate potentially hazardous sites at MCB Camp Lejeune was an Initial Assessment Study (IAS). This study, which was conducted in 1983, identified areas of concern that may potentially cause threats to human health and the environment as a result of past storage, handling, and/or disposal of hazardous materials. Based on a review of historical records, field inspections, and personal interviews, 76 areas of concern (AOCs) were identified. The IAS concluded that, while none of the sites pose an immediate threat to human health or the environment, 22 sites warrant further investigation to assess long-term impacts. During preliminary investigation of the AOCs, an additional AOC (Site 78, Hadnot Point Industrial Area) was identified. Subsequent sampling and monitoring activities of these sites have been initiated since 1984.

The Department of Navy's Installation Restoration Program (IRP) was initiated in 1986 following the legislation of the Superfund Amendments and Reauthorization Act (SARA). The IRP, which was implemented to follow the requirements of SARA, replaced the NACIP.

MCB Camp Lejeune was placed on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL) effective October 4, 1989 (54 Federal Register 41015, October 4, 1989). Following the listing of MCB Camp Lejeune on the NPL, a Federal Facilities Agreement (FFA) between the United States Environmental Protection Agency Region IV (EPA), the North Carolina Department of Environment, Health, and Natural Resources (DEHNR), and the Department of the Navy was signed in February 1991. The objectives of the FFA are:

- To ensure that the environmental impacts associated with past and present activities at MCB Camp Lejeune are thoroughly investigated and appropriate CERCLA response actions are developed and implemented as necessary to protect the public health, welfare and the environment;

- To establish a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at MCB Camp Lejeune in accordance with CERCLA, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), and EPA policy relevant to remediation at MCB Camp Lejeune; and

- To facilitate cooperation, exchange of information and participation of the Parties in such action.

The FFA covers 23 sites at MCB Camp Lejeune. These sites are required to be investigated in accordance with the NCP, CERCLA, and SARA, under the terms and conditions of the FFA. Since then, additional sites have been added, based on the conclusions and recommendations identified by Site Inspections of other existing or newly-identified sites throughout MCB Camp Lejeune.

1.3 Purpose of the Site Management Plan

This Fiscal Year 1994 Site Management Plan (SMP) is one of the primary documents identified in the FFA. The SMP documents the decisions and evaluations made during the project planning and scoping process for MCB Camp Lejeune. The SMP includes proposed deadlines for completion of primary documents, as specified in the FFA, to be submitted during Fiscal Year 1994. In addition, the SMP identifies Installation Restoration activities projected for the next five-year period (1994-1998).

1.4 Site Changes Since the Signing of the 1991 Federal Facilities Agreement

The FFA identified 23 sites where RI/FS activities are to be conducted (see Table 1-1). Since that time, two sites (Sites 22 and Site 45) will be investigated as UST sites and will not require an RI/FS at this time. In addition, Site "A" and Site 68 will require a Site Inspection prior to undertaking, if necessary, RI/FS activities.

TABLE 1-1

IRP AREAS OF CONCERN/SITES IDENTIFIED IN THE 1991 FEDERAL FACILITIES AGREEMENT

Site No.	Site Description
1	French Creek Liquids Disposal Area
2	Former Nursery/Day-Care Center
3	Old Creosote Site
6	Storage Lots 201 and 203
7	Tarawa Terrace Dump
9	Fire Fighting Training Pit at Piney Green Road
12	Exposure Ordnance Disposal
16	Montford Point Burn Dump (1958-1972)
21	Transformer Storage Lot 140
22 (1)	Industrial Area Tank Farm
24	Industrial Area Fly Ash Dump
28	Hadnot Point Burn Dump
30	Sneads Ferry Road - Fuel Tank Sludge Area
35	Camp Geiger Area Fuel Farm
36	Camp Geiger Area Dump near Sewage Treatment Plant
41	Camp Geiger Dump near former Trailer Park
43	Agan Street Dump(2)
44	Jones Street Dump
45 (1)	Campbell Street Underground AVGAS Storage and Adjacent JP Fuel Farm at Air Station
48	MCAS New River Mercury Dump Site
54 (2)	Crash Crew Fire Training Burn Pit
63	Verona Loop Dump(2)
65	Engineer Area Dump(2)
68 (2)	Rifle Range Dump
69	Rifle Range Chemical Dump
73	Courthouse Bay Liquids Disposal Area
74	Mess Hall Grease Pit Area
75 (2)	MCAS Basketball Court Site
76 (2)	MCAS Curtin Road Site
A (2)	MCAS (H) Officer's Housing Area
78	Hadnot Point Industrial Area
80	Paradise Point (Gold Course Pesticide Area)
82	VOC Disposal Area at Piney Creek Road
84	Building 45 Area(2)
85	Camp Johnson Battery Dump(2)
86	Tank Area AS419-AS421 at MCAS

Note: Other specific locations may be added to the above list upon identification of the need to perform an RI/FS at those locations resulting in the corresponding modification to the Scope of Work Primary Document (described in the Federal Facilities Agreement).

(1) UST Petroleum Site (UST Petroleum Investigation/Corrective Action Regulations).
(2) Site Inspections will initially be conducted. The SI will determine the need to conduct an RI/FS.

Based on the results of Site Inspections conducted at MCB Camp Lejeune during the period 1991-1993, the following sites will be included under the RI/FS phase:

- Site 3 (Old Creosote Plant)
- Site 7 (Tarawa Terrace Dump)
- Site 43 (Agan Street Dump)
- Site 44 (Jones Street Dump)
- Site 54 (Crash Crew Fire Training Burn Pit)
- Site 63 (Verona Loop Dump)
- Site 65 (Engineer Area Dump)
- Site 80 (Paradise Point)
- Site 82 (VOC Disposal Area at Piney Green Road)

With these changes, a total of 27 sites will require RI/FS activities.

1.5 Recommended Amendments to the 1991 Federal Facilities Agreement

Appendix D of the FFA lists and describes various primary and secondary documents that will be submitted by the Navy/Marine Corps. Primary document No. 10 (Location-Specific Remedial Design Reports) should be amended to include Remedial Design Work Plans, Treatability Study Reports, and Requirements Packages.

1.6 Format of the Site Management Plan

This SMP consists of seven sections. Section 1.0 (Introduction) explains the history of environmental activities at MCB Camp Lejeune, the purpose of the FFA, and the purpose of the SMP. Section 2.0 (Operable Units) describes the Operable Units at MCB Camp Lejeune that will be addressed in the SMP. A summary of ongoing and planned activities associated with these Operable Units is outlined in Section 3.0 (Operable Unit Scope of Work). Section 4.0 (IRP Management Schedules) provides estimated (and amended) schedules for conducting CERCLA activities for each Operable Unit. Detailed schedules are provided for those Operable Units that are active or will be initiated in Fiscal Year 1994. Section 4.0 also includes schedules for those Operable Units that will be studied in Fiscal Years 1995-1998 and specific target submittal dates for draft primary and secondary documents for Fiscal Year 1994 through 1998. Ongoing and/or planned Site Inspection (SI) activities are presented in

Section 5.0 (Site Inspection Activities). Ongoing and/or planned removal actions are discussed in Section 6.0 (Removal/Interim Remedial Actions). References are provided in Section 7.0.

2.0 OPERABLE UNITS

As defined in the NCP, an "Operable Unit means a discrete action that comprises an incremental step toward comprehensively addressing site problems. This discrete portion of a remedial response manages migration, or eliminates or mitigates a release, threat of a release, or pathway of exposure. The cleanup of a site can be divided into a number of operable units, depending on the complexity of the problems associated with the site. Operable units may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site."

This section identifies the Operable Units at MCB Camp Lejeune where IRP activities are or will be implemented. Anticipated project startup dates for these activities are also identified. The project startup dates coincide with the priority of the Operable Units with respect to their potential for groundwater contamination, proximity to receptors, contaminants verified, and potential ecological impacts.

2.1 Operable Unit Determination

In accordance with guidance provided in the NCP, the Navy/Marine Corps has recommended that the 27 current IRP sites be grouped into 13 Operable Units (OU) for the purposes of proceeding with RI/FS activities (see Table 2-1).

The 27 RI/FS sites represent an increase of nine sites (Sites 3, 7, 43, 44, 54, 63, 65, 80, and 82) from the previous SMP (i.e., Fiscal Year 1993).

Site 3 (Old Creosote Plant) will be included as Operable Unit No. 12. Site 7 (Tarawa Terrace Dump) and Site 80 (Paradise Point) will be investigated as Operable Unit No. 11 since these two sites share a common local drainage basin (Northeast Creek). Site 43 (Agan Street Dump), Site 44 (Jones Street Dump), and Site 54 (Crash Crew Training Burn Pit) have been combined with two other sites to form Operable Unit No. 6. These five sites are all located in the same geographic area and exhibit similar waste types. Site 63 (Verona Loop Dump) will be studied alone as Operable Unit No. 13. Site 65 (Engineer Area Dump) has been included as part of Operable Unit No. 9 due to its close proximity to Site 73. Site 82 (Piney Green Road VOC Area) has been included under Operable Unit No. 2 since this site is adjacent to Sites 6 and 9.

TABLE 2-1

RECOMMENDED OPERABLE UNITS FOR
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA

Operable Unit No.	Site No(s).	Site Name(s)	Primary Reasons for OU Selection
1	21	Transformer Storage Lot 140	Sites are geographically located in the same area.
	24	Industrial Area Fly Ash Dump	
	78	Hadnot Point Industrial Area	
2	6	Storage Lots 201 and 203	Sites are located near each other.
	9	Firefighting Training Pit at Piney Green Road	Sites are currently undergoing RI/FS activities (development of RI/FS Project Plans).
	82	Piney Green Road VOC Area	
3	48	MCAS New River Mercury Dump Site	Unique characteristics of the site involving the disposal of mercury, which is highly toxic and bioaccumulates.
4	41	Camp Geiger Dump Near Former Trailer Park	Unique characteristics of the site involving the disposal of chemical wastes generated on the base.
	69	Rifle Range Chemical Dump	
	74	Mess Hall Grease Disposal Area	
5	2	Former Nursery/Day Care Center	Similar characteristics of materials disposed (pesticides).
6	36	Camp Geiger Area Dump near Sewage Treatment Plant	Similar characteristics of materials disposed (POL, waste oils, solvents) and contaminants detected (metals, VOCs, O&G). Sites are located in the Brinson Creek and Tank Creek watershed.
	43	Agan Street Dump	
	44	Jones Street Dump	
	54	Crash Crew Fire Training Burn Pit	
	86	Tank Area AS419-AS421 at Marine Corps Air Station	

TABLE 2-1 (Continued)

RECOMMENDED OPERABLE UNITS FOR
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA

Operable Unit No.	Site No(s).	Site Name(s)	Primary Reasons for OU Selection
7	1	French Creek Liquids Disposal Area	Sites are located near each other and are located in the French Creek watershed. Similar contaminants detected (metals, O&G).
	28	Hadnot Point Burn Dump	
	30	Sneads Ferry Road Fuel Tank Sludge Area	
8	16	Montford Point Burn Dump	Isolated site which requires additional site investigation.
9	65	Engineer Area Dump	Geographic proximity.
	73	Courthouse Bay Liquids Disposal Area	
10	35	Camp Geiger Area Fuel Farm	Accelerated cleanup necessary to abate impacts to Brinson Creek.
11	7	Tarawa Terrace Dump	Geographic proximity. Both sites are located in the Northeast Creek Watershed.
	80	Paradise Point	
12	3	Old Creosote Plant	Isolated site with unique waste source.
13	63	Verona Loop Dump	Isolated site.

Site 35 has been taken out of Operable Unit No. 6. Site 35 is now considered Operable Unit No. 10. Due to a highway project in the area, Site 35 is on an expedited RI/FS schedule.

Site 41 (Camp Geiger Dump Near Former Trailer Park) will no longer be included as part of Operable Unit No. 6 since chemical agents may have been disposed of at this location. Therefore, Site 41 will be included as part of Operable Unit No. 4 with Sites 69 and 74, which reportedly may have buried chemical agents.

These Operable Units are depicted in Figure 1-1 and described below.

2.2 Operable Unit Descriptions

This section describes the operable units at MCB Camp Lejeune where RI/FS and remediation activities are or will be conducted.

2.2.1 Operable Unit No. 1 (Sites 21, 24, and 78)

Operable Unit No. 1 consists of Site 21 (Transformer Storage Lot 140), Site 24 (Industrial Area Fly Ash Dump), and Site 78 (Hadnot Point Industrial Area). These sites are described below.

Site 21 - Transformer Storage Lot 140

Site 21 is located between Ash Street and Sneads Ferry Road on Center Road. A transformer oil pit was located in the northeastern end of Lot 140 across the railroad tracks from Building 702. The entire lot is approximately 220 feet by 890 feet with the dimensions of the pit measuring 25 to 30 feet long by 6 feet wide by 8 feet deep.

Lot 140 was used from 1958 to 1977, for pesticide mixing and as a cleaning area for pesticide application equipment. The mixing area for the pesticides is believed to have been the southeast corner of the lot. Pesticide contamination possibly occurred as a result of small spills, washout, and excess disposal. In 1977, before activities were moved to a different location, washout was estimated to be about 350 gallons per week of overland discharge.

In 1950 and 1951, an on-site pit was used as a drainage receptor for oil from transformers.

Sand was occasionally placed in the pit when oil was found standing in the pit bottom. The total quantity of oil drained in this manner is unknown.

Site 24 - Industrial Area Fly Ash Dump

Site 24 is located south and east of the intersection of Birch and Duncan Streets. Four separate disposal locations were investigated as potential areas of contamination. Site 24 was used for the disposal of fly ash, cinders, solvents, used paint stripping compounds, sewage sludge, and water treatment sludge from the late 1940s to 1980. Approximately 20 to 25 acres in size, the site lies adjacent to upstream portions of Cogdels Creek.

Site 78 - Hadnot Point Industrial Area

The Hadnot Point Industrial Area (HPIA) is located on the east side of the New River. The HPIA is defined as that area bounded by Holcomb Boulevard to the west, Sneads Ferry Road to the north, Louis Street to the east, and the Main Service Road to the south.

The establishment of MCB Camp Lejeune began in the early 1940s with the construction of the HPIA. Water supply for the base was furnished by wells that tapped a potable aquifer 50 to 300 feet below the base. In 1941, a water treatment system, including 21 water supply wells, was placed on-line at HPIA. The system serviced most of the base until the 1950s, when additional wells and treatment facilities were installed because of the expanding needs of the base. Today, eight water treatment facilities and over 160 water supply wells serve the MCB at Camp Lejeune.

The HPIA is comprised of approximately 75 buildings/facilities. These include maintenance shops, gas stations, administrative offices, commissaries, snack bars, warehouses, and storage yards. A steam plant and training facility occupy the southwest portion of HPIA. In addition, numerous underground storage tanks, stormwater drains, and oil/water separators are present.

A transformer storage yard (Site 21) and a petroleum UST fuel tank farm (Site 22) are located within the northern portion of HPIA.

2.2.2 Operable Unit No. 2 (Sites 6, 9, and 82)

Operable Unit No. 2 consists of Site 6 (Storage Lots 201 and 203), Site 9 (Fire Fighting Training Pit at Piney Green Road), and Site 82 (Piney Green Road VOC Area). These sites are described below.

Site 6 - Storage Lots 201 and 203

Storage Lots 201 and 203 are located on Holcomb Boulevard between Wallace and Bear head Creeks. Lot 201 is estimated to be approximately 25 acres in size, and Lot 203 is approximately 46 total acres. The area between the storage lots and surrounding these lots is primarily wooded. However, random disposal areas in the woods have been documented.

These lots have a long history of various uses, including disposal and storage. The land surface is flat and unpaved, and surface soils have been moved about as a result of regrading and equipment movement. The site was and still is used to store hazardous materials. DDT is reported to have been disposed of at Lot 203 when it served as a waste disposal area in the 1940s. Transformers containing PCBs have also been stored at this site. No spills or leaks have been reported.

Site 9 - Firefighting Training Pit at Piney Green Road

This 2-acre site is located between Piney Green Road and Holcomb Boulevard, south of Bearhead Creek. This AOC has been used for firefighting training exercises from the 1960s to the present. Until 1981, the fire training activities were carried out in an unlined pit. Flammable liquids, including used oil, solvents, and contaminated fuels (nonleaded), were burned in the pit. An oil-water separator has been installed at the site as a means of pollution control.

Site 82 - Piney Green Road VOC Area

The Piney Green Road VOC Area is a forested area between Lot 203 and Wallace Creek and appears to have been used as a disposal area at some point in the past. It is estimated to be 30 acres. There is visual evidence of debris piles and small depressions as identified by ES&E in the Site Summary Report, June 1990. A ravine, which is filled with debris in various sections, bisects the site. This site is bounded on the north by Wallace Creek and to the south by

Storage Lot 203. The site is therefore a reasonable source of the observed VOCs in groundwater and Wallace Creek.

2.2.3 Operable Unit No. 3 (Site 48)

Operable Unit No. 3 is the Marine Corps Air Station (MCAS) Mercury Dump (Site 48). The MCAS New River Mercury Dump Site is located on Longstaff Road next to Building AS-804. The disposal area was utilized from 1956 to 1966 and covers a 100- to 200-foot wide corridor extending from the rear of Building AS-804 (former photo lab) to the edge of the New River. These dimensions correlate with an area of approximately 20,000 square feet. Metallic mercury was periodically drained from the delay lines of the radar units and disposed of at this AOC. Approximately 1 gallon per year of mercury was deposited over a 10-year period, amounting to more than 1,000 pounds total. The best information available indicates that the material was carried by hand and dumped or buried in small quantities at randomly selected spots. Building AS-804 is currently being used as an administrative office and classroom for nuclear, biological, and chemical warfare training.

2.2.4 Operable Unit No. 4 (Sites 41, 69, and 74)

Operable Unit No. 4 is comprised of Site 41 (Camp Geiger Dump Near Former Trailer Park), Site 69 (Rifle Range Chemical Dump) and Site 74 (Mess Hall Grease Pit Disposal Area). These sites are described below.

<u>Site 41 - Camp Geiger Dump near Former Trailer Park</u>

The Camp Geiger Dump is located south of the terminus of Robert L. Wilson Boulevard and south of the abandoned trailer park. The area lies between an unnamed creek and Tank Creek. This 30-acre disposal area was operated from 1946 to 1970, and was used as an open burn dump that received mixed industrial waste, commercial waste, construction debris, waste oils, solvents from the air station, garbage, trash, asphalt, concrete, old batteries, Mirex, and ordnance. The size estimate for Site 41 is based on map and photographic information. Field estimates have been made, but no field measurements were performed.

Based on interviews with MCAS New River and Camp Lejeune personnel, it is estimated that 10,000 to 15,000 gallons of waste oils and solvents were disposed of at this site. Most of these wastes were probably burned. The number of old lead-containing batteries disposed of is

assumed to be relatively small. Tons of Mirex in bags were disposed of in 1964. The disposed quantity of ordnance is estimated to include thousands of mortar shells. At least one case of grenades and one 105mm howitzer shell were also reported to have been disposed of within the filled area. In the mid-1960s over a 1- to 2-year period, at least two waste disposal incidents occurred during which two truckloads of drummed wastes were unloaded at the site. These wastes were described as being similar to those disposed of at the Rifle Range Chemical Dump (Site 69). (Pesticides, PCBs, solvents, and chemical agent training kits were reportedly disposed of at Site 69.) No other information concerning drum content is available. Based on an estimated fill depth of 5 feet, the total estimated volume of waste of the site is approximately 110,000 cubic yards.

Site 69 - Rifle Range Chemical Dump

The Rifle Range Chemical Dump is located approximately 9,000 feet east of the intersection of Range Road and Sneads Ferry Road, north of Everett Creek. The site is an estimated 6 acres in size. Available records indicate the site was active from the early 1950s until 1976. It is reported that the site was utilized as a disposal area for all chemical wastes generated on the base. The list of materials disposed of at the site include the following materials: pentachlorophenol, DDT, trichloroethylene, malathion, diazinon, lindane, gas cylinders, HTH, PCBs, drums that appeared to contain training agent consisting of chloroacetophenone (CN) gas, all other hazardous materials generated or used on the base, and chemical agent test kits for chemical warfare. The materials were disposed of in trenches or pits that were between 6 to 20 feet deep. At least 12 different disposal events have been documented.

Site 74 - Mess Hall Grease Disposal Area

The Mess Hall Grease Disposal Area is located in a wooded area approximately 1/2 mile east of Holcomb Boulevard in the northeast portion of Camp Lejeune. The Pest Control Area is located approximately 20 to 50 yards south of the grease pit and 75 yards east of Supply Well 654. The disposal area north of the dirt access road is approximately 3 acres in size. The grease pit measured 135 feet long, 30 feet wide, and 12 feet deep. The total size of the Pest Control Area has been estimated at 100 feet by 100 feet. Available information indicates the site was active from the early 1950s until 1960. Disposal activities at the site included the placement of mess hall grease and some waste food into a pit. Records indicate that there was at least one unsuccessful attempt to burn the grease using a more volatile substance. The material was washed out of the pit in 1954, when Hurricane Hazel passed through the area.

Use of the pit was discontinued at this time. No estimates regarding the quantity of grease disposed of at the site have been made.

Drums and pesticide-soaked bags were dumped near the grease pit. Detailed information regarding the contents of the drums is not available. Personnel involved with disposal of the drums were not informed of the drum's contents or origin. It is speculated that the drums may have contained pesticides and/or transformer oil containing PCBs. Best estimates indicate that approximately 500 gallons of pesticides were released from the deposition of the bags. Approximately 2,200 gallons of pesticides, contained in drums, were deposited at the site. It is estimated that 1,100 gallons of PCB-containing oil were buried at the site. One internal memorandum indicated that drums which were supposed to be taken to Site 69 were instead taken to Site 74. (Pesticides, PCBs, solvents, and chemical agent training kits were reportedly disposed of at Site 69.)

2.2.5 Operable Unit No. 5 (Site 2)

Operable Unit No. 5 consists of Site 2 (Former Nursery/Day Care Center). From 1945 to 1958 this building was used for the storing, handling, and dispensing of pesticides. The building at this location was later used as a children's day-care center. Chemicals known to have been used include chlordane, DDT, diazinon, and 2,4-D. Chemicals known to have been stored on site include dieldrin, lindane, malathion, silvex, and 2,4,5-TP. Areas of suspected contamination are the fenced playground, mixing pad, wash pad, and railroad drainage ditch. Contamination is believed to have occurred as a result of small spills, washout, and excess disposal. A preliminary soil sampling investigation conducted at this site in 1982 indicated the presence of DDE, DDD, DDT, and chlordane. Based on these results, the day-care activities were moved to another location. Building 712 is currently being used as a personnel office for non-appropriated funding personnel.

2.2.6 Operable Unit No. 6 (Sites 36, 43, 44, 54, and 86)

Site 36 (Camp Geiger Area Dump Near the Sewage Treatment Plant), Site 41 (Camp Geiger Dump Near Former Trailer Park), Site 43 (Agan Street Dump), Site 44 (Jones Street Dump), Site 54 (Crash Crew Fire Training Area), and Site 86 (Tank Area AS419-AS421) will be investigated as an Operable Unit. These sites are described below.

Site 36 - Camp Geiger Area Dump near Sewage Treatment Plant (STP)

The Camp Geiger Area Dump is located east of the Camp Geiger STP approximately 200 feet on the south side of Brinson Creek, downstream of Site 35. An unnamed ditch is located less than 100 feet southeast of the filled area. Site 36 was used for the disposal of municipal wastes and mixed industrial wastes including garbage, trash, waste oils, solvents, and hydraulic fluids from the air station from the late 1940s to the late 1950s. Most of the material was first burned and then buried. However, some unburned material was buried. According to interviews conducted during the IAS process, less than 5 percent of all hydrocarbons used at the air station were disposed of at the site. Using a 5 percent estimate for dumping over the 9 years of operation, approximately 25, 000 gallons of material could have been disposed of in the landfill areas. If it is assumed that this amount was split between this site and the trailer park dump (Site 41), 10,000 to 15,000 gallons of solvents and oils may have been placed into Site 36. The records state that all waste solvents and oils were burned after disposal at this site.

The site covers about 25,000 square feet and rises about 10 to 12 feet above grade. Based on an average depth of fill of 15 feet, the estimated volume of the disposal area is 14,000 cubic yards. These estimates are based on map and photographic information only. No field measurements have been performed for this purpose.

Site 43 - Agan Street Dump

Site 43 is located at the Marine Corps Air Station, New River portion of MCB Camp Lejeune. The site is located about one mile east of the main entrance to MCAS and one mile north of the runway. Site 43 is located off of Agan Street and adjacent to the site of a former sewage treatment plant. To the immediate north of the site is Edwards Creek. Strawhorn Creek, which discharges into Edwards Creek, borders the site to the east and south. Edwards Creek discharges into the New River approximately one-half mile north of the site.

The Agan Street Dump is approximately 20 acres in size. Boards, trash, fiberglass, and wastewater treatment plant sludge were disposed on the ground surface. The years of operation are unknown. However, the STP ceased operations in 1975. There is little evidence of the construction debris at the site. In addition, the area(s) where sludges were disposed of are not evident. Much of the area is heavily overgrown and wooded. Various dirt roads are present throughout the site area. The dirt roads are very narrow. It is unlikely that these

roads are utilized by military vehicles. It is more probably that the roads are used for biking or just walking.

During the site inspection (July-August 1991), much of the site experienced flooding due to several rainy periods. Marshes are present around most of the site.

Site 44 - Jones Street Dump

The Jones Street Dump (Site 44) is located at Marine Corps Air Station, New River. The site is situated adjacent to a base housing complex. The site is approximately five acres in size and is bordered to the north by Edwards Creek and to the south by Jones Street. Woods are present to the east and west.

The dump operated in the 1950s and received mainly debris, cloth, boards, and paint cans. It is reported that small quantities of hazardous materials may also have been disposed of on site (Water & Research, 1983). However, no other details are available with respect to the types or quantities of hazardous materials.

Site 54 - Crash Crew Fire Training Burn Pit

This 1.5-acre site within MCAS New River is located adjacent to the southwest end of Runway 5-23 near Building AS-3614. This AOC is believed to have been used in the mid-1950s for crash crew training and continues into the present. Contaminated fuels (principally JP-type and possibly leaded fuels) and waste fuels were used in the training exercises. Originally, the training was conducted on the ground surface with the area surrounded by a berm. Later, a burn pit was used which was lined in approximately 1975.

Site 86 - Tank Area AS419 - AS421 at Marine Corps Air Station

Site 86 is located at Marine Corps Air Station, New River, North Carolina, on the southwest corner of Foster Street and Campbell Street. Two hundred feet to the south is the Marine Corps Air Station fire station. The taxiway is located approximately 800 feet to the south of the site. Office buildings, aircraft hangers, machine shops and a commissary are located in close proximity to the site.

The site consists of an area which was once occupied by three aboveground storage tanks (AGSTs), each with a 25,000 gallon capacity. The tanks were surrounded by an earthen berm and a pump house. It has been reported that the tanks were used to store No. 6 fuel oil and waste oil. The tanks have been removed.

In November 1990, a soil and groundwater investigation of the area was completed. Total petroleum hydrocarbons (TPH) were detected in only one out of 22 surface soil samples above 10 ppm (124 ppm). The location and depth of soils containing TPH concentrations above the North Carolina action level of 10 ppm suggest the source to be from localized surficial spills. Although the soil only reflects minor problems associated with surficial product spills, groundwater was found to be contaminated with trichloroethene (TCE) above the MCL. For this reason, this site has been included with other CERCLA sites at MCB Camp Lejeune. The source of the TCE in groundwater is unknown.

2.2.7 Operable Unit No. 7 (Sites 1, 28, and 30)

Operable Unit No. 7 will consist of Site 1 (French Creek Disposal Area), Site 28 (Hadnot Point Burn Dump), and Site 30 (Sneads Ferry Road Fuel Tank Sludge Area). These sites are described below.

Site 1 - French Creek Liquids Disposal Area

This site is located on both the north and south sides of Main Service Road at the western edge of the Gun Park Area and Force Troops Complex. The total area for the site is approximately 7 to 8 acres. Site 1 has been used by many different Marine organizations since the 1940s. Liquid wastes from vehicle maintenance activities were poured on the ground as part of routine operations.

Batteries and used battery acid were also disposed of at this location. Suspected quantities of waste are estimated to be 5,000 to 20,000 gallons of waste petroleum, oil, and lubricants (POL) and 1,000 to 10,000 gallons of battery acid.

Site 28 - Hadnot Point Burn Dump

The Hadnot Point Burn Dump is located east of the Mainside Sewage Treatment Plant on both sides of Cogdels Creek. A variety of solid wastes, including mixed industrial waste, trash,

garbage, oil-based paint, and refuse, was burned and subsequently covered with dirt on this 23-acre disposal area, which was in operation form 1946 to 1971. Upon its closure in 1971, the surface was graded, and grass was planted. The volume of fill is estimated at 185,000 to 379,000 cubic yards. Since the waste was burned, no approximation of the remaining amount of specific substances can reasonably be made. The site is currently used as a recreational area, including a stocked fishing pond.

Site 30 - Sneads Ferry Road Fuel Tank Sludge Area

The Sneads Ferry Road Fuel Tank Sludge Area is located along a tank trail that intersects Sneads Ferry Road from the west, about 6,000 feet south of the intersection with Marines Road. The site is located approximately 1,500 feet east of French Creek. In 1970, sludge from fuel storage tanks storing leaded gasoline (containing tetraethyl lead and related compounds) and tank washout waters were disposed of at the site by a private contractor. It is estimated that, at a minimum, 600 gallons of sludge or tank bottom deposits were dumped at the site. Two 12,000-gallon tanks were pumped out while the type of fuel stored was changed. The 600-gallon estimate is based on tank capacity below the tank outflow ports. Additional washout water may also have been present. Additional information suggests that the site had also been used for similar wastes from other tanks. Composition of the sludge and/or washout is unknown and may vary from containing substantial amounts of tetraethyl lead to containing mostly cleaning compounds.

2.2.8 Operable Unit No. 8 (Site 16)

Operable Unit No. 8 is the Montford Point Burn Dump (Site 16). Site 16 was opened about 1958 and was closed in 1972, although unauthorized dumping subsequently occurred. The site contains building debris, garbage, tires, and waste oils. The quantity of these wastes is not known, but only a small amount of oil disposal is suspected. Materials reportedly have been dumped on the surface and included asbestos insulation material for pipes. The asbestos on the surface has been removed from this 4-acre site.

2.2.9 Operable Unit No. 9 (Sites 65 and 73)

Operable Unit No. 9 consists of Site 65 (Engineer Area Dump) and Site 73 (Courthouse Bay Liquids Disposal Area). These sites are described below.

Site 65 - Engineer Area Dump

Site 65 is located in the Courthouse Bay area of MCB Camp Lejeune. The Courthouse Bay area ranges in elevation from about 45 feet to sea level. The terrain at Site 65 is relatively flat with an average elevation of 40 feet within the site area. Site 65 is a local high elevation area.

The Engineer Area Dump is approximately four to five acres in size. Two separate disposal areas have been reported: a battery acid disposal area and a liquids disposal area. The types of liquids which have been disposed are to be petroleum, oil, and lubricant products. In addition, the dump was used to burn construction debris. The dump was in operation from before 1958 until 1972.

There are two small ponds at the southeast part of Site 65. The area surrounding the ponds is marshy and wetland-like. The two ponds appear to be joined together during periods of high precipitation. A small intermittent stream runs from the southwest into the west pond. The ponds do not appear to drain to a specific location. Stormwater runoff from Site 65 and the surrounding areas eventually drains into Courthouse Bay.

The Site 65 area is no longer used for dumping. The area is currently heavily wooded with a marshy area existing around the two previously mentioned ponds. A large open area consisting of dirt is used for military training exercises. Heavy equipment operators use the area to train on their earthmoving machinery. The roads surrounding Site 65 are not paved.

There are no buildings or facilities existing on Site 65. The nearest facilities are Buildings BB-201, BB-239, and BB-237 located on an access road off of Poe Road. These facilities are used to store and transfer waste oil, diesel fuel, kerosene, and product POL. A generator building also exists to the northwest of the site.

Site 73 - Courthouse Bay Liquids Disposal Area

The Courthouse Bay Liquids Disposal Area is located on both sides of Courthouse Road approximately 200 feet northwest of Courthouse Bay. This AOC was used from 1946 until 1977. Available information indicates that disposal activities occurred within a 13-acre area. An estimated 400,000 gallons of waste oil were disposed of in this area. The waste oil was generated during routine vehicle maintenance. The oil drained directly on the ground surface. In addition, approximately 20,000 gallons of waste battery acid were reportedly disposed of in this area. Waste battery acid was poured into shallow hand-shoveled holes that were backfilled after disposal.

2.2.10 Operable Unit No. 10 (Site 35)

Camp Geiger Area Fuel Farm (Site 35) is located north of the intersection of G and Fourth Streets, approximately 400 feet southwest of Brinson Creek. This 2,500-square-foot site was used in 1957 and 1958 for storing and pumping fuel. Gas was released to the soil through a leak in an underground line near an aboveground storage tank and tank pad. The Camp Lejeune Fire Department has estimated the amount of fuel released to be in the thousands of gallons. Exact quantities released cannot be determined because the records were destroyed. The spill migrated east and northeast toward and into Brinson Creek. Fuel at the surface of the shallow aquifer was disposed of by digging holes to the water table and igniting the fuel. Fuel which contaminated Brinson Creek was also ignited and burned.

Little information is available with respect to another spill in 1990. Although a spill was reported at the site, the cause of the spill was not documented.

2.2.11 Operable Unit No. 11 (Sites 7 and 80)

Operable Unit No. 11 consists of Site 7 (Tarawa Terrace Dump) and Site 80 (Paradise Point). These sites are described below.

Site 7 - Tarawa Terrace Dump

Tarawa Terrace Dump is a landfill located east of the sewage treatment plant between Tarawa Boulevard and Northeast Creek. Its size is estimated at 5 acres. The landfill was closed in 1972, but the years of operation are not known. As far as is known, no hazardous materials

were disposed of in this facility. Only construction debris, spiractor (water treatment plant filter media), and household trash are known to have been disposed.

Site 80 - Paradise Point Golf Course

The study area of this site consists of a 1-acre area at the back of the machine shop and the truck wash area at the Paradise Point Golf Course. The site contains an area of bare, hummocky soil, with a large soil mound. There are areas of dead and/or dying vegetation in the vicinity of the soil mound. In addition, there are unvegetated areas where soils have been disturbed. A drainage ditch runs from the truck wash area around the back of the machine shop.

In addition to the machine shop, which is a potential source of waste oils, the routine application of pesticides and herbicides on the golf course and the potential inadvertent disposal of excess pesticides and herbicides behind the machine shop may also have contributed to potential contamination in this area. The truck wash area consists of a concrete pad and sumps that collect washwater from the sprayers, but prior to the construction of this pad, the disposition of washwater may have been completely uncontrolled. The presence of dead vegetation indicates that, at a minimum, waste herbicides may have been disposed of behind the machine shop. There is no indication that other chemicals have been used or disposed of in this area.

2.2.12 Operable Unit No. 12 (Site 3)

Operable Unit No. 12 consists only of Site 3 (Old Creosote Plant). The old creosote plant operated from 1951 to 1952 to supply treated lumber during construction of the railroad on the base. The facility was located approximately 800 feet east of Building 613, on the opposite side of Holcomb Boulevard. Logs were cut into railroad ties at the on-site sawmill, then pressure treated with hot creosote stored in a railroad tank car. There is no indication of creosote disposal on site, and records show that creosote remaining in the pressure chamber at the end of a treatment cycle was stored for future use. Upon completion of the railroad, the plant and mill were dismantled and sold. The only site features remaining are concrete pads and the boiler chimney.

2.2.13 Operable Unit No. 13 (Site 63)

The Verona Loop Dump (Site 63) is located along Verona Loop Road, approximately one and one-half mile east of Highway 17. The site is located south of Marine Corps Air Station, New River.

The Verona Loop Dump is approximately three to four acres in size. The site is primarily wooded except for the haul roads formerly used to take debris to the dump. The site is bordered by Verona Loop Road to the south, an intermittent stream to the east, and woods to the north and south. The site is situated in a relatively flat area with an elevation of approximately 45 to 50 feet above mean sea level (msl). The area surrounding the disposal area, however, is hilly for the Camp Lejeune area. The site area slopes downward (i.e., west to east) toward an intermittent stream, which is at an elevation of about 20 feet msl. The area north of the site gradually increases in elevation.

Site 63 is no longer used for disposal. The area is heavily wooded. Approximately one mile north of the site is the advanced infantry training school. Ammo supply magazines are located approximately one-half mile east of the site. The only use of the land is for recreational hunting and training. In the vicinity of Site 63, infantry training is periodically conducted. Although hunting is permitted, a permit/pass must be obtained.

3.0 OPERABLE UNIT SCOPE OF WORK

The purpose of this section is to summarize completed, ongoing, and planned IRP activities at each Operable Unit.

Operable Unit No. 1 (Sites 21, 24, and 78)

During Fiscal Year 1992, an interim remedial action Record of Decision (ROD) was signed for the remediation of the shallow aquifer at Site 78 (HPIA). Remedial design activities were subsequently initiated in Fiscal Year 1992 (August 1992). The design of the interim remedial action was completed in August 1993. Remedial action startup is planned for the beginning of Fiscal Year 1994.

Also during Fiscal Year 1993, RI/FS Project Plans for Operable Unit No. 1 were initiated and completed. The RI/FS field investigations commenced in April, 1993. The RI/FS is scheduled to be completed in Fiscal Year 1994. A Final Record of Decision is scheduled to be signed before the end of Fiscal Year 1994. Remedial design activities are anticipated to begin in August of 1994. The remedial design will likely be completed in early Fiscal Year 1996 and remedial action initiated.

Operable Unit No. 2 (Sites 6, 9, and 82)

The RI/FS at Operable Unit No. 2 was initiated in Fiscal Year 1992 (July 1992) and completed in September 1993 with the signing of a Final Record of Decision. Remedial design activities associated with the ROD will be initiated on or before December 1, 1993. The remedial design is scheduled to be completed in February 1995. Remedial action for the final alternative is planned to begin in May 1995.

A Time-Critical Removal Action was initiated (i.e., preparation of specifications) in Fiscal Year 1993. The removal action will address surficial drums,stained soils (beneath the drums), and buried drums at two areas within the operable unit. The removal action will be initiated in the first quarter of Fiscal Year 1994.

Operable Unit No. 3 (Site 48)

A "no action" Record of Decision for Site 48 was signed in September 1993. There are no other IR activities associated with this site. Site 48 will be delisted from the IR program.

Operable Unit No. 4 (Sites 41, 69, and 74)

During Fiscal Year 1993, Sites 41 and 74 were combined with Site 69 to form Operable Unit No. 4. Previously, Sites 41 and 74 were part of Operable Unit No. 5. Both sites were combined with Site 69 since chemical agents may be present at both of these sites. All sites potentially involving chemical agents will be investigated together.

RI/FS Project Plans for Operable Unit No. 4 were initiated in April 1993. These plans are anticipated to be finalized in Fiscal Year 1994 (November 1993). The RI/FS is anticipated to begin in November 1993 (Fiscal Year 1994). The RI/FS is anticipated for completion in May 1995. Remedial design activities are scheduled to begin in May 1995.

Operable Unit No. 5 (Site 2)

RI/FS Project Plans for Site 2 were initiated in June 1992 and completed in March 1993. The RI/FS was initiated in April 1993. The RI/FS is scheduled to be completed in August 1994. Subsequent remedial design activities, if required, are planned to be initiated in Fiscal Year 1994.

A Time-Critical Removal Action will be initiated in Fiscal Year 1994. The removal action will address pesticide-contaminated soil and concrete at the former mixing area.

Operable Unit No. 6 (Sites 36, 43, 44, 54, and 86)

RI/FS Project Plans for Operable Unit No. 6 will be initiated in March 1994 and are scheduled to be completed in December 1994. Subsequent RI/FS activities will be determined following the completion of RI/FS Project Plans.

Operable Unit No. 7 (Sites 1, 28, and 30)

RI/FS Project Plans for Operable Unit No. 7 were initiated in March 1993. These plans are scheduled to be finalized in December 1993. The RI/FS phase is scheduled to begin in December 1993 and is anticipated to be completed in May 1995.

Operable Unit No. 8 (Site 16)

The RI/FS activities at Site 16 will begin in November 1993 with the preparation of RI/FS Project Plans. The RI/FS phase at Site 16 is scheduled to begin in September 1994 and will continue into Fiscal Year 1996.

Operable Unit No. 9 (Sites 65 and 73)

RI/FS Project Plans for Operable Unit No. 9 are scheduled to be initiated in April 1994 and completed in January 1995. The RI/FS schedule will be determined following the completion of RI/FS Project Plans.

Operable Unit No. 10 (Site 35)

RI/FS Project Plans for Site 35 were initiated in May 1993 and are scheduled to be finalized in February 1994. The RI/FS phase will begin in March 1994 and continue through May 1995. Remedial design activities will begin in May 1995.

An Interim Remedial Action (IRA) RI/FS was initiated in June 1993 to address petroleum-contaminated soils. The IRA RI/FS is scheduled to be completed in September 1994. The design phase is scheduled to begin in September 1994.

Operable Unit No. 11 (Sites 7 and 80)

RI/FS Project Plans will be prepared during Fiscal Year 1994. The initiation of RI/FS field work is scheduled for September 1994.

Operable Unit No. 12 (Site 3)

RI/FS Project Plans will be prepared during Fiscal Year 1994. The RI/FS field activities are scheduled to begin in September 1994.

Operable Unit No. 13 (Site 63)

No IR activities are planned for Fiscal Year 1994 at this operable unit. RI/FS Project Plans will be prepared at the beginning of Fiscal Year 1995.

Summary

Various IRP activities were either initiated or completed in Fiscal Year 1993 at 8 of the 13 operable units at MCB Camp Lejeune. IRP activities will continue at all eight of these Operable Units through Fiscal Year 1994. IRP activities at Operable Units 6, 9, 11, and 12 will begin in Fiscal Year 1994. IRP activities at Operable Unit 13 will be initiated in Fiscal Year 1995. Table 3-1 summarizes the ongoing and planned activities associated with Operable Units 1 through 13 for Fiscal years 1993 through 1998.

TABLE 3-1

ACTIVE OPERABLE UNIT IRP ACTIVITIES

Operable Unit	Site No.	Activity	Scheduled Start Up	Actual Start Up	Scheduled Completion	Actual Completion
1	78	Interim Remedial Action RI/FS, PRAP and ROD	FY 91	FY 91	FY 92	FY 92
		Interim Remedial Action Design	FY 92	FY 92	FY 94	FY 93
		Interim Remedial Action	FY 94	--	FY 94	--
1	21, 24 and 78	RI/FS Project Plans	FY 92	FY 92	FY 93	FY 93
		RI/FS, PRAP and ROD	FY 93	FY 93	FY 94	--
		Remedial Design/Remedial Action (1)	FY 94	--	FY 96	--
2	6, 9, and 82	RI/FS Project Plans	FY 91	FY 91	FY 92	FY 92
		RI/FS, PRAP and ROD	FY 92	FY 92	FY 94	FY 93
		Remedial Design/Remedial Action (1)	FY 94	--	FY 95	--
		Time-Critical Removal Action	FY 93	FY 93	FY 94	--
3	48	RI/FS Project Plans	FY 91	FY 91	FY 92	FY 92
		RI/FS, PRAP and ROD (2)	FY 92	FY 92	FY 94	FY 93
4 (3)	41, 69, and 74	RI/FS Project Plans	FY 93	FY 93	FY 94	--
		RI/FS, PRAP and ROD	FY 94	--	FY 95	--
		Remedial Design/Remedial Action (1)	FY 95	--	FY 96	--
5	2	RI/FS Project Plans	FY 92	FY 92	FY 93	FY 93
		RI/FS, PRAP and ROD	FY 93	FY 93	FY 94	--
		Remedial Design/Remedial Action (1)	FY 94	--	FY 96	--
		Time-Critical Removal Action	FY 94	--	FY 94	--

(1) Remedial construction activities must commence within 15 months following the Record of Decision.
(2) No action ROD.
(3) Amended schedule from FY 1993 Site Management Plan.

TABLE 3-1 (Continued)

ACTIVE OPERABLE UNIT IRP ACTIVITIES

Operable Unit	Site No.	Activity	Scheduled Start Up	Actual Start Up	Scheduled Completion	Actual Completion
6	36, 43, 44, 54, and 86	RI/FS Project Plans RI/FS, PRAP and ROD Remedial Design/Remedial Action (1)	FY 94 FY 95 FY 96	-- -- --	FY 95 FY 96 FY 97	-- -- --
7	1, 28 and 30	RI/FS Project Plans RI/FS, PRAP and ROD Remedial Design/Remedial Action (1)	FY 93 FY 94 FY 95	FY 93 -- --	FY 94 FY 95 FY 96	-- -- --
8 (3)	16	RI/FS Project Plans RI/FS, PRAP and ROD Remedial Design/Remedial Action (1)	FY 94 FY 94 FY 96	-- -- --	FY 94 FY 96 FY 97	-- -- --
9	65 and 73	RI/FS Project Plans RI/FS, PRAP and ROD Remedial Design/Remedial Action (1)	FY 94 FY 95 FY 96	-- -- --	FY 95 FY 96 FY 97	-- -- --
10 (3)	35	RI/FS Project Plans RI/FS, PRAP, and ROD Remedial Design/Remedial Action(1) Interim Remedial Action (Soil) RI/FS, PRAP, and ROD Interim Remedial Action Design (Soil) Interim Remedial Action (Soil)	FY 93 FY 94 FY 95 FY 93 FY 94 FY 95	FY 93 -- -- FY 93 -- --	FY 94 FY 95 FY 96 FY 94 FY 94 FY 96	-- -- -- -- -- --
11	7 and 80	RI/FS Project Plans RI/FS, PRAP and ROD Remedial Design/Remedial Action (1)	FY 94 FY 94	--	FY 94	--
12	3	RI/FS Project Plans RI/FS, PRAP and ROD Remedial Design/Remedial Action (1)	FY 94 FY 95 FY 94	-- --	FY 94	--

(1) Remedial construction activities must commence within 15 months following the Record of Decision.
(2) No action ROD.
(3) Amended schedule from FY 1993 Site Management Plan.

4.0 SITE MANAGEMENT SCHEDULES

The purpose of this section is to present project schedules for each of the 13 Operable Units for Fiscal Years 1994 through 1998. These schedules are adjusted annually in the Site Management Plan.

Operable Units and sites that will be active during Fiscal Year 1994 are summarized below.

Operable Unit	Site	Fiscal Year 1994 Activities
1	78	Interim Remedial Action of the Shallow Aquifer
1	21, 24 and 78	Complete RI/FS and sign ROD; begin RD
2	6, 9 and 82	Begin RD
3	48	No Action (Delisted)
4	41, 69, and 74	Complete RI/FS Project Plans; initiate RI/FS
5	2	Complete RI/FS, sign ROD, and initiate RD
6	36, 43, 44, 54, and 86	Initiate RI/FS Project Plans
7	1, 28, and 30	Complete RI/FS Project Plans and initiate RI/FS
8	16	Initiate and complete RI/FS Project Plans; initiate RI/FS
9	65 and 73	Initiate RI/FS Project Plans
10	35	Complete RI/FS Project Plans; initiate RI/FS; initiate IRA RI/FS for soil; sign IRA ROD; begin IRA design
11	7 and 80	Initiate and complete RI/FS Project Plans; initiate RI/FS
12	3	Initiate and complete RI/FS Project Plans; initiate RI/FS
13	63	No activities planned until Fiscal Year 95

The project schedules for these Operable Units are depicted on Tables 4-1 through 4-13. The project schedules include: a detailed listing of Fiscal Year 1994 activities for each Operable Unit; the duration (in calendar days) of each IRP activity; the deliverables (e.g., RI/FS Project Plans, RA Work Plans, etc.); and submittal dates. In addition, the project schedules include all activities through completion of the Remedial Design (RD) and startup of the Remedial

Table 4 - 1: Site Management Schedule
Sites 21, 24, and 78 (Operable Unit No. 1), MCB Camp Lejeune, NC

Activity	Days	Start	Finish
Project Management	490ed	4/15/93	8/18/94
Subcontractor Procurement	30ed	4/16/93	5/16/93
Field Investigation	90ed	4/16/93	7/15/93
Mobilization	30ed	4/16/93	5/16/93
Surveying (Pre-Inv.)	5ed	5/10/93	5/15/93
Soil Gas Investigation	7ed	5/10/93	5/17/93
Soil Investigation	30ed	5/17/93	6/16/93
Groundwater Investigation	24ed	6/21/93	7/15/93
SW/SD Investigation	3ed	6/9/93	6/12/93
Surveying (Post-Inv.)	10ed	6/21/93	7/1/93
Sample Analysis/Validation	127ed	5/17/93	9/21/93
Data Evaluation	21ed	9/21/93	10/12/93
Risk Assessment	42ed	10/12/93	11/23/93
RI Report	258ed	10/12/93	6/27/94
Preliminary Draft RI Report	42ed	10/12/93	11/23/93
Comment Period	28ed	11/23/93	12/21/93
Draft RI	28ed	12/21/93	1/18/94
Comment Period	60ed	1/18/94	3/19/94
Draft Final RI Report	42ed	3/19/94	4/30/94
Comment Period	30ed	4/30/94	5/30/94
Final RI	28ed	5/30/94	6/27/94

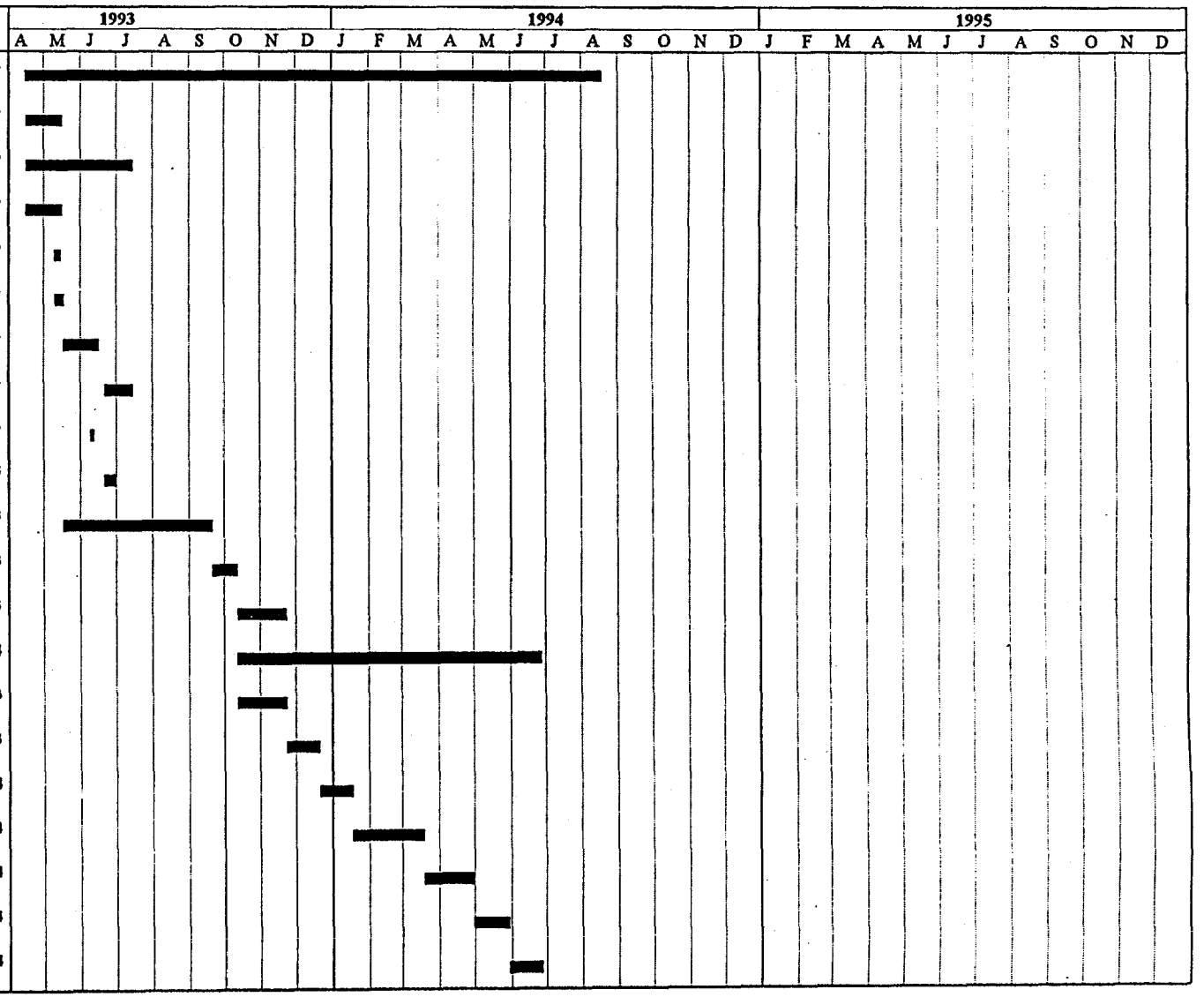
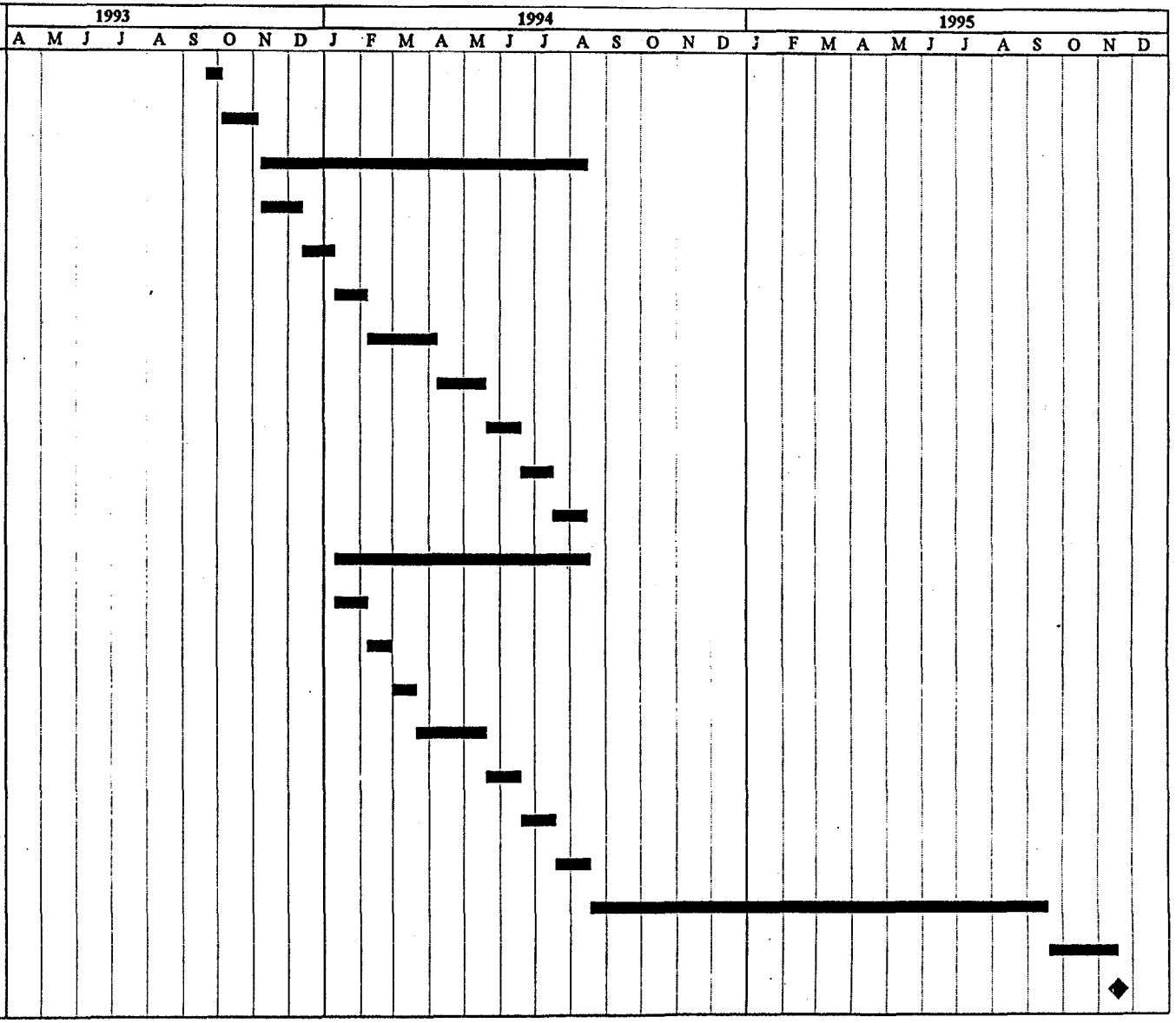


Table 4 - 1: Site Management Schedule

Sites 21, 24, and 78 (Operable Unit No. 1), MCB Camp Lejeune, NC

Activity	Days	Start	Finish
Alternative Screening	14ed	9/21/93	10/5/93
Alternative Evaluation	31ed	10/5/93	11/5/93
FS Report /PRAP	281ed	11/8/93	8/16/94
Preliminary Draft FS/PRAP	35ed	11/8/93	12/13/93
Comment Period	28ed	12/13/93	1/10/94
Draft FS/PRAP	28ed	1/10/94	2/7/94
Comment Period	60ed	2/7/94	4/8/94
Draft Final FS/PRAP	42ed	4/8/94	5/20/94
Comment Period	30ed	5/20/94	6/19/94
Final FS/PRAP	28ed	6/19/94	7/17/94
Public Comment Period	30ed	7/17/94	8/16/94
ROD	220ed	1/10/94	8/18/94
Preliminary Draft ROD	28ed	1/10/94	2/7/94
Comment Period	21ed	2/7/94	2/28/94
Draft ROD	21ed	2/28/94	3/21/94
Comment Period	60ed	3/21/94	5/20/94
Draft Final ROD	30ed	5/20/94	6/19/94
Comment Period	30ed	6/19/94	7/19/94
Final ROD	30ed	7/19/94	8/18/94
Remedial Design (1,2)	397ed	8/18/94	9/19/95
Procure RA Contractor (1,2)	60ed	9/19/95	11/18/95
Remedial Action (1,2)	0ed	11/18/95	11/18/95



(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(c)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 4 - 2: Site Management Schedule

Sites 6 , 9 and 82 (Operable Unit No. 2), MCB Camp Lejeune, NC

Task	Days	Start	Finish
Prepare Draft RD Work Plan	35ed	12/1/93	1/5/94
Submit Draft RD Work Plan to Agencies	0ed	1/5/94	1/5/94
Agency Review	60ed	1/5/94	3/6/94
Prepare Draft Final RD Work Plan	60ed	3/6/94	5/5/94
Submit Draft Final RD Work Plan	0ed	5/5/94	5/5/94
Agency Review	30ed	5/5/94	6/4/94
Prepare Final RD Work Plan	30ed	6/4/94	7/4/94
Submit Final RD Work Plan	0ed	7/4/94	7/4/94
Conduct Treatability Study	42ed	7/4/94	8/15/94
Prepare 30 % Design / Draft Design Report / Draft RA	63ed	7/4/94	9/5/94
Submit 30 % Design / Draft Design Report / Draft RA	0ed	9/5/94	9/5/94
Agency Review	53ed	9/5/94	10/28/94
Prepare 90 % Design / Draft Final Design Report	60ed	10/28/94	12/27/94
Submit 90 % Design / Draft Final Design Report	0ed	12/27/94	12/27/94
Agency Review	30ed	12/27/94	1/26/95
Prepare Final Design / Final Design Report / Final RA Work	30ed	1/26/95	2/25/95
Submit Final Design / Final Design Report / Final RA Work	0ed	2/25/95	2/25/95
Procure Remediation Contractor	70ed	2/25/95	5/6/95
Begin Construction (Mobilization)	0ed	5/6/95	5/6/95

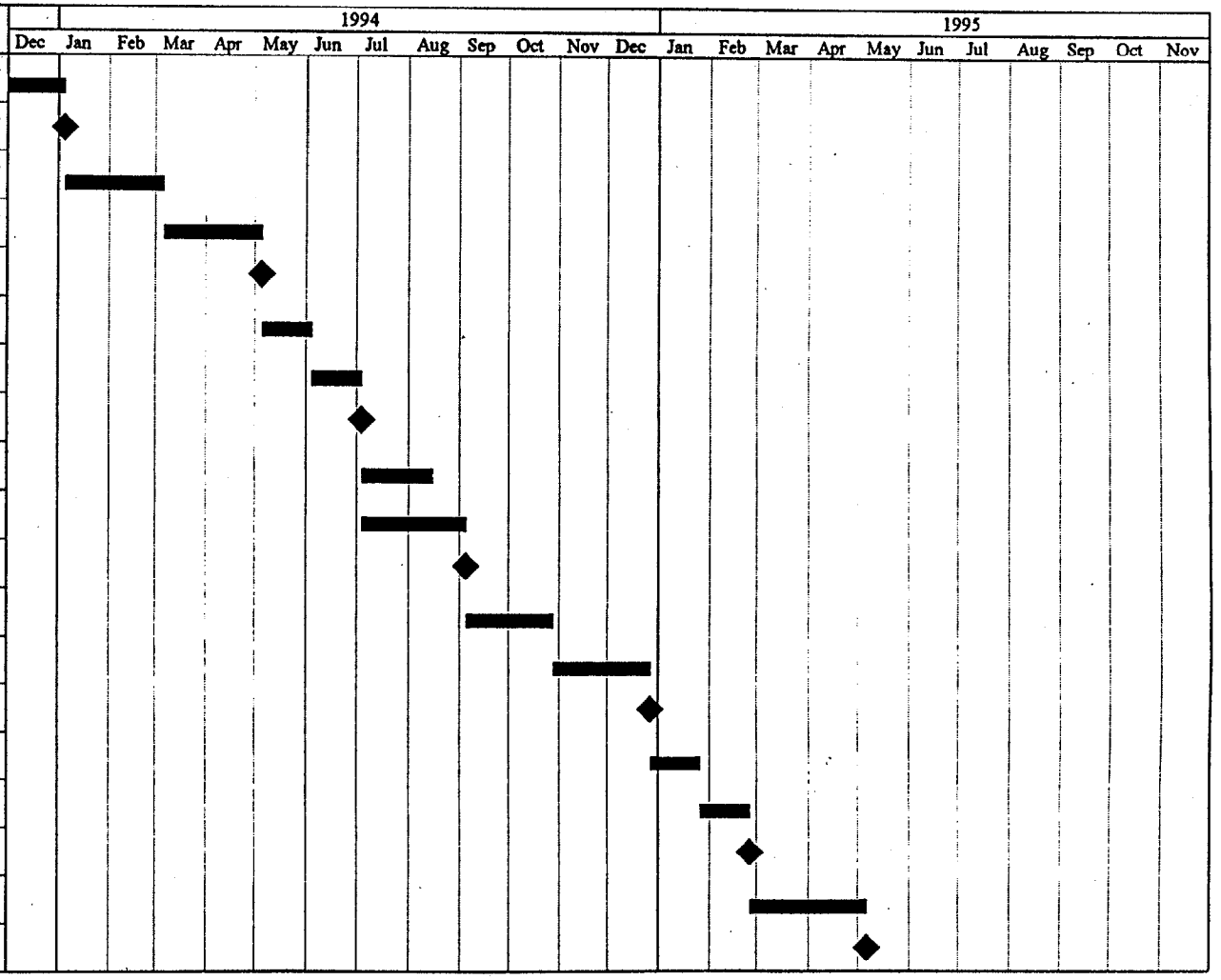


Table 4 - 3: Site Management Schedule

Sites 41, 69 and 74 (Operable Unit No. 4), MCB Camp Lejeune, NC

Task	Days	Start	Finish
Submit Draft Final RI/FS Project Plans	0ed	10/8/93	10/8/93
Agency Review	30ed	10/8/93	11/7/93
Prepare Final RI/FS Project Plans	21ed	11/7/93	11/28/93
Submit Final RI/FS Project Plan	0ed	11/28/93	11/28/93
RI Field Investigation	442ed	11/28/93	2/13/95
Mobilization	30ed	11/28/93	12/28/93
Field Investigation	60ed	12/28/93	2/26/94
Data Analysis/Validation	116ed	12/28/93	4/23/94
Data Evaluation	42ed	4/23/94	6/4/94
RI / RA	28ed	6/4/94	7/2/94
Prepare Preliminary Draft RI	42ed	6/4/94	7/16/94
Submit Preliminary Draft RI	0ed	7/16/94	7/16/94
LANTDIV Review	30ed	7/16/94	8/15/94
Prepare Draft RI	30ed	8/15/94	9/14/94
Submit Draft RI	0ed	9/14/94	9/14/94
Agency Review	60ed	9/14/94	11/13/94
Prepare Draft Final RI	60ed	11/13/94	1/12/95
Submit Draft Final RI	0ed	1/12/95	1/12/95
Agency Review	30ed	1/12/95	2/11/95
Prepare Final RI	30ed	2/11/95	3/13/95
Submit Final RI	0ed	3/13/95	3/13/95
Prepare Preliminary Draft FS	42ed	7/4/94	8/15/94
Submit Preliminary Draft FS	0ed	8/15/94	8/15/94
LANTDIV Review	28ed	8/15/94	9/12/94

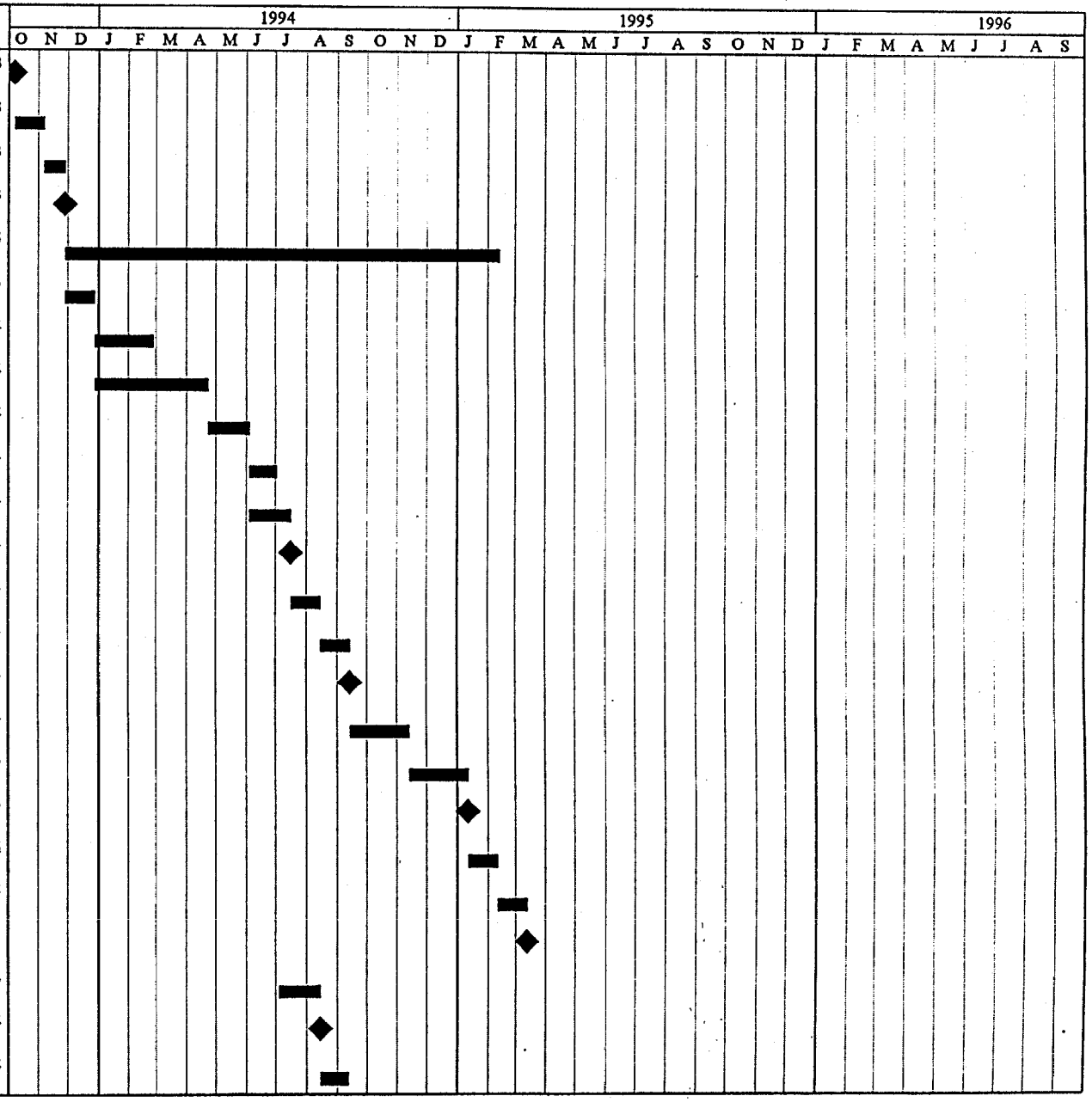
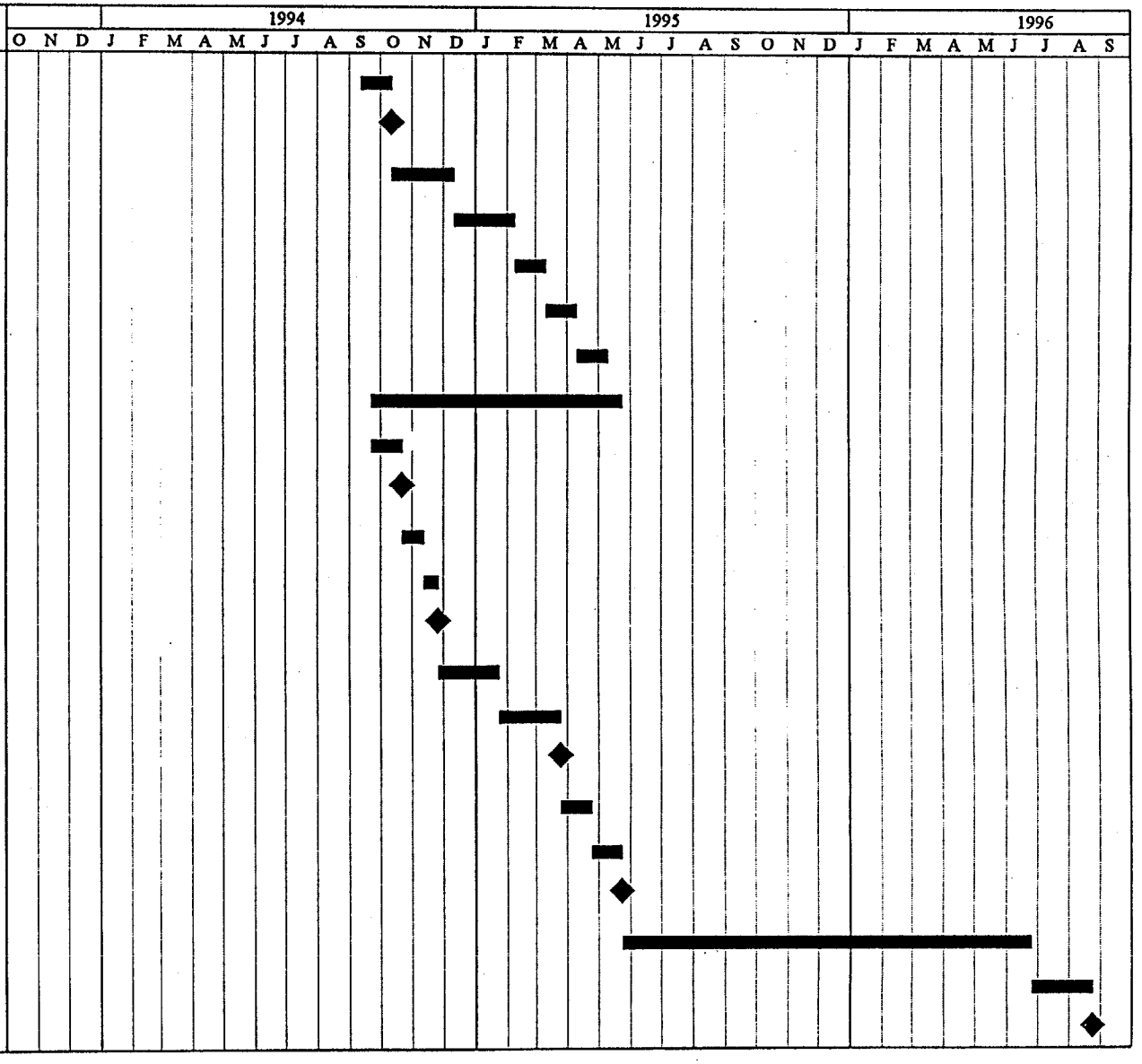


Table 4 - 3: Site Management Schedule

Sites 41, 69 and 74 (Operable Unit No. 4), MCB Camp Lejeune, NC

Task	Days	Start	Finish
Prepare Draft FS /PRAP	30ed	9/12/94	10/12/94
Submit Draft FS/PRAP	0ed	10/12/94	10/12/94
Agency Review	60ed	10/12/94	12/11/94
Prepare Draft Final FS/PRAP	60ed	12/11/94	2/9/95
Agency Review	30ed	2/9/95	3/11/95
Prepare Final FS/PRAP	30ed	3/11/95	4/10/95
Public Comment Period	30ed	4/10/95	5/10/95
ROD	244ed	9/22/94	5/24/95
Prepare Preliminary Draft ROD	30ed	9/22/94	10/22/94
Submit Preliminary Draft ROD	0ed	10/22/94	10/22/94
LANTDIV Review	21ed	10/22/94	11/12/94
Prepare Draft ROD	14ed	11/12/94	11/26/94
Submit Draft ROD	0ed	11/26/94	11/26/94
Agency Review	59ed	11/26/94	1/24/95
Prepare Draft Final ROD	60ed	1/24/95	3/25/95
Submit Draft Final ROD	0ed	3/25/95	3/25/95
Agency Review	30ed	3/25/95	4/24/95
Prepare Final ROD	30ed	4/24/95	5/24/95
Submit Final ROD	0ed	5/24/95	5/24/95
Remedial Design (1,2)	398ed	5/24/95	6/25/96
Procure RA Contractor (1,2)	60ed	6/25/96	8/24/96
Remedial Action (1,2)	0ed	8/24/96	8/24/96



(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(e)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS

Table 4 - 4: Site Management Schedule

Site 2 (Operable Unit No. 5), MCB Camp Lejeune, NC

Activity	Days	Start	Finish
Project Management	283d	4/15/93	5/16/94
Subcontractor Procurement	30ed	4/16/93	5/16/93
Field Investigation	41d	4/16/93	6/12/93
Mobilization	30ed	4/16/93	5/16/93
Surveying (Pre-Inv.)	5ed	5/10/93	5/15/93
Soil Investigation	24ed	5/17/93	6/10/93
Groundwater Investigation	5ed	5/28/93	6/2/93
SW/SD Investigation	2ed	5/24/93	5/26/93
Surveying (Post-Inv.)	2ed	6/1/93	6/3/93
Aquifer Tests	5ed	6/7/93	6/12/93
Sample Analysis/Validation	93ed	5/17/93	8/18/93
Data Evaluation	21ed	8/18/93	9/8/93
Risk Assessment	42ed	9/8/93	10/20/93
Treatability Studies	63ed	8/18/93	10/20/93
RI Report	198d	9/8/93	6/13/94
Preliminary Draft RI	49ed	9/8/93	10/27/93
Comment Period	28ed	10/27/93	11/24/93
Draft RI Report	28ed	11/24/93	12/22/93
Comment Period	60ed	12/22/93	2/20/94
Draft Final RI	53ed	2/20/94	4/14/94
Comment Period	30ed	4/14/94	5/14/94
Final RI Report	30ed	5/14/94	6/13/94

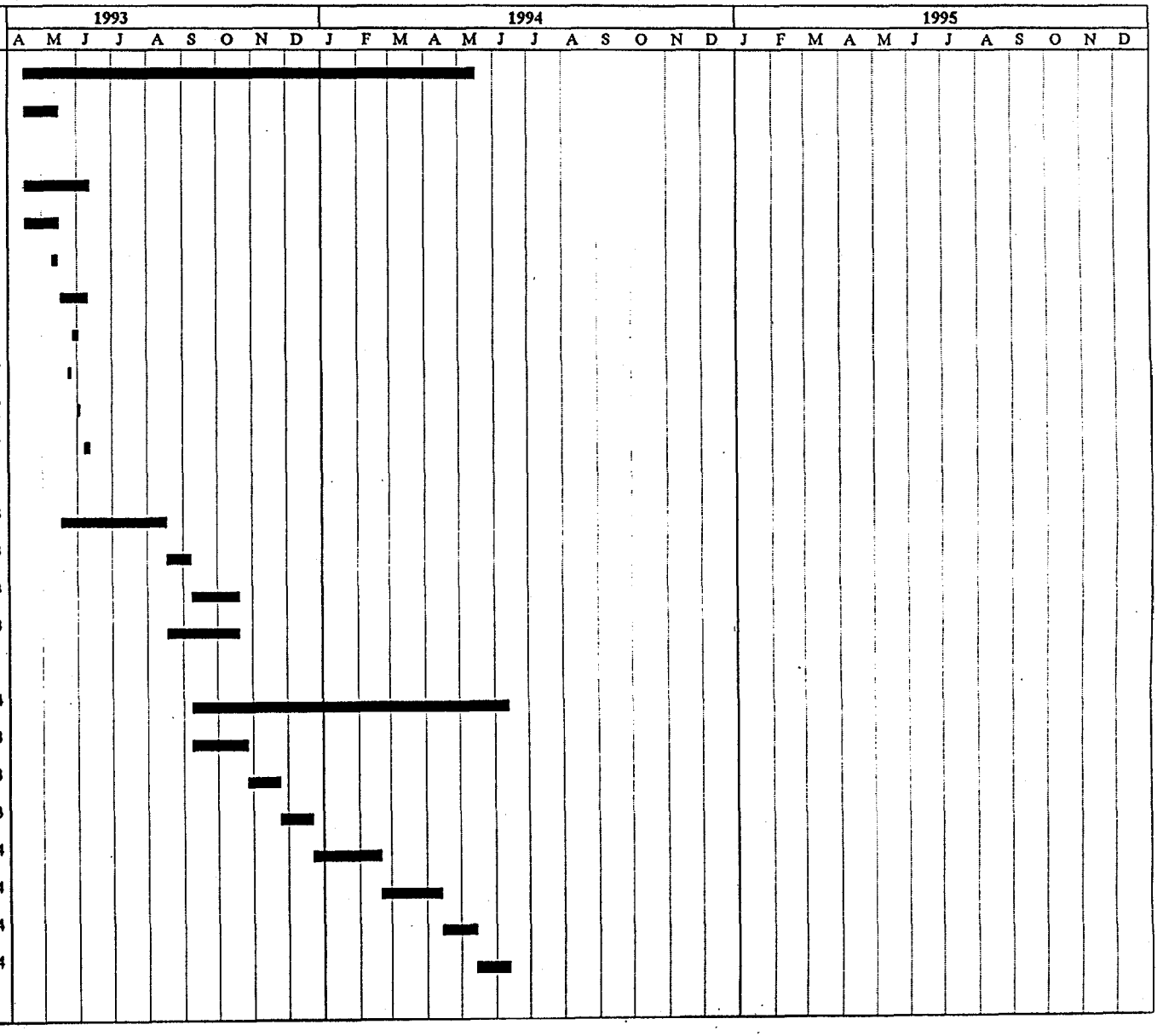
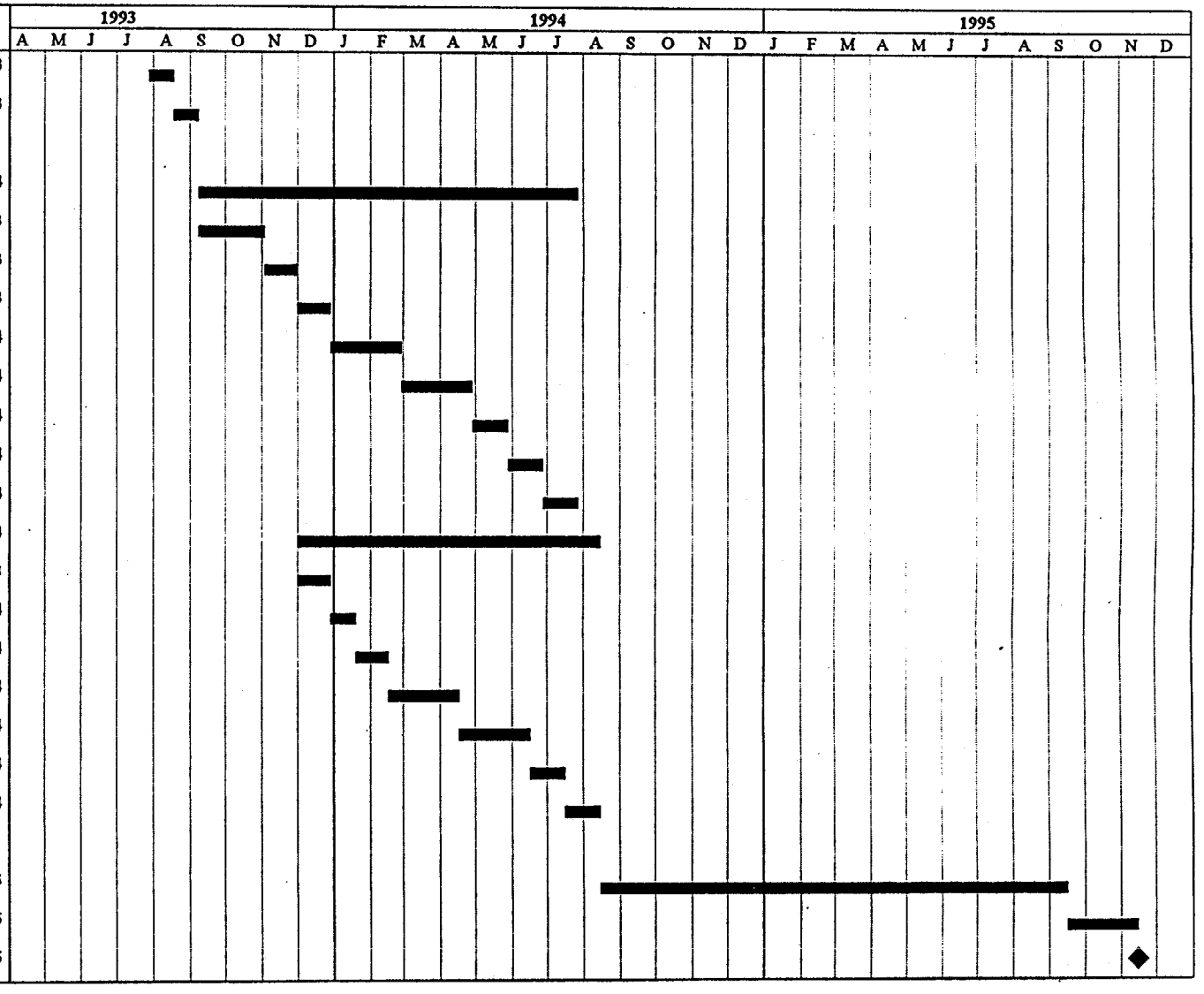


Table 4 - 4: Site Management Schedule
Site 2 (Operable Unit No. 5), MCB Camp Lejeune, NC

Activity	Days	Start	Finish
Alternative Screening	21ed	7/28/93	8/18/93
Alternative Evaluation	21ed	8/18/93	9/8/93
FS Report	230d	9/8/93	7/27/94
Preliminary Draft FS	56ed	9/8/93	11/3/93
Comment Period	28ed	11/3/93	12/1/93
Draft FS/PRAP	28ed	12/1/93	12/29/93
Comment Period	60ed	12/29/93	2/27/94
Draft Final FS/PRAP	60ed	2/27/94	4/28/94
Comment Period	30ed	4/28/94	5/28/94
Final FS/PRAP	30ed	5/28/94	6/27/94
Public Comment	30ed	6/27/94	7/27/94
ROD	183d	12/1/93	8/15/94
Preliminary Draft ROD	28ed	12/1/93	12/29/93
Comment Period	21ed	12/29/93	1/19/94
Draft ROD	28ed	1/19/94	2/16/94
Comment Period	60ed	2/16/94	4/17/94
Draft Final ROD	60ed	4/17/94	6/16/94
Comment Period	30ed	6/16/94	7/16/94
Final ROD	30ed	7/16/94	8/15/94
Remedial Design (1,2)	397ed	8/15/94	9/16/95
Procure RA Contractor (1,2)	60ed	9/16/95	11/15/95
Remedial Action (1,2)	0ed	11/15/95	11/15/95



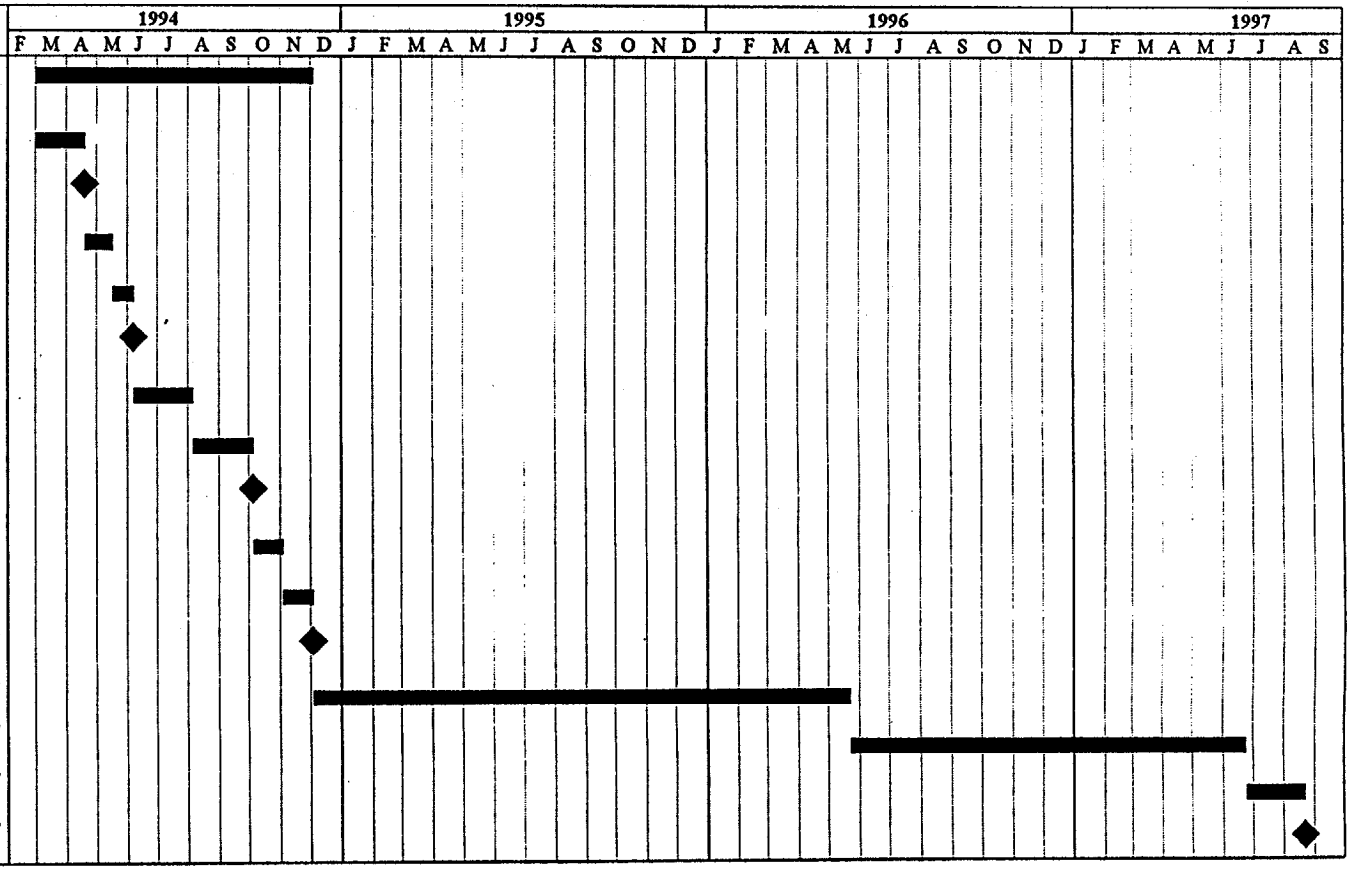
(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(e)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 4 - 5: Site Management Schedule

Sites 36, 43, 44, 54 and 86 (Operable Unit No. 6), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	199d	3/1/94	12/4/94
Prepare Prelim. Draft RI/FS Proj. Plans	49ed	3/1/94	4/19/94
Submit Prelim. Draft RI/FS Proj. Plans	0ed	4/19/94	4/19/94
LANTDIV Review	28ed	4/19/94	5/17/94
Prepare Draft RI/FS Project Plans	21ed	5/17/94	6/7/94
Submit Draft RI/FS Project Plans	0ed	6/7/94	6/7/94
Agency Review	60ed	6/7/94	8/6/94
Prepare Draft Final RI/FS Project Plans	60ed	8/6/94	10/5/94
Submit Draft Final RI/FS Project Plans	0ed	10/5/94	10/5/94
Agency Review	30ed	10/5/94	11/4/94
Prepare Final RI/FS Project Plans	30ed	11/4/94	12/4/94
Submit Final RI/FS Project Plans	0ed	12/4/94	12/4/94
RI/FS, PRAP, and ROD (1)	536ed	12/4/94	5/23/96
Remedial Design (2)	397ed	5/23/96	6/24/97
Procure RA Contractor (2)	60ed	6/24/97	8/23/97
Begin Remedial Action (2)	0ed	8/23/97	8/23/97



(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(e)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 4 - 6: Site Management Schedule

Sites 1, 28, and 30 (Operable Unit No. 7), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	215d	3/1/93	12/26/93
Prepare Prelim Draft RI/FS Project Plans	60ed	3/1/93	4/30/93
Submit Prelim Draft RI/FS Project Plans	0ed	4/30/93	4/30/93
LANTDIV Review	30d	4/30/93	6/10/93
Prepare Draft RI/FS Project Plans	30ed	5/30/93	6/29/93
Submit Draft RI/FS Project Plans	0ed	6/29/93	6/29/93
Agency Review	60ed	6/29/93	8/28/93
Prepare Draft Final RI/FS Project Plans	60ed	8/28/93	10/27/93
Submit Draft Final RI/FS Project Plans	0ed	10/27/93	10/27/93
Agency Review	30ed	10/27/93	11/26/93
Prepare Final RI/FS Project Plans	30ed	11/26/93	12/26/93
Submit Final RI/FS Project Plans	0ed	12/26/93	12/26/93
Field Investigation	63ed	1/3/94	3/7/94
Sample Analysis / Validation	119ed	1/3/94	5/2/94
Data Evaluation	21ed	5/2/94	5/23/94
Risk Assessment	42ed	5/23/94	7/4/94
RI Report	200d	6/6/94	3/11/95
Preliminary Draft RI Report	42ed	6/6/94	7/18/94
Comment Period	28ed	7/18/94	8/15/94
Draft RI	28ed	8/15/94	9/12/94
Comment Period	60ed	9/12/94	11/11/94
Draft Final RI Report	60ed	11/11/94	1/10/95
Comment Period	30ed	1/10/95	2/9/95
Final RI	30ed	2/9/95	3/11/95

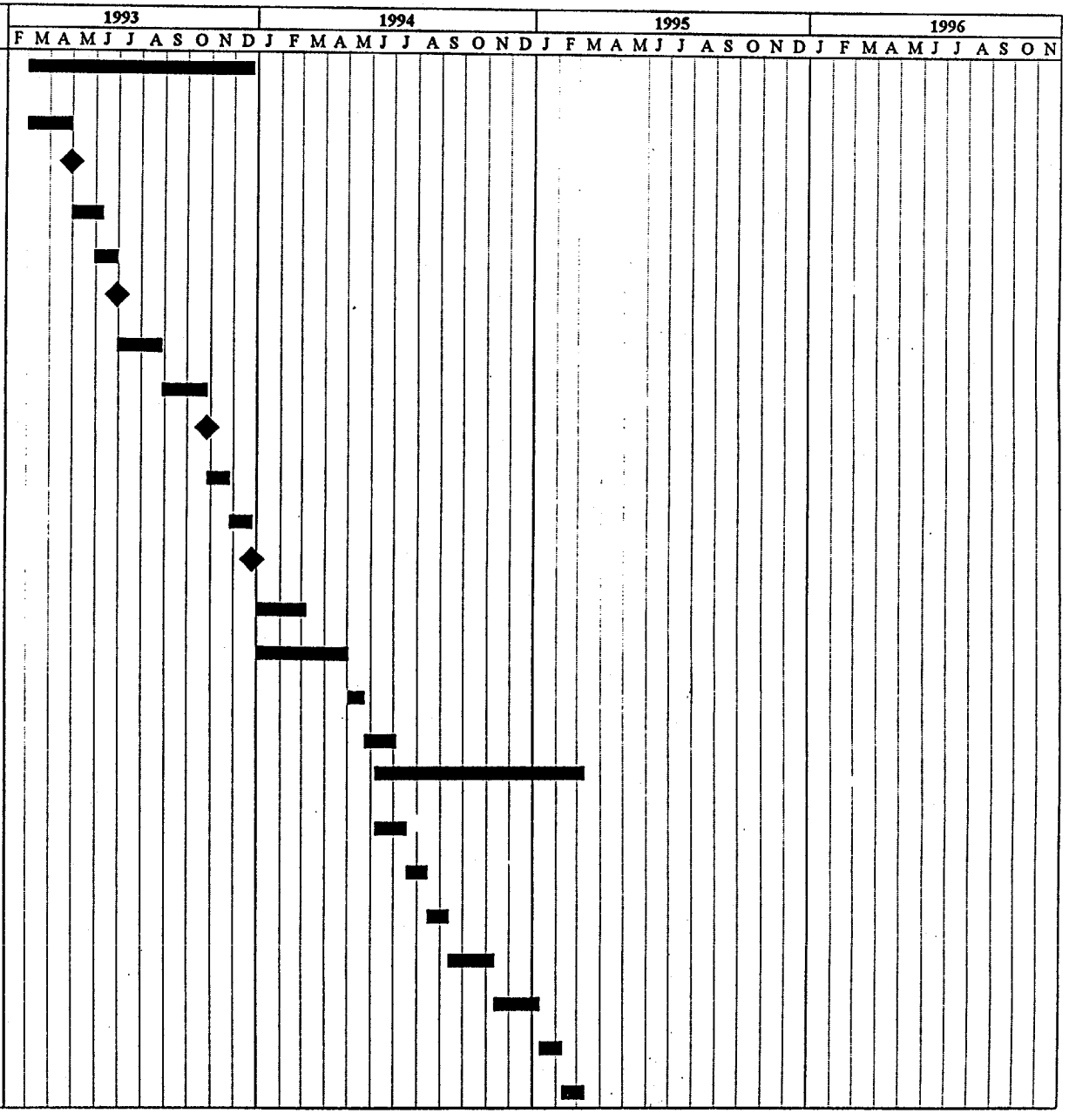
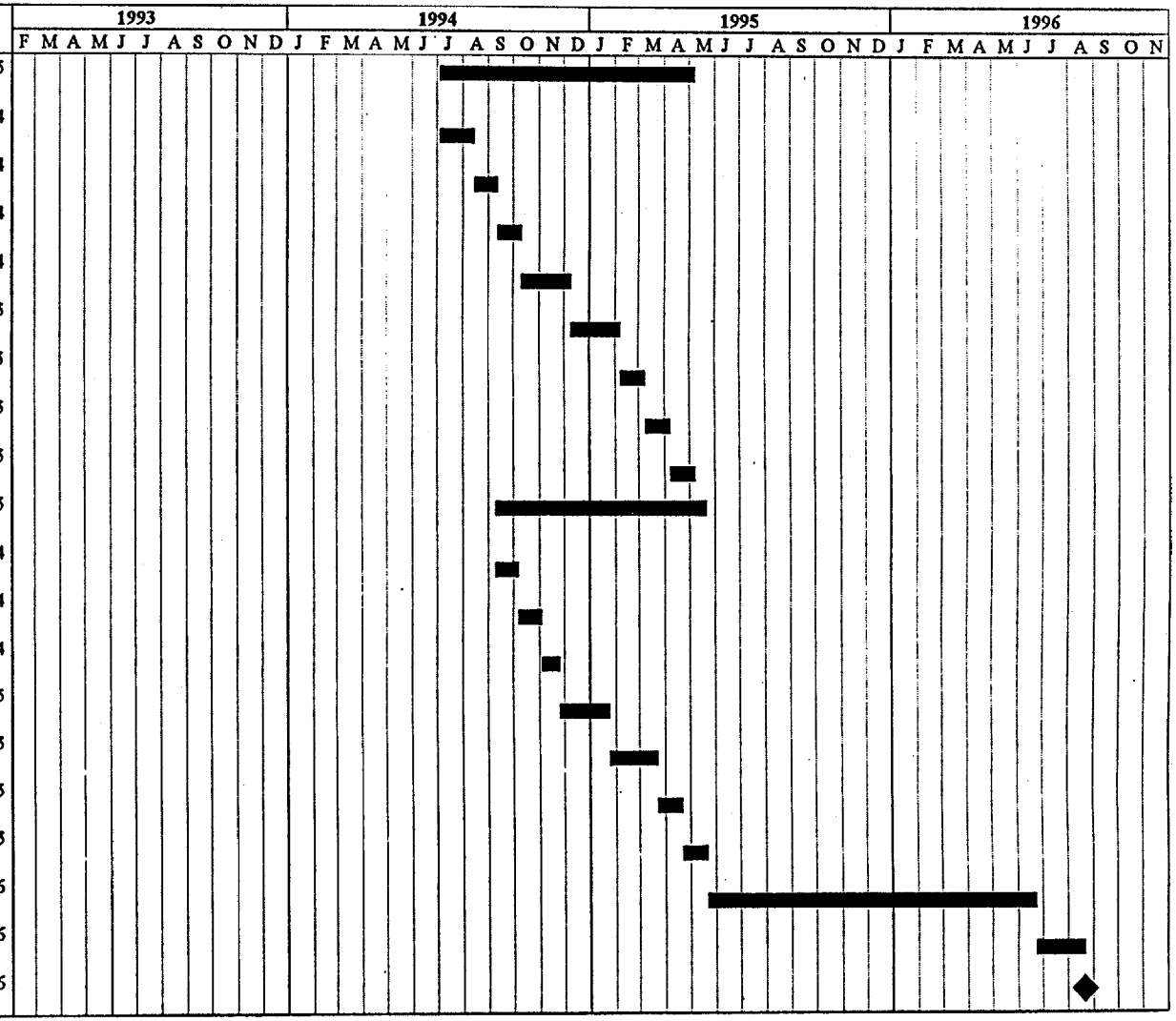


Table 4 - 6: Site Management Schedule

Sites 1, 28, and 30 (Operable Unit No. 7), MCB Camp Lejeune, NC

Task	Days	Start	Finish
FS Report / PRAP	220d	7/4/94	5/8/95
Preliminary Draft FS / PRAP	42ed	7/4/94	8/15/94
Comment Period	28ed	8/15/94	9/12/94
Draft FS / PRAP	28ed	9/12/94	10/10/94
Comment Period	60ed	10/10/94	12/9/94
Draft Final FS / PRAP	60ed	12/9/94	2/7/95
Comment Period	30ed	2/7/95	3/9/95
Final FS / PRAP	30ed	3/9/95	4/8/95
Public Comment Period	30ed	4/8/95	5/8/95
ROD	181d	9/9/94	5/22/95
Preliminary Draft ROD	28ed	9/9/94	10/7/94
Comment Period	28ed	10/7/94	11/4/94
Draft ROD	21ed	11/4/94	11/25/94
Comment Period	60ed	11/25/94	1/24/95
Draft Final ROD	58ed	1/24/95	3/23/95
Comment Period	30ed	3/23/95	4/22/95
Final ROD	30ed	4/22/95	5/22/95
Remedial Design (1,2)	398ed	5/22/95	6/23/96
Procure RA Contractor	60ed	6/23/96	8/22/96
Begin RA (1,2)	0ed	8/22/96	8/22/96



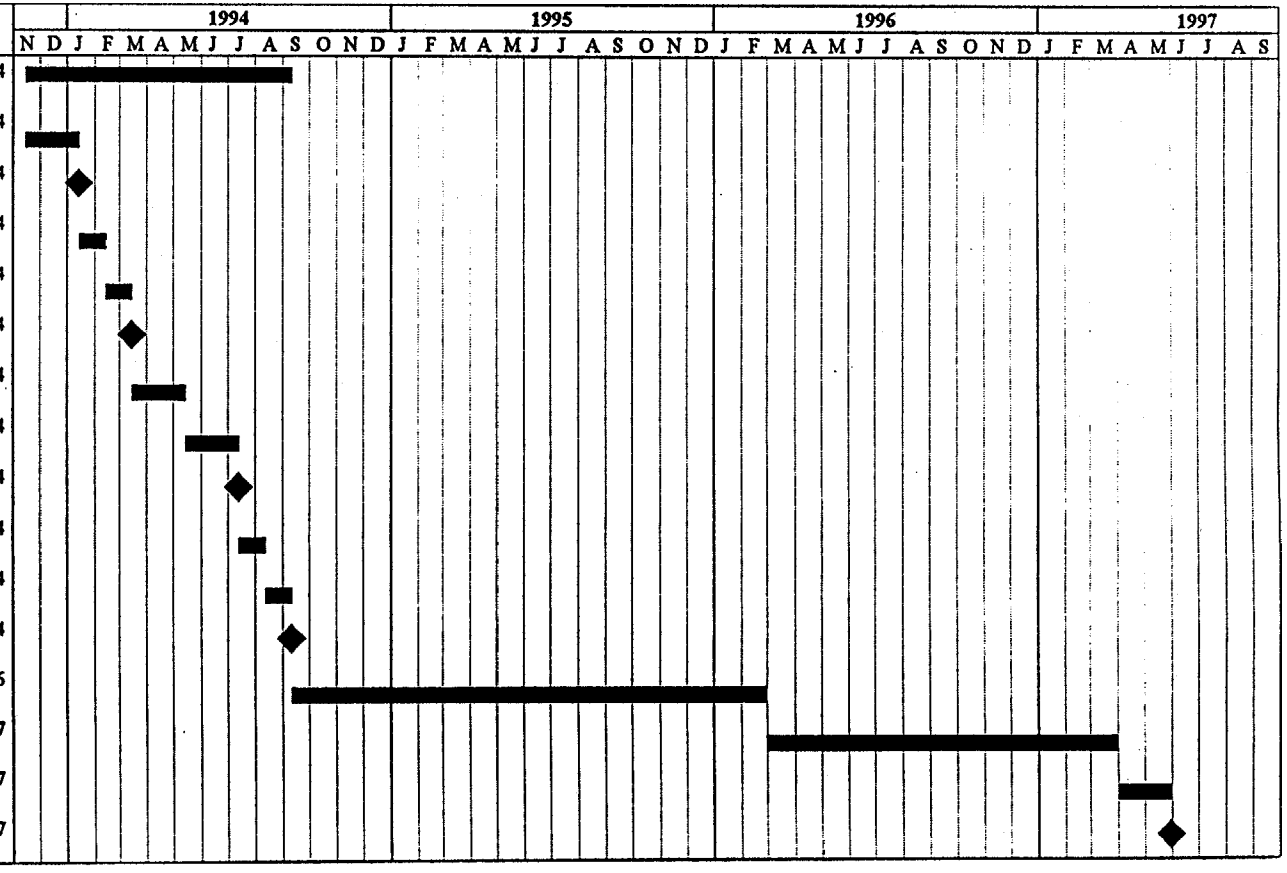
(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(e)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 4 - 7: Site Management Schedule

Site 16 (Operable Unit No. 8), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	215d	11/15/93	9/11/94
Prepare Prelim Draft RI/FS Project Plans	60ed	11/15/93	1/14/94
Submit Prelim Draft RI/FS Project Plans	0ed	1/14/94	1/14/94
LANTDIV Review	30ed	1/14/94	2/13/94
Prepare Draft RI/FS Project Plans	30ed	2/13/94	3/15/94
Submit Draft RI/FS Project Plans	0ed	3/15/94	3/15/94
Agency Review	60ed	3/15/94	5/14/94
Prepare Draft Final RI/FS Project Plans	60ed	5/14/94	7/13/94
Submit Draft Final RI/FS Project Plans	0ed	7/13/94	7/13/94
Agency Review	30ed	7/13/94	8/12/94
Prepare Final RI/FS Project Plans	30ed	8/12/94	9/11/94
Submit Final RI/FS Project Plans	0ed	9/11/94	9/11/94
RI/FS, PRAP, and ROD (1)	536ed	9/11/94	2/29/96
Remedial Design (2)	397ed	2/29/96	4/1/97
Procure RA Contractor (2)	60ed	4/1/97	5/31/97
Begin Remedial Action (2)	0ed	5/31/97	5/31/97



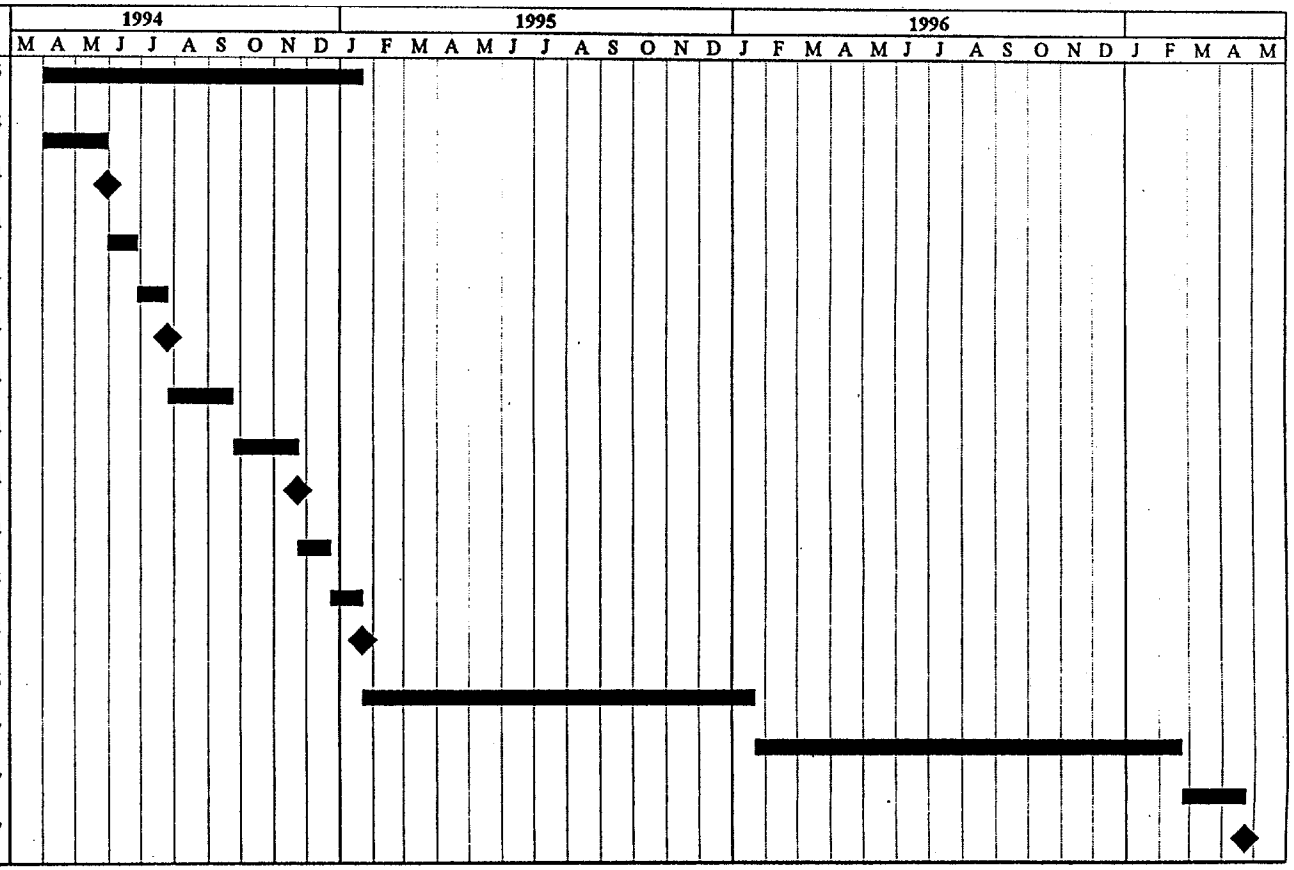
(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(c)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 4 - 8: Site Management Schedule

Sites 65 and 73 (Operable Unit No. 9), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	211d	4/1/94	1/22/95
Prepare Prelim Draft RI/FS Project Plans	60ed	4/1/94	5/31/94
Submit Prelim Draft RI/FS Project Plans	0ed	5/31/94	5/31/94
LANTDIV Review	28ed	5/31/94	6/28/94
Prepare Draft RI/FS Project Plans	28ed	6/28/94	7/26/94
Submit Draft RI/FS Project Plans	0ed	7/26/94	7/26/94
Agency Review	60ed	7/26/94	9/24/94
Prepare Draft Final RI/FS Project Plans	60ed	9/24/94	11/23/94
Submit Draft Final RI/FS Project Plans	0ed	11/23/94	11/23/94
Agency Review	30ed	11/23/94	12/23/94
Prepare Final RI/FS Project Plans	30ed	12/23/94	1/22/95
Submit Final RI/FS Project Plans	0ed	1/22/95	1/22/95
RI/FS PRAP, and ROD (1)	365ed	1/22/95	1/22/96
Remedial Design (2)	397ed	1/22/96	2/22/97
Procure RA Contractor (2)	60ed	2/22/97	4/23/97
Begin Remedial Action (2)	0ed	4/23/97	4/23/97



(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(c)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 4 - 9: Site Management Schedule

Site 35 (Operable Unit no. 10), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	214d	5/1/93	2/25/94
Prepare Prelim Draft RI/FS Project Plans	60ed	5/1/93	6/30/93
Submit Prelim Draft RI/FS Project Plans	0ed	6/30/93	6/30/93
LANTDIV Review	30ed	6/30/93	7/30/93
Prepare Draft RI/FS Project Plans	30ed	7/30/93	8/29/93
Submit Draft RI/FS Project Plans	0ed	8/29/93	8/29/93
Agency Review	60ed	8/29/93	10/28/93
Prepare Draft Final RI/FS Project Plans	60ed	10/28/93	12/27/93
Submit Draft Final RI/FS Project Plans	0ed	12/27/93	12/27/93
Agency Review	30ed	12/27/93	1/26/94
Prepare Final RI/FS Project Plans	30ed	1/26/94	2/25/94
Submit Final RI/FS Project Plans	0ed	2/25/94	2/25/94
Field Investigation	42ed	3/1/94	4/12/94
Sample Analysis/Validation	84ed	3/1/94	5/24/94
Data Evaluation	21ed	5/24/94	6/14/94
Risk Assessment	28ed	6/14/94	7/12/94
RI Report	199d	6/14/94	3/19/95
Preliminary Draft RI Report	42ed	6/14/94	7/26/94
Comment Period	28ed	7/26/94	8/23/94
Draft RI Report	28ed	8/23/94	9/20/94
Comment Period	60ed	9/20/94	11/19/94
Draft Final RI Report	60ed	11/19/94	1/18/95
Comment Period	30ed	1/18/95	2/17/95
Final RI	30ed	2/17/95	3/19/95

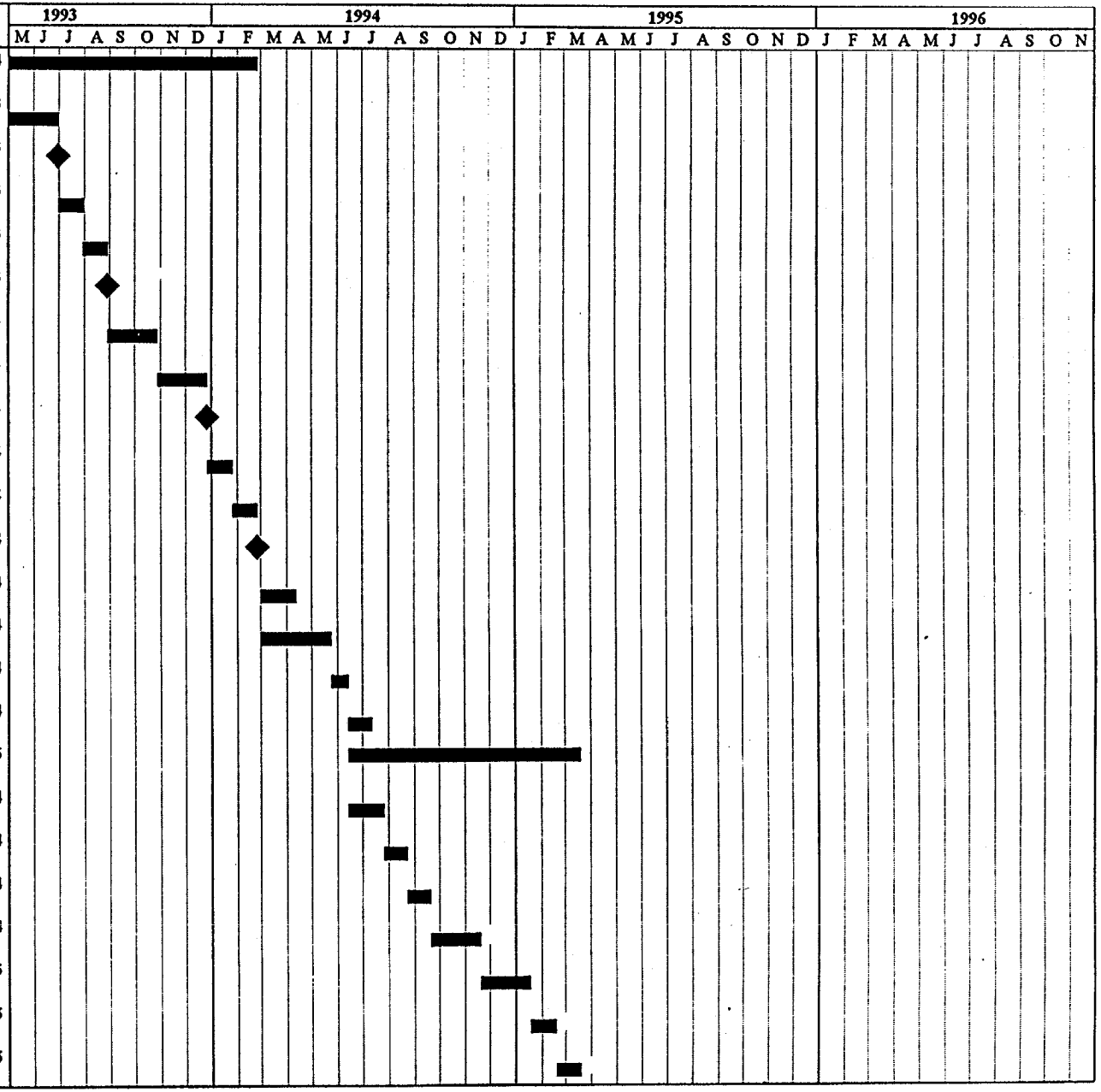
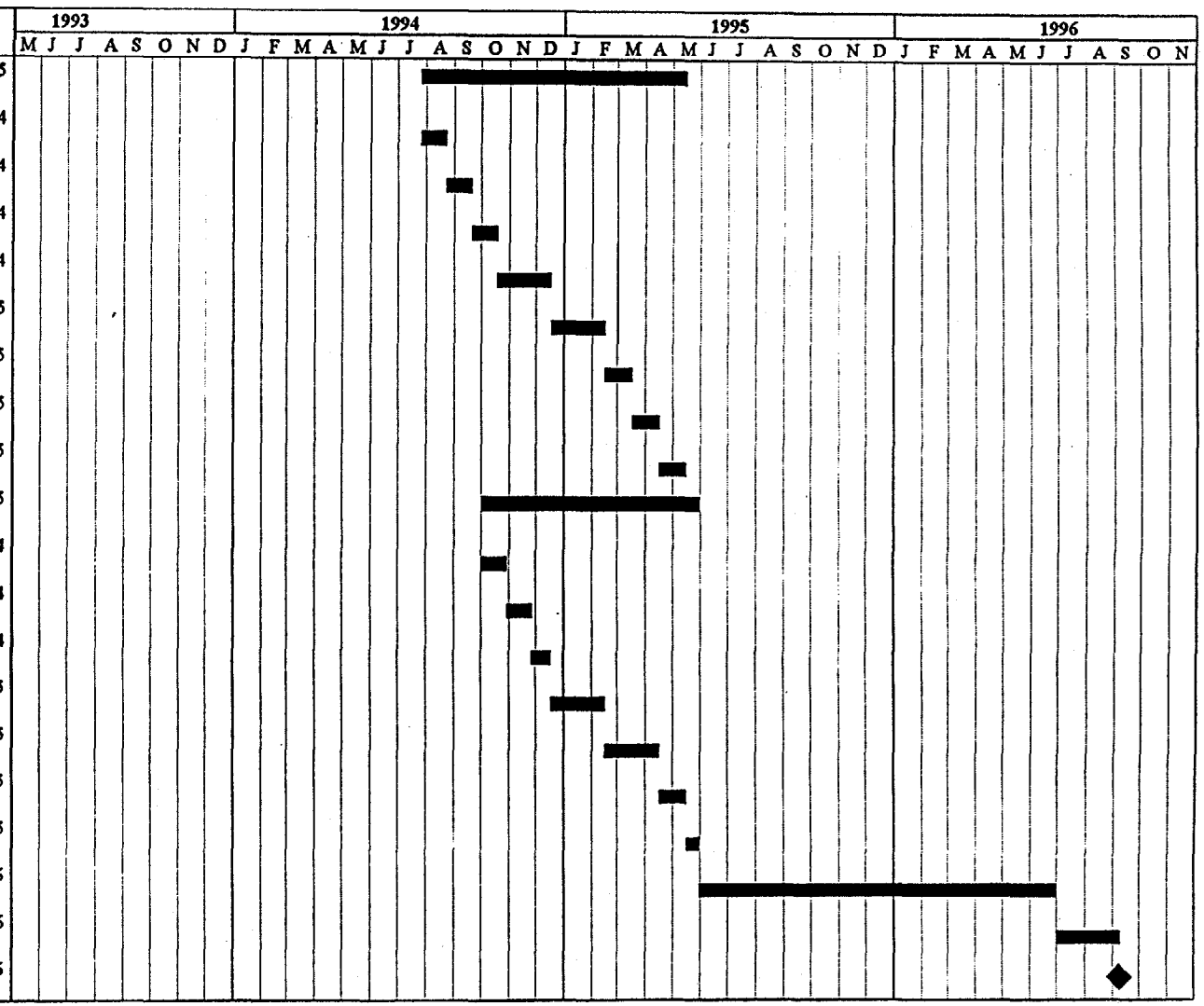


Table 4 - 9: Site Management Schedule

Site 35 (Operable Unit no. 10), MCB Camp Lejeune, NC

Task	Days	Start	Finish
FS Report/PRAP	210d	7/26/94	5/16/95
Preliminary Draft FS/PRAP	28ed	7/26/94	8/23/94
Comment Period	28ed	8/23/94	9/20/94
Draft FS/PRAP	28ed	9/20/94	10/18/94
Comment Period	60ed	10/18/94	12/17/94
Draft Final FS/PRAP	60ed	12/17/94	2/15/95
Comment Period	30ed	2/15/95	3/17/95
Final FS/PRAP	30ed	3/17/95	4/16/95
Public Comment Period	30ed	4/16/95	5/16/95
ROD	171d	10/1/94	5/30/95
Preliminary Draft ROD	28ed	10/1/94	10/29/94
Comment Period	28ed	10/29/94	11/26/94
Draft ROD	21ed	11/26/94	12/17/94
Comment Period	60ed	12/17/94	2/15/95
Draft Final ROD	60ed	2/15/95	4/16/95
Comment Period	30ed	4/16/95	5/16/95
Final ROD	14ed	5/16/95	5/30/95
Remedial Design (1,2)	398ed	5/30/95	7/1/96
Procure RA Contractor	70ed	7/1/96	9/9/96
Begin RA (1,2)	0ed	9/9/96	9/9/96



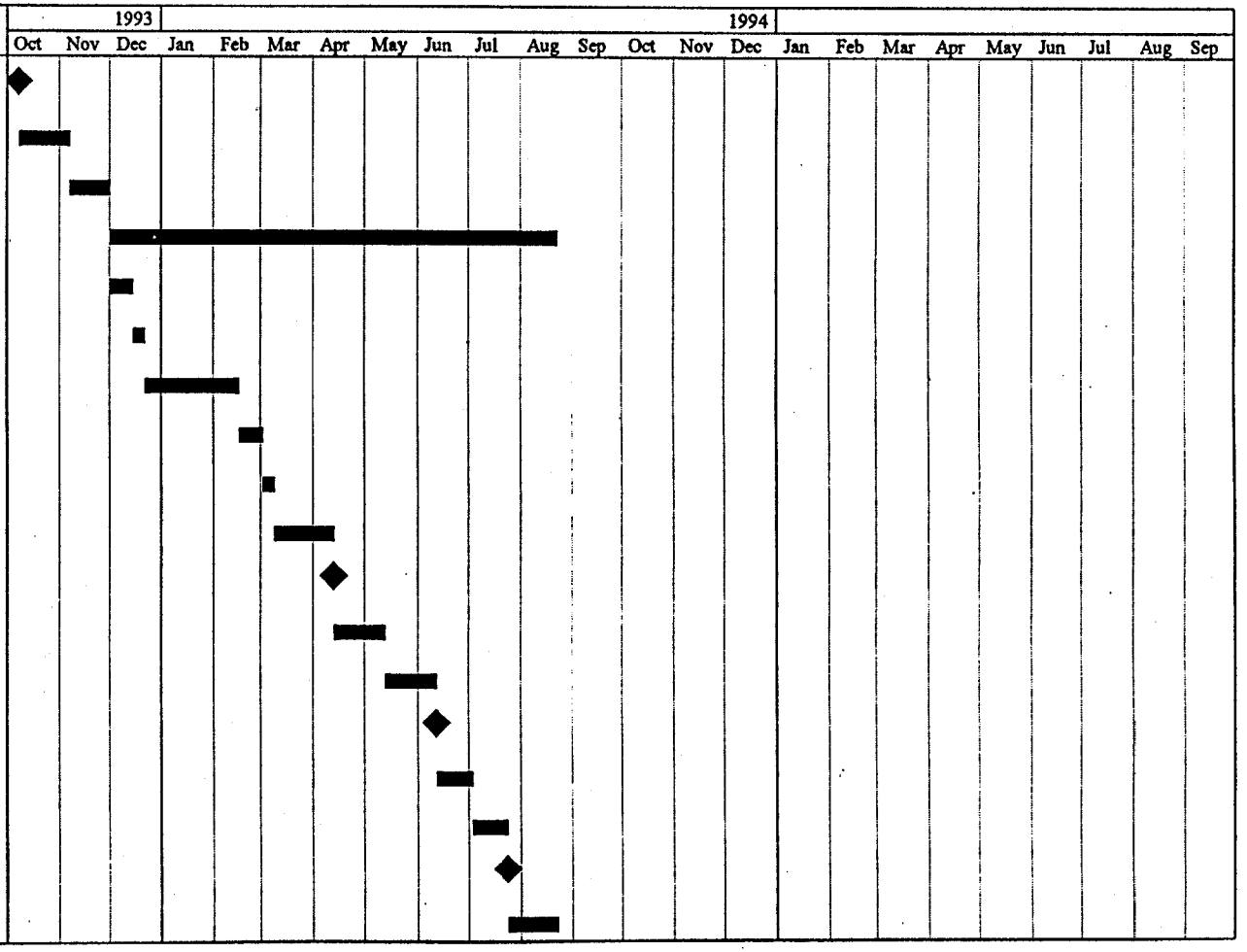
(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(c)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 4 - 10: Site Management Schedule

Interim Remedial Action (IRA) RI/FS Schedule, Site 35 (Operable Unit No. 10), MCB Camp Lejeune, NC

Task	Days	Start	Finish
Submit Draft Final IRA Project Plans	0ed	10/8/93	10/8/93
Agency Review	30ed	10/8/93	11/7/93
Final IRA Project Plans	24ed	11/7/93	12/1/93
RI/FS	265ed	12/1/93	8/23/94
Notice to Proceed/Mobilization	14ed	12/1/93	12/15/93
Field Investigation	7ed	12/15/93	12/22/93
Data Analysis/Validation	56ed	12/22/93	2/16/94
Data Evaluation	14ed	2/16/94	3/2/94
Risk Assessment	7ed	3/2/94	3/9/94
Prepare Draft RI/FS and PRAP	35ed	3/9/94	4/13/94
Submit Draft RI/FS and PRAP	0ed	4/13/94	4/13/94
Government Review	30ed	4/13/94	5/13/94
Prepare Draft Final RI/FS and PRAP	30ed	5/13/94	6/12/94
Submit Draft Final RI/FS and PRAP	0ed	6/12/94	6/12/94
Agency Review	21ed	6/12/94	7/3/94
Prepare Final RI/FS and PRAP	21ed	7/3/94	7/24/94
Submit Final RI/FS and PRAP	0ed	7/24/94	7/24/94
Public Comment Period	30ed	7/24/94	8/23/94

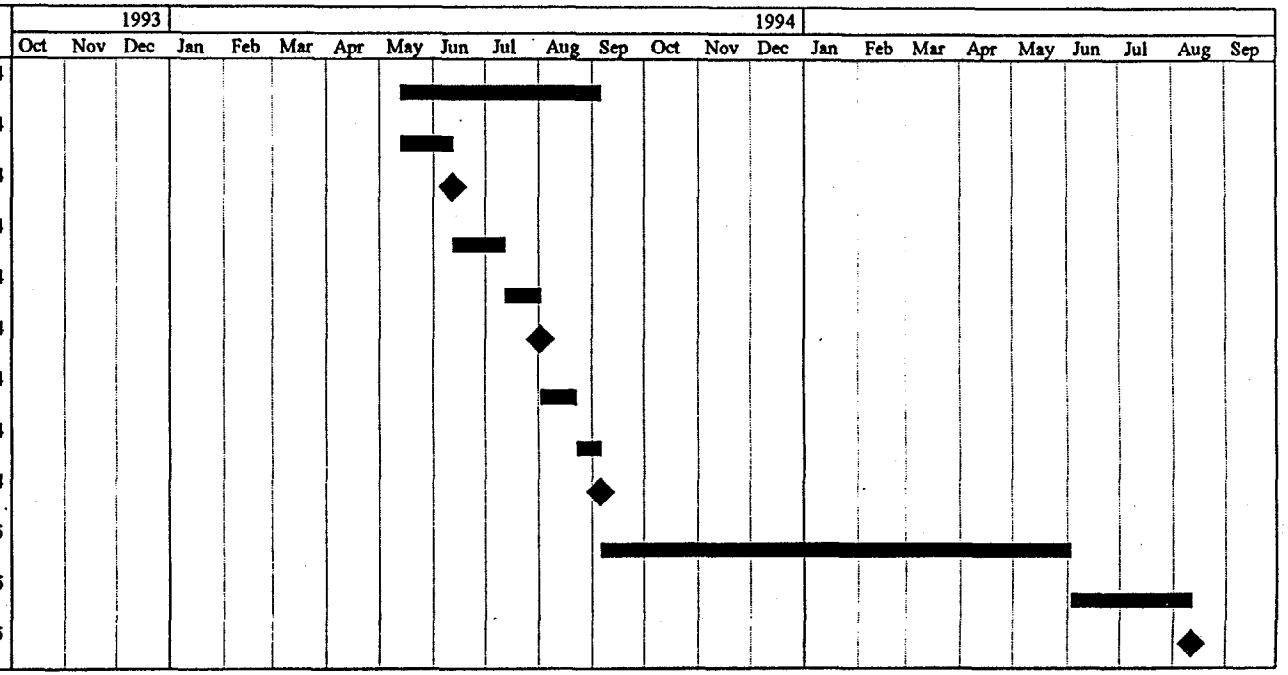


Note: Review/Responce durations are accelerated and are shorter than the FFA periods.

Table 4 - 10: Site Management Schedule

Interim Remedial Action (IRA) RI/FS Schedule, Site 35 (Operable Unit No. 10), MCB Camp Lejeune, NC

Task	Days	Start	Finish
ROD	116ed	5/13/94	9/6/94
Prepare Draft ROD	30ed	5/13/94	6/12/94
Submit Draft ROD	0ed	6/12/94	6/12/94
Agency Review	30ed	6/12/94	7/12/94
Prepare Draft Final ROD	21ed	7/12/94	8/2/94
Submit Draft Final ROD	0ed	8/2/94	8/2/94
Agency Review	21ed	8/2/94	8/23/94
Prepare Final ROD	14ed	8/23/94	9/6/94
Submit Final ROD	0ed	9/6/94	9/6/94
Remedial Design (1)	270ed	9/6/94	6/3/95
Procure RA Contractor (1)	70ed	6/3/95	8/12/95
Initiate Interim RA	0ed	8/12/95	8/12/95



(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

Note: Review/Responce durations are accelerated and are shorter than the FFA periods.

Table 4 - 11 Site Management Schedule

Site 7 and 80 (Operable Unit No. 11), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	213d	12/1/93	9/26/94
Prepare Prelim Draft RI/FS Project Plans	60ed	12/1/93	1/30/94
Submit Prelim Draft RI/FS Project Plans	0ed	1/31/94	1/31/94
LANTDIV Review	28ed	1/31/94	2/28/94
Prepare Draft RI/FS Project Plans	28ed	2/28/94	3/28/94
Submit Draft RI/FS Project Plans	0ed	3/28/94	3/28/94
Agency Review	60ed	3/28/94	5/27/94
Prepare Draft Final RI/FS Project Plans	60ed	5/27/94	7/26/94
Submit Draft Final RI/FS Project Plans	0ed	7/26/94	7/26/94
Agency Review	30ed	7/26/94	8/25/94
Prepare Final RI/FS Project Plans	30ed	8/25/94	9/24/94
Submit Final RI/FS Project Plans	0ed	9/26/94	9/26/94
RI/FS PRAP, and ROD (1)	365ed	9/26/94	9/26/95
Remedial Design (2)	397ed	9/26/95	10/27/96
Procure RA Contractor (2)	60ed	10/28/96	12/27/96
Begin Remedial Action (2)	0ed	12/27/96	12/27/96

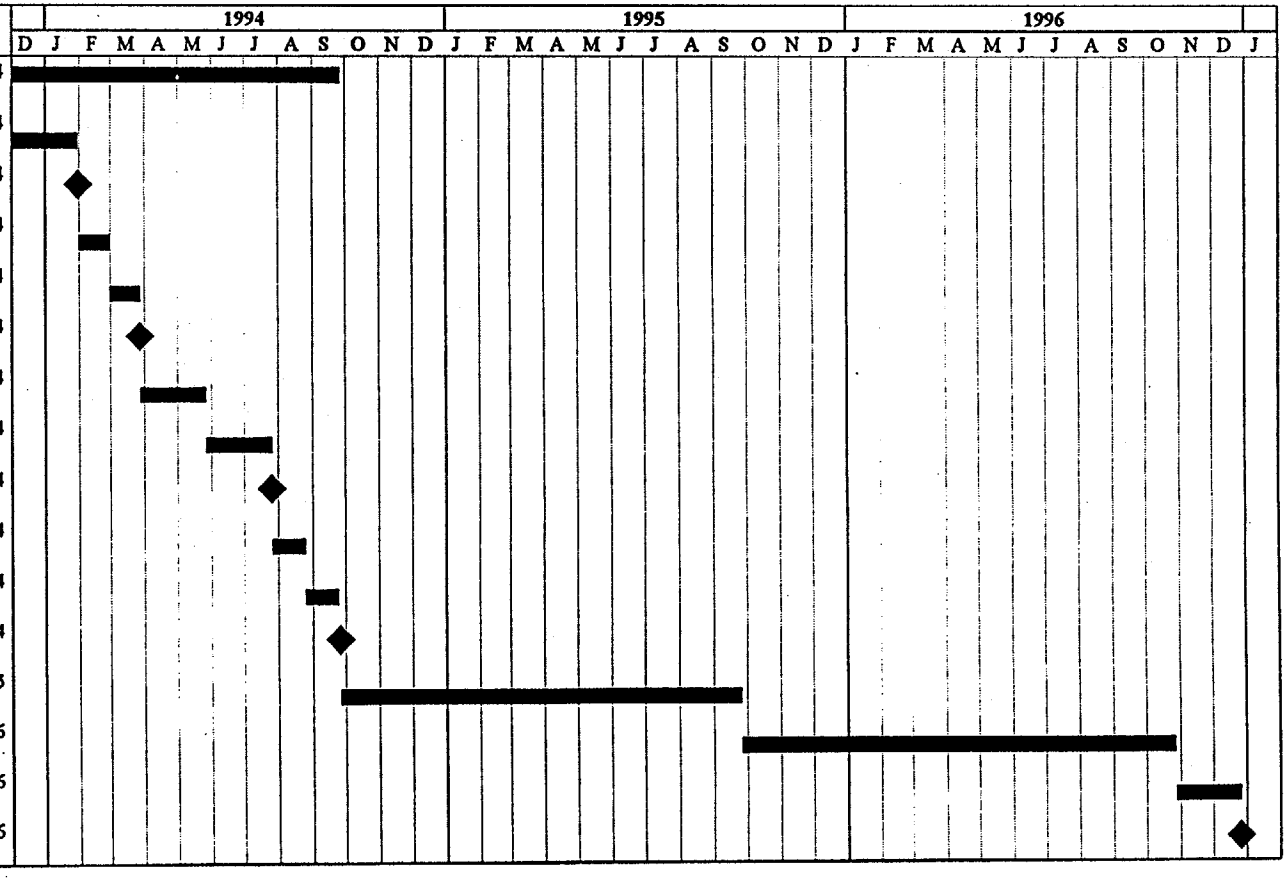
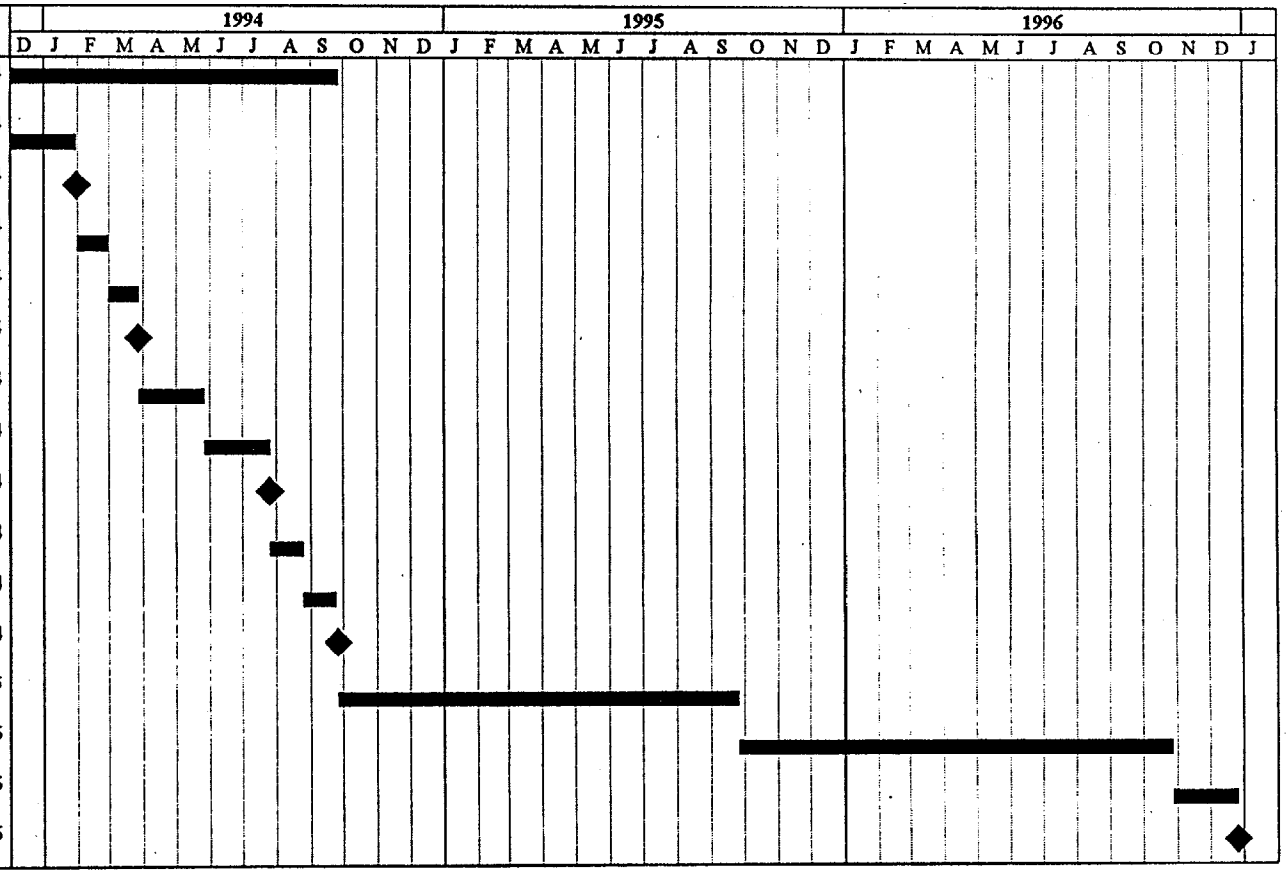


Table 4 - 12 Site Management Schedule

Site 3 (Operable Unit No. 12), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	213d	12/1/93	9/26/94
Prepare Prelim Draft RI/FS Project Plans	60ed	12/1/93	1/30/94
Submit Prelim Draft RI/FS Project Plans	0ed	1/31/94	1/31/94
LANTDIV Review	28ed	1/31/94	2/28/94
Prepare Draft RI/FS Project Plans	28ed	2/28/94	3/28/94
Submit Draft RI/FS Project Plans	0ed	3/28/94	3/28/94
Agency Review	60ed	3/28/94	5/27/94
Prepare Draft Final RI/FS Project Plans	60ed	5/27/94	7/26/94
Submit Draft Final RI/FS Project Plans	0ed	7/26/94	7/26/94
Agency Review	30ed	7/26/94	8/25/94
Prepare Final RI/FS Project Plans	30ed	8/25/94	9/24/94
Submit Final RI/FS Project Plans	0ed	9/26/94	9/26/94
RI/FS PRAP, and ROD (1)	365ed	9/26/94	9/26/95
Remedial Design (2)	397ed	9/26/95	10/27/96
Procure RA Contractor (2)	60ed	10/28/96	12/27/96
Begin Remedial Action (2)	0ed	12/27/96	12/27/96



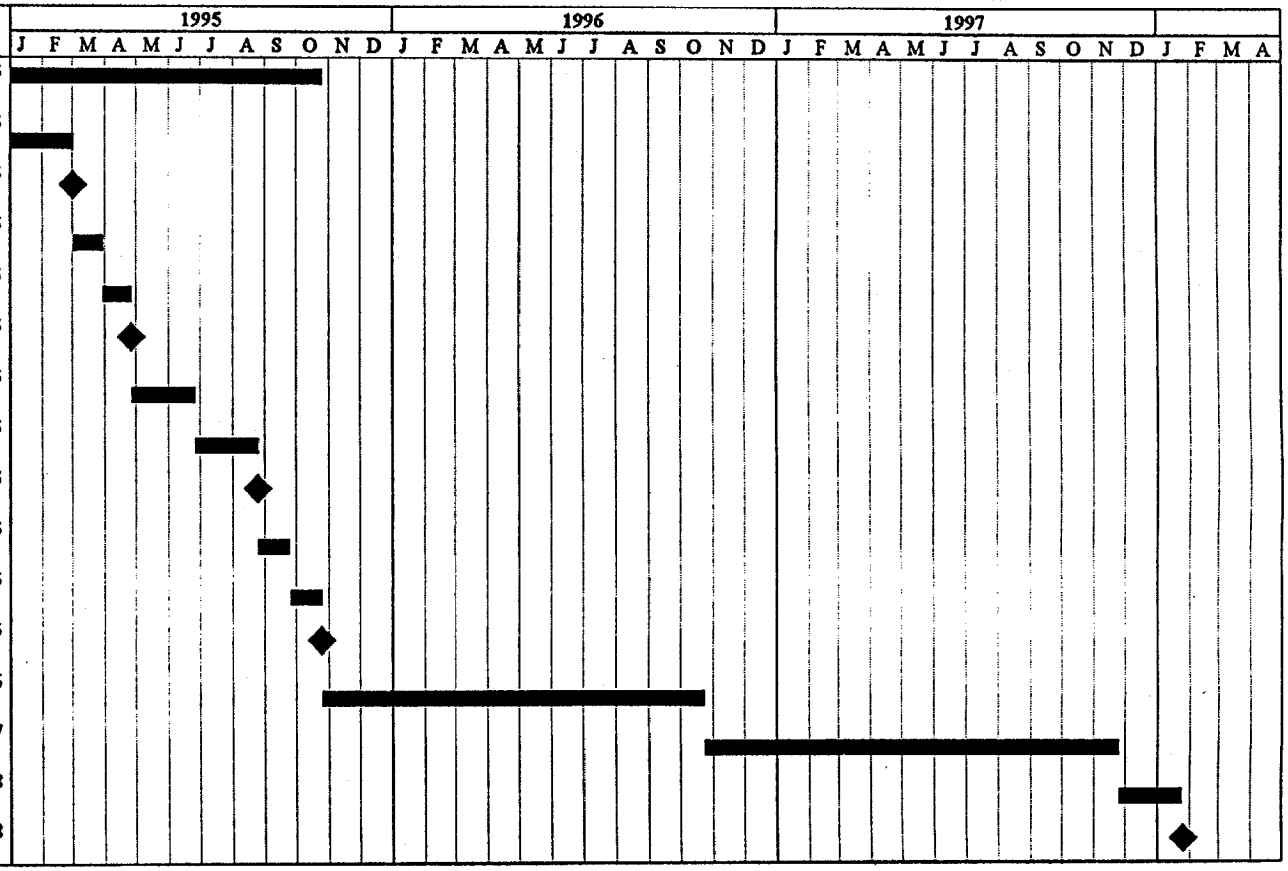
(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(c)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 4 - 13 Site Management Schedule

Site 63 (Operable Unit No. 13), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	212d	1/1/95	10/25/95
Prepare Prelim Draft RI/FS Project Plans	60ed	1/1/95	3/2/95
Submit Prelim Draft RI/FS Project Plans	0ed	3/2/95	3/2/95
LANTDIV Review	28ed	3/2/95	3/30/95
Prepare Draft RI/FS Project Plans	28ed	3/30/95	4/27/95
Submit Draft RI/FS Project Plans	0ed	4/27/95	4/27/95
Agency Review	60ed	4/27/95	6/26/95
Prepare Draft Final RI/FS Project Plans	60ed	6/26/95	8/25/95
Submit Draft Final RI/FS Project Plans	0ed	8/25/95	8/25/95
Agency Review	30ed	8/25/95	9/24/95
Prepare Final RI/FS Project Plans	30ed	9/25/95	10/25/95
Submit Final RI/FS Project Plans	0ed	10/25/95	10/25/95
RI/FS PRAP, and ROD (1)	365ed	10/25/95	10/24/96
Remedial Design (2)	397ed	10/24/96	11/25/97
Procure RA Contractor (2)	60ed	11/25/97	1/24/98
Begin Remedial Action (2)	0ed	1/26/98	1/26/98



(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(e)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Action. A listing of deliverables associated with Fiscal Year 1994 IRP activities are summarized on Table 4-14.

The project schedules for the 13 Operable Units reflect Government review times specified in the FFA and Navy/Marine Corps turnaround times. These review durations are as follows.

- Draft Primary Documents: 60 days to review and 60 days to prepare and submit the Draft Final document.

- Draft Final Primary Documents: 30 days to review and 30 days to finalize. Draft Final documents will become final if no comments are received within 30 days unless an extension is requested in accordance with the FFA.

The FFA does not address Preliminary Draft Documents, which are prepared by the Navy/Marine Corps for internal review only (i.e., reviewed only by the Navy/Marine Corps). The duration for reviewing Preliminary Draft Primary documents is 30 days. The duration for revising the Preliminary Draft document to a Draft document is also 30 days.

Project schedules for some RI/FS or RD/RA activities have been estimated at this time until the RI/FS Project Plans are completed or until the RI/FS is completed. For example, Operable Unit No. 10 is currently in the Project Planning stage. Therefore, the schedule for RI/FS activities is only an estimation since the field investigation duration is unknown at this time.

In addition, the project schedule for Remedial Design activities cannot be established until the RI/FS is completed. For remedial design activities, a project duration of 15 months has been established since Section 120(e)(2) of CERCLA requires that remedial action activities begin within 15 months following the Record of Decision.

TABLE 4-14

PRIMARY AND SECONDARY DOCUMENT SUBMITTALS
FOR FISCAL YEAR 1994
MCB CAMP LEJEUNE, NORTH CAROLINA

Operable Unit	Site	Activity	Primary Document Submittals	Anticipated Submittal Date
1	21, 24 and 78	RI/FS	Draft RI	January 18, 1994
			Draft FS and PRAP	February 7, 1994
			Draft ROD	March 21, 1994
			Draft Final RI	April 30, 1994
			Draft Final FS and PRAP	May 20, 1994
			Draft Final ROD	June 19, 1994
			Final RI	June 27, 1994
			Final FS and PRAP	July 17, 1994
			Final ROD	August 18, 1994
2	6, 9, and 82	RI/FS	Draft RD Work Plan	January 1, 1994
			Draft Final RD Work Plan	May 5, 1994
			Final RD Work Plan	July 4, 1994
			30 Percent Design	September 5, 1994
4	41, 69, and 74	RI/FS	Draft Final RI/FS Project Plans	October 8, 1993
			Final RI/FS Project Plans	November 28, 1993
			Draft RI	September 14, 1994
5	2	RI/FS	Draft RI	December 22, 1993
			Draft FS and PRAP	December 29, 1993
			Draft ROD	February 16, 1994
			Draft Final RI	April 14, 1994
			Draft Final FS and PRAP	April 28, 1994
			Draft Final ROD	June 16, 1994
			Final RI	June 13, 1994
			Final FS and PRAP	June 27, 1994
			Final ROD	August 15, 1994

TABLE 4-14
(Continued)
PRIMARY AND SECONDARY DOCUMENT SUBMITTALS
FOR FISCAL YEAR 1994
MCB CAMP LEJEUNE, NORTH CAROLINA

Operable Unit	Site	Activity	Primary Document Submittals	Anticipated Submittal Date
6	36, 43, 44, 54, and 86	RI/FS Project Plans	Draft RI/FS Project Plans	June 7, 1994
7	1, 28, and 30	RI/FS Project Plans	Draft Final RI/FS Project Plans	October 27, 1993
			Final RI/FS Project Plans	December 26, 1993
			Draft RI Report	September 12, 1994
8	16	RI/FS Project Plans	Draft RI/FS Project Plans	March 15, 1994
			Draft Final RI/FS Project Plans	July 13, 1994
			Final RI/FS Project Plans	September 11, 1994
9	65 and 73	RI/FS Project Plans	Draft RI/FS Project Plans	July 26, 1994
10	35	RI/FS Project Plans	Draft Final RI/FS Project Plans	December 27, 1993
			Final RI/FS Project Plans	February 25, 1994
			Draft RI Report	September 20, 1994
10	35	IRA	Draft Final IRA Project Plans	October 8, 1993
			Final IRA Project Plans	December 1, 1993
			Draft RI/FS/PRAP	April 13, 1994
			Draft Final RI/FS/PRAP	June 12, 1994
			Draft ROD	June 12, 1994
			Final RI/FS/PRAP	July 24, 1994
			Draft Final ROD	August 2, 1994
			Final ROD	September 6, 1994

Notes:
(1) Submittal of Draft Final Reports are based on a Government review period of 60 days. The actual submittal date will be in proportion to the increase or decrease of review calendar days.
(2) Draft Final Reports are Final if no Government comments are received within 30 days.
(3) Based on a Government review period of 30 days.

TABLE 4-14
(Continued)
PRIMARY AND SECONDARY DOCUMENT SUBMITTALS
FOR FISCAL YEAR 1994
MCB CAMP LEJEUNE, NORTH CAROLINA

Operable Unit	Site	Activity	Primary Document Submittals	Anticipated Submittal Date
11	7 and 80	None	Draft RI/FS Project Plans	March 28, 1994
			Draft Final RI/FS Project Plans	July 26, 1994
			Final RI/FS Project Plans	September 26, 1994
12	3	None	Draft RI/FS Project Plans	September 26, 1994
			Draft Final RI/FS Project Plans	July 26, 1994
			Final RI/FS Project Plans	September 26, 1994
13	63	None	None	--

Notes:
(1) Submittal of Draft Final Reports are based on a Government review period of 60 days. The actual submittal date will be in proportion to the increase or decrease of review calendar days.
(2) Draft Final Reports are Final if no Government comments are received within 30 days.
(3) Based on a Government review period of 30 days.

5.0 SITE INSPECTION

5.1 Introduction

This section identifies Fiscal Year 1994-1998 IRP activities for sites scheduled for Site Inspections (SIs). It is important to note that these SI sites are not required to adhere to the same reporting requirements as defined in the Camp Lejeune Federal Facilities Agreement for RI/FS sites. If these sites warrant further investigation based on the SI results, the sites will be added to the FFA list of RI/FS sites (e.g., Sites 3, 7, 43, 44, 54, 63, 65, 80, and 82 were added to this SMP as RI/FS sites).

5.2 Sites

The list of sites at MCB Camp Lejeune that require Site Inspections to determine whether additional RI/FS activities are needed is shown in Table 5-1.

Following are brief descriptions of the sites where SIs are being conducted or are scheduled to be performed.

5.2.1 Site 12 - Explosive Ordnance Disposal (G-4A)

Site 12 covers approximately 8 to 10 acres. During the early 1960s, ordnance was disposed of by burning or exploding when it was found to be inert, unserviceable, or defective. Materials disposed of included ordnance, colored smokes, and white phosphorous. Any undestroyed residues were typically less than 1 pound.

5.2.2 Site 68 - Rifle Range Dump

The Rifle Range Dump is located west of Range Road approximately 2,000 feet west of the Rifle Range water treatment plant and 800 feet east of Stone Creek. This 3- to 4-acre area was used as a disposal site for various types of wastes, including garbage, building debris, waste treatment sludge, and solvents. The fill lies within a 30- to 40-acre area that showed, in aerial photographs, signs of previous disturbance. However, this disturbance may be related to logging activities. The depth of the fill area is approximately 10 feet, and the amount of material deposited has been estimated to be 100,000 cubic yards. An estimated 2,000 gallons of waste solvents were reportedly deposited.

TABLE 5-1

REPORTED DISPOSAL SITES REQUIRING SITE INSPECTIONS
MCB CAMP LEJEUNE, NORTH CAROLINA

Site No.	Site Description	Dates Used	Material Deposited
12	Exposure Ordnance Disposal (EOD) (G-4)	Early 1960s	Ordnance burned or exploded, colored smokes, white phosphorus
68	Rifle Range Dump	1942-1972	Solvents, WTP sludge, construction materials
75	MCAS Basketball Court Site	Early 1950s	Training agents (CN, CNC, CNB, and/or CNS)
76	MCAS Curtis Road Site	1949	Training agents (CN, CNC, CNB, and/or CNS)
84	Building 45 Area	1940s - Unknown	Capacitors, transformers, and construction debris
85	Camp Johnson Battery Dump	1950s	Batteries, charcoal canisters
A	MCAS Officer's Housing Area	Unknown	Hospital wastes

This currently inactive landfill was utilized as a disposal facility for a period of 30 years from 1942 to 1972. The major concern is the potential for waste solvents to affect the groundwater quality beneath the site. Organic compounds were identified in the potable supply wells RR-45 and RR-97. Even though these wells are located upgradient from the site, it was suspected that continuous pumping of the wells may have drawn contaminants to the wells.

5.2.3 Site 75 - MCAS Basketball Court Site

The MCAS Basketball Court Site is located along the north side of Curtis Road. This AOC was reportedly a drum burial area that was used on at least one occasion in the early 1950s. The excavation as seen in an aerial photograph was an oval shaped pit approximately 90 feet long by 70 feet wide and was sufficiently deep to have encountered the water table. An estimated 75 to 100 55-gallon drums were placed in this pit. The drums reportedly contained a chloroacetophenone tear gas solution used for training. Additional organic chemicals, such as chloroform, carbon tetrachloride, benzene, and chloropicrin, may have been present in the solution. Degradation of the drums could have resulted in the release of the suspected materials into the groundwater. This was of particular concern due to the proximity of several water supply wells in the area, two of them being within 500 feet of the alleged disposal site.

5.2.4 Site 76 - MCAS Curtis Road Site

The MCAS Curtis Road Site is located in the vicinity of and along the north side of Curtis Road. The precise location of the site is unknown, and two possible locations have been identified based on interviews and aerial photography. This alleged dump site was reportedly used as a drum disposal area on two occasions in 1949. The estimated area of the disposal unit is 1/4 acre and approximately 25 to 75 55-gallon drums were allegedly involved. It is believed that the drums contained a chloroacetophenone tear gas agent similar to that allegedly buried in the MCAS Basketball Court Site (Site 75). Potential contaminants are chloroform, carbon tetrachloride, benzene, and chloropicrin.

5.2.5 Site A - MCAS (H) Officer's Housing Area

The MCAS (H) Officers' Housing Area site is located on the west bank of the New River. This area was identified during the second round of sampling conducted in 1986. Waste was identified eroding out of a cut bank along the New River in the vicinity of an officers' housing

area. The materials were tentatively identified as hospital wastes. Various hospital waste materials were noted, including hypodermic needles and vials of white powder that were believed to contain a chlorine-based substance. No information was available regarding the volume of the waste or the mode of disposal.

5.2.6 Site 84 - Building 45 Area

The Building 45 Area site is located adjacent to Highway 24 and Northeast Creek just prior to the main entrance to MCB Camp Lejeune. The property and structure was purchased by the Marine Corps in 1942. Prior to 1942, this area was owned and operated by Tidewater Electric Company. MCB Camp Lejeune has no records concerning their operation and use of this area. Behind the building there is evidence of construction debris in the wooded area. This debris consist of concrete rubble, old power guide wires, and a recently removed capacitor.

5.2.7 Site 85 - Camp Johnson Battery Dump

The Camp Johnson Battery Dump was recently discovered off Wilson Drive in the Montford Point Area during road repairs. Decomposed batteries, which were used in military communication equipment during the Korean era, were unearthed as a roadway was being widened. Military personnel utilizing this area also discovered discarded charcoal canisters from old air purifying respirators. The discarded battery packs and charcoal canisters were observed in piles, randomly located throughout a 2 to 3 acre area.

5.3 Scope of Work

During Fiscal Year 1992 and Fiscal Year 1993, SIs were initiated by preparing SI Project Plans (Work Plan, Sampling and Analysis Plan, and Health and Safety Plan) and conducting the field investigations for Sites 3, 7, 43, 44, 54, 63, 65, 80, and 82. The Draft SI Reports were submitted in Fiscal Year 1993. Based on the results, all nine sites were added to the list of RI/FS sites due to either soil or groundwater contamination.

Site inspections at Sites A, 12, 68, 75, 76, 84, and 85 will begin in Fiscal Year 1994 with the preparation of SI Project Plans.

Most of the sites have been previously investigated in various stages of the NACIP Program, and there have been no sites identified that pose immediate threats to human health and the environment.

5.4 Site Management Schedules

Table 5-2 depicts the tentative schedule for site inspections. Based on the results of the SI, future RI/FS activities may be implemented. A summary of Fiscal Year 1994 deliverables is given in Table 5-3.

Table 5 - 2: Site Inspection Site Management Schedule
Sites A, 12, 68, 75, 76, 84, and 85 - MCB Camp Lejeune, NC

Task	Days	Start	Finish
SI Project Plans	212d	9/21/93	7/14/94
Prepare Prelim Draft SI Project Plans	58ed	9/21/93	11/18/93
Submit Prelim Draft SI Project Plans	0ed	11/18/93	11/18/93
LANTDIV Review	28ed	11/18/93	12/16/93
Prepare Draft SI Project Plans	30ed	12/16/93	1/15/94
Submit Draft SI Project Plans	0ed	1/15/94	1/15/94
Agency Review	60ed	1/15/94	3/16/94
Prepare Draft Final SI Proj Plans	60ed	3/16/94	5/15/94
Submit Draft Final SI Project Plans	0ed	5/15/94	5/15/94
Agency Review	30ed	5/15/94	6/14/94
Prepare Final SI Project Plans	30ed	6/14/94	7/14/94
Submit Final SI Project Plans	0ed	7/14/94	7/14/94

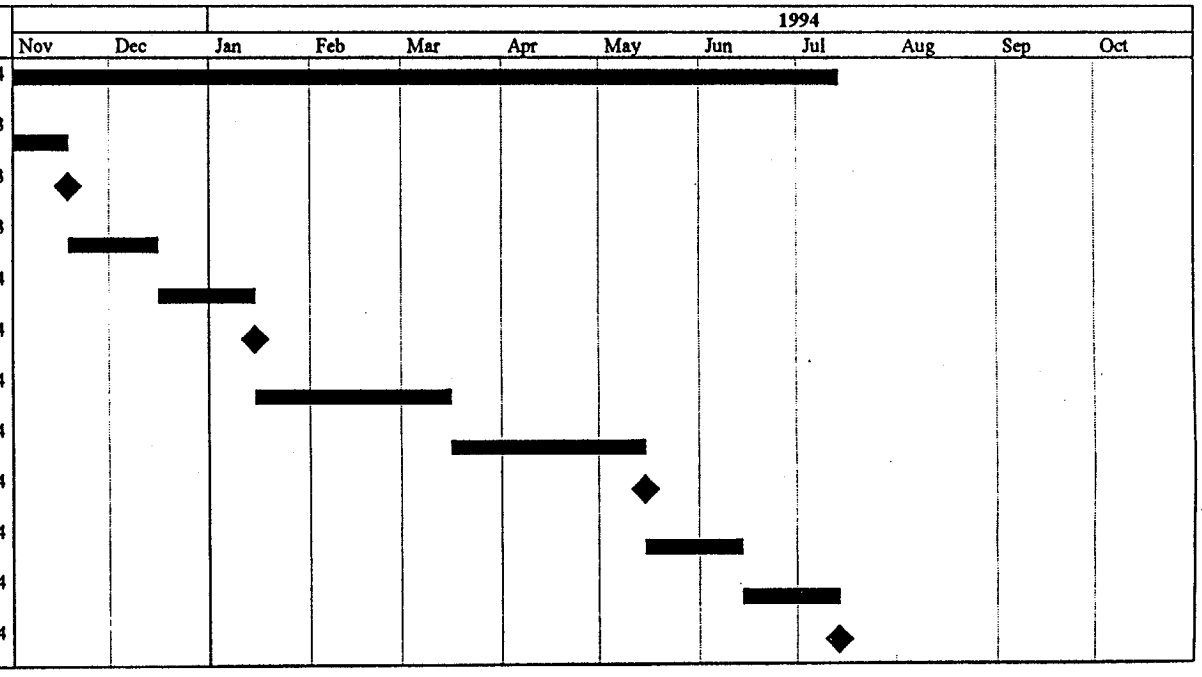


TABLE 5-3

SUMMARY OF FISCAL YEAR 1994 SUBMITTALS
FOR SITE INSPECTION IRP SITES
MCB CAMP LEJEUNE

Sites	Submittal Documents	Anticipated Submittal Date
A, 12, 68, 75, 76, 84, and 85	Preliminary Draft SI Project Plans	November 18, 1993
	Draft SI Project Plans	January 15, 1994
	Draft Final SI Project Plans	May 15, 1994
	Final SI Project Plans	July 14, 1994

6.0 REMOVAL/INTERIM REMEDIAL ACTIONS

Removal actions are taken to prevent immediate and substantial harm to human health. Examples are fencing, removal of aboveground drums, and removal of buried drums, if identified during geophysical surveys. Interim remedial actions are conducted to prevent a potential release of contaminants and/or further migration of contaminants.

A removal action will be conducted at Site 2 to remove approximately 1,700 cubic yards of soil contaminated with pesticides. The contaminated soils are adjacent to the former pesticide mixing area. The mixing area is located behind an administrative building along Holcomb Boulevard.

A removal action has been initiated at Site 6 to remove approximately 60 surface drums and buried drums at two areas of concern. The design phase of this removal action was initiated and completed in Fiscal Year 1993. The removal action is anticipated to be initiated in the first or second quarter of Fiscal Year 1994.

An Interim Remedial Action (IRA) design for the remediation of the shallow aquifer at Site 78 (Hadnot Point Industrial Area) was completed in Fiscal Year 1993 (August 1993). This IRA will be to pump and treat groundwater on site, then discharge the effluent to the Hadnot Point Industrial Area Sewage Treatment Plant (STP). Construction activities for this IRA are anticipated to begin in the first quarter of Fiscal Year 1994.

Access restriction measures will be installed at Site 82, 44, and 74 since these sites may pose a danger to trespassers or military personnel.

The Navy will continue to identify possible removal/interim remedial actions as site investigations proceed.

7.0 REFERENCES

Baker, 1992. Draft Operable Unit Prioritization Report for MCB Camp Lejeune, North Carolina. April 24, 1992.

Camp Lejeune Federal Facility Agreement. February 1991.

ESE, 1990. Final Site Summary Report, MCB Camp Lejeune, North Carolina. September 1990.

Table 1: Expedited Site Management Schedule

Sites 21, 24, and 78 (Operable Unit No. 1), MCB Camp Lejeune, NC

Activity	Days	Start	Finish
Project Management	490ed	4/15/93	8/18/94
Subcontractor Procurement	30ed	4/16/93	5/16/93
Field Investigation	90ed	4/16/93	7/15/93
Mobilization	30ed	4/16/93	5/16/93
Surveying (Pre-Inv.)	5ed	5/10/93	5/15/93
Soil Gas Investigation	7ed	5/10/93	5/17/93
Soil Investigation	30ed	5/17/93	6/16/93
Groundwater Investigation	24ed	6/21/93	7/15/93
SW/SD Investigation	3ed	6/9/93	6/12/93
Surveying (Post-Inv.)	10ed	6/21/93	7/1/93
Sample Analysis/Validation	127ed	5/17/93	9/21/93
Data Evaluation	21ed	9/21/93	10/12/93
Risk Assessment	42ed	10/12/93	11/23/93
RI Report	186ed	10/12/93	4/16/94
Preliminary Draft RI Report	42ed	10/12/93	11/23/93
Comment Period	21ed	11/23/93	12/14/93
Draft RI	21ed	12/14/93	1/4/94
Comment Period	30ed	1/4/94	2/3/94
Draft Final RI Report	30ed	2/3/94	3/5/94
Comment Period	21ed	3/5/94	3/26/94
Final RI	21ed	3/26/94	4/16/94

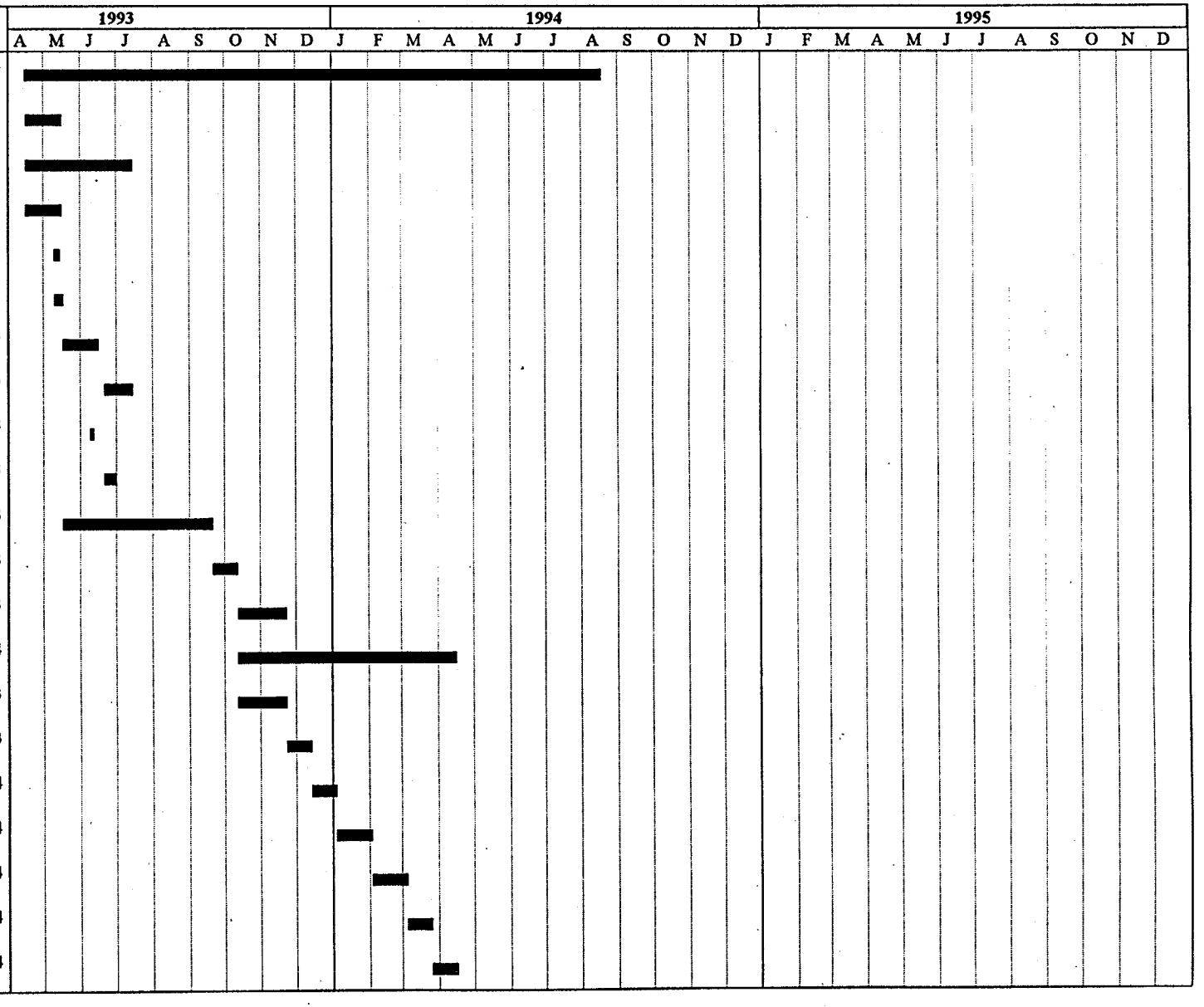


Table 1: Expedited Site Management Schedule

Sites 21, 24, and 78 (Operable Unit No. 1), MCB Camp Lejeune, NC

Activity	Days	Start	Finish
Alternative Screening	14ed	9/21/93	10/5/93
Alternative Evaluation	31ed	10/5/93	11/5/93
FS Report /PRAP	209ed	11/8/93	6/5/94
Preliminary Draft FS/PRAP	35ed	11/8/93	12/13/93
Comment Period	21ed	12/13/93	1/3/94
Draft FS/PRAP	21ed	1/3/94	1/24/94
Comment Period	30ed	1/24/94	2/23/94
Draft Final FS/PRAP	30ed	2/23/94	3/25/94
Comment Period	21ed	3/25/94	4/15/94
Final FS/PRAP	21ed	4/15/94	5/6/94
Public Comment Period	30ed	5/6/94	6/5/94
ROD	163ed	1/10/94	6/22/94
Preliminary Draft ROD	28ed	1/10/94	2/7/94
Comment Period	21ed	2/7/94	2/28/94
Draft ROD	21ed	2/28/94	3/21/94
Comment Period	30ed	3/21/94	4/20/94
Draft Final ROD	21ed	4/20/94	5/11/94
Comment Period	21ed	5/11/94	6/1/94
Final ROD	21ed	6/1/94	6/22/94
Remedial Design	305ed	6/22/94	4/23/95
Procure RA Contractor	60ed	4/23/95	6/22/95
Remedial Action	0ed	6/22/95	6/22/95

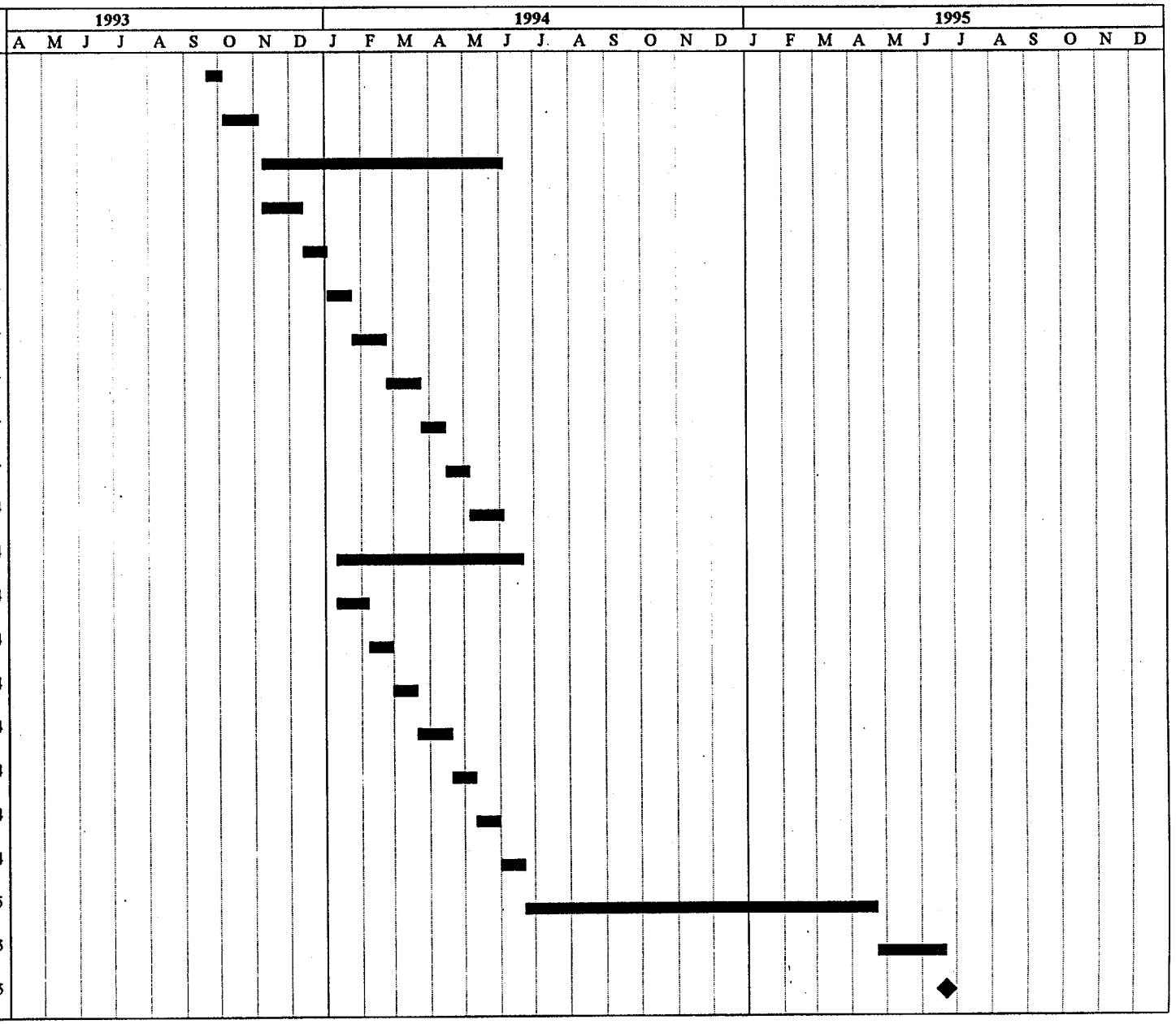


Table 2: Expedited Site Management Schedule

Sites 6 ; 9 and 82 (Operable Unit No. 2), MCB Camp Lejeune, NC

Task	Days	Start	Finish
Prepare Draft RD Work Plan	35ed	12/1/93	1/5/94
Submit Draft RD Work Plan to Agencies	0ed	1/5/94	1/5/94
Agency Review	30ed	1/5/94	2/4/94
Prepare Draft Final RD Work Plan	30ed	2/4/94	3/6/94
Submit Draft Final RD Work Plan	0ed	3/7/94	3/7/94
Agency Review	21ed	3/7/94	3/28/94
Prepare Final RD Work Plan	21ed	3/28/94	4/18/94
Submit Final RD Work Plan	0ed	4/18/94	4/18/94
Conduct Treatability Study	42ed	4/18/94	5/30/94
Prepare 30 % Design / Draft Design Report / Draft RA	63ed	4/18/94	6/20/94
Submit 30 % Design / Draft Design Report / Draft RA	0ed	6/20/94	6/20/94
Agency Review	42ed	6/20/94	8/1/94
Prepare 90 % Design / Draft Final Design Report	42ed	8/1/94	9/12/94
Submit 90 % Design / Draft Final Design Report	0ed	9/12/94	9/12/94
Agency Review	21ed	9/12/94	10/3/94
Prepare Final Design / Final Design Report / Final RA Work	21ed	10/3/94	10/24/94
Submit Final Design / Final Design Report / Final RA Work	0ed	10/24/94	10/24/94
Procure Remediation Contractor	60ed	10/24/94	12/23/94
Begin Construction (Mobilization)	0ed	12/23/94	12/23/94

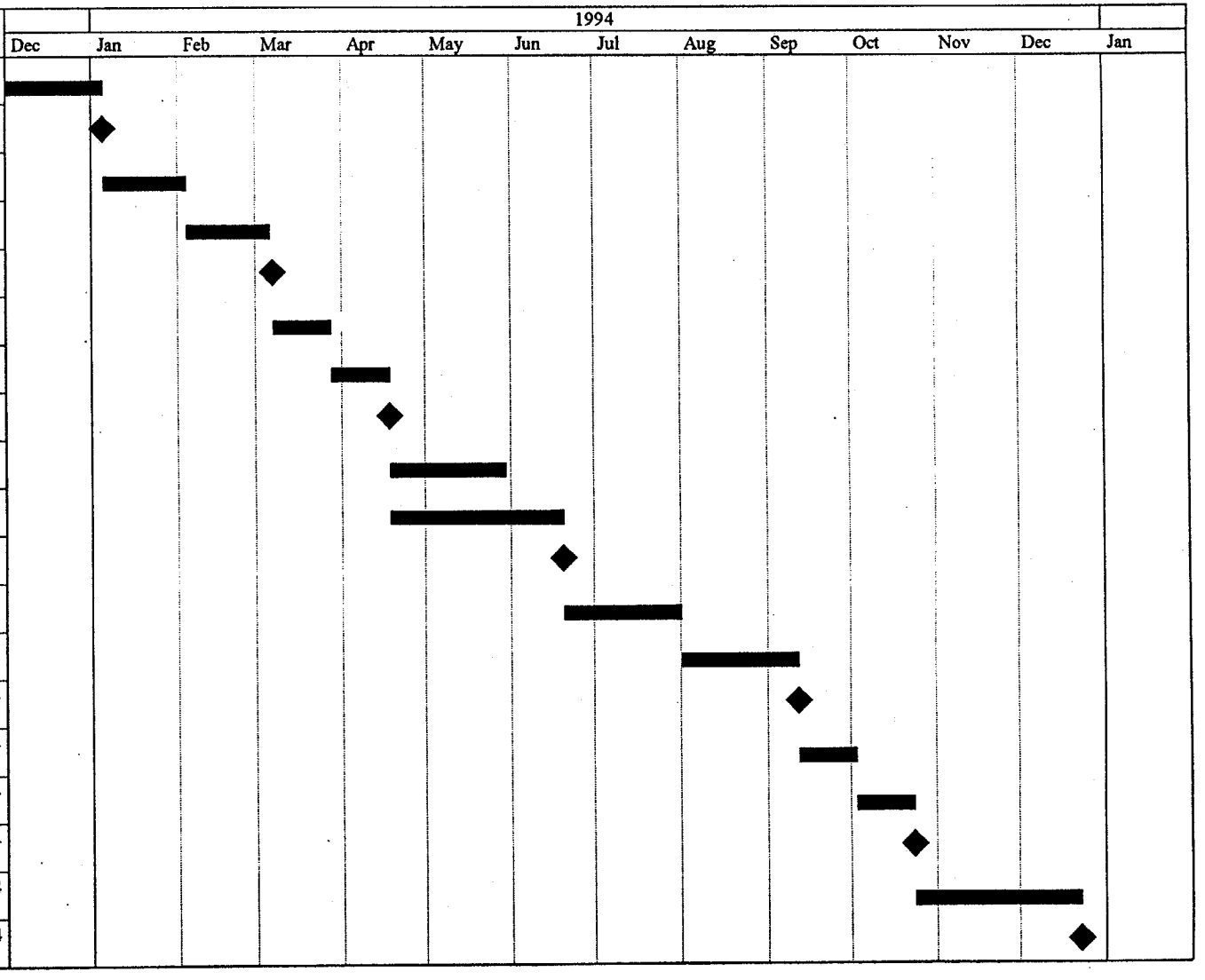


Table 3: Expedited Site Management Schedule

Sites 41, 69 and 74 (Operable Unit No. 4), MCB Camp Lejeune, NC

Task	Days	Start	Finish
Submit Draft Final RI/FS Project Plans	0ed	10/8/93	10/8/93
Agency Review	21ed	10/8/93	10/29/93
Prepare Final RI/FS Project Plans	21ed	10/29/93	11/19/93
Submit Final RI/FS Project Plan	0ed	11/19/93	11/19/93
RI Field Investigation	442ed	11/19/93	2/4/95
Mobilization	30ed	11/19/93	12/19/93
Field Investigation	60ed	12/19/93	2/17/94
Data Analysis/Validation	116ed	12/19/93	4/14/94
Data Evaluation	42ed	4/14/94	5/26/94
RI / RA	28ed	5/26/94	6/23/94
Prepare Preliminary Draft RI	42ed	5/26/94	7/7/94
Submit Preliminary Draft RI	0ed	7/7/94	7/7/94
LANTDIV Review	28ed	7/7/94	8/4/94
Prepare Draft RI	21ed	8/4/94	8/25/94
Submit Draft RI	0ed	8/25/94	8/25/94
Agency Review	30ed	8/25/94	9/24/94
Prepare Draft Final RI	30ed	9/24/94	10/24/94
Submit Draft Final RI	0ed	10/24/94	10/24/94
Agency Review	21ed	10/24/94	11/14/94
Prepare Final RI	21ed	11/14/94	12/5/94
Submit Final RI	0ed	12/5/94	12/5/94
Prepare Preliminary Draft FS	42ed	7/4/94	8/15/94
Submit Preliminary Draft FS	0ed	8/15/94	8/15/94
LANTDIV Review	28ed	8/15/94	9/12/94

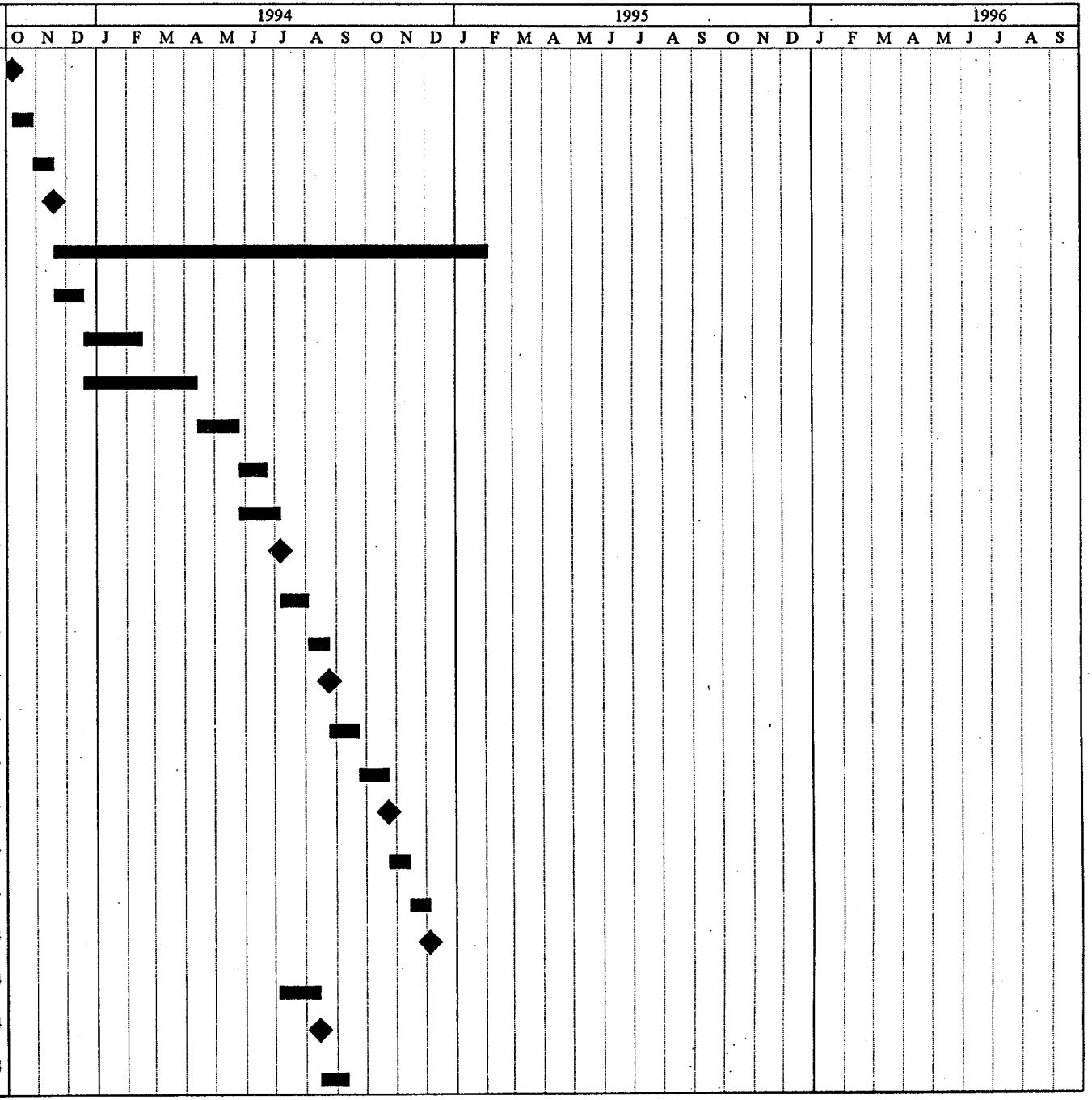
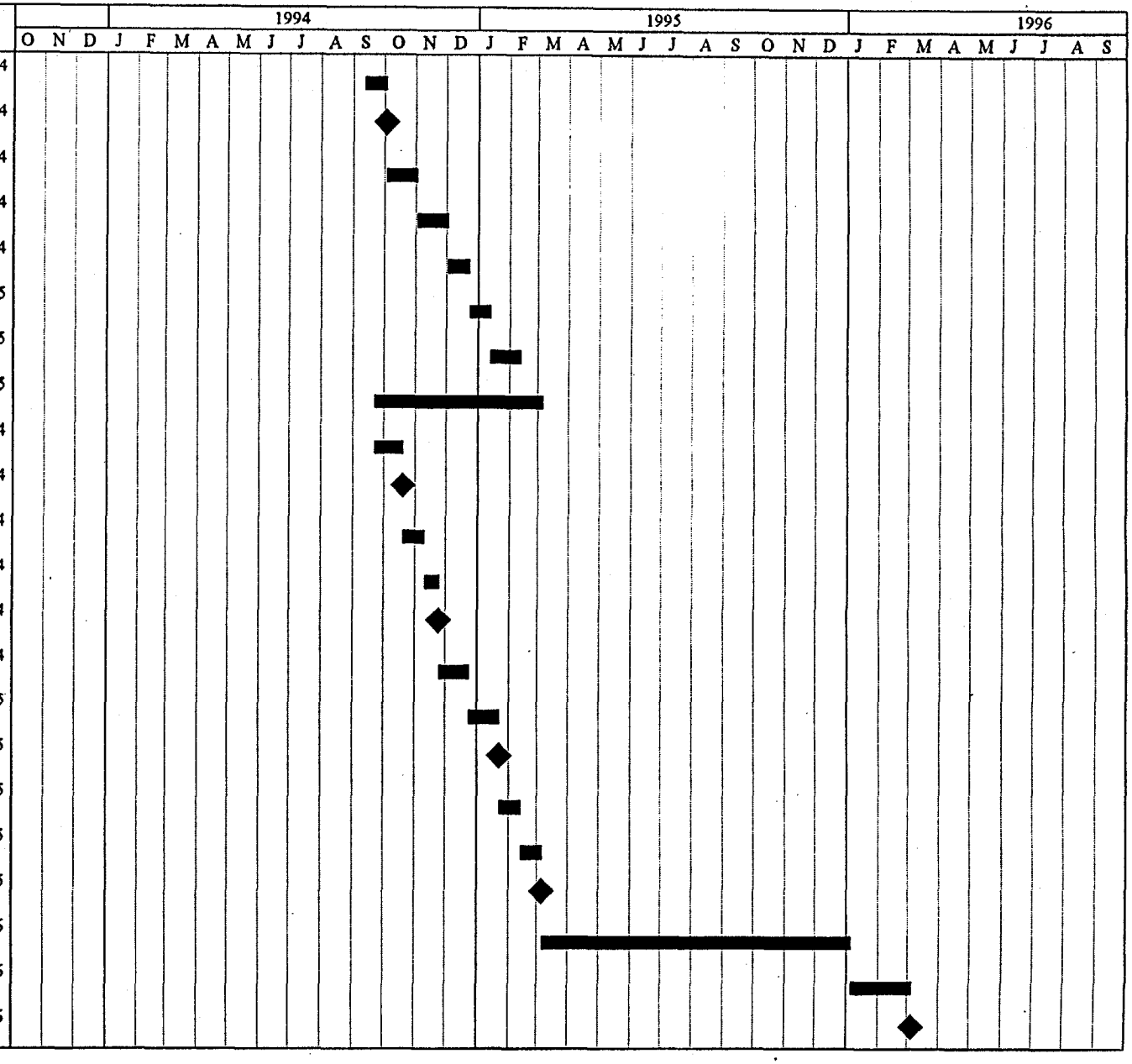


Table 3: Expedited Site Management Schedule

Sites 41, 69 and 74 (Operable Unit No. 4), MCB Camp Lejeune, NC

Task	Days	Start	Finish
Prepare Draft FS /PRAP	21ed	9/12/94	10/3/94
Submit Draft FS/PRAP	0ed	10/3/94	10/3/94
Agency Review	30ed	10/3/94	11/2/94
Prepare Draft Final FS/PRAP	30ed	11/2/94	12/2/94
Agency Review	21ed	12/2/94	12/23/94
Prepare Final FS/PRAP	21ed	12/23/94	1/13/95
Public Comment Period	30ed	1/13/95	2/12/95
ROD	165ed	9/22/94	3/6/95
Prepare Preliminary Draft ROD	28ed	9/22/94	10/20/94
Submit Preliminary Draft ROD	0ed	10/20/94	10/20/94
LANTDIV Review	21ed	10/20/94	11/10/94
Prepare Draft ROD	14ed	11/10/94	11/24/94
Submit Draft ROD	0ed	11/24/94	11/24/94
Agency Review	30ed	11/24/94	12/24/94
Prepare Draft Final ROD	30ed	12/24/94	1/23/95
Submit Draft Final ROD	0ed	1/23/95	1/23/95
Agency Review	21ed	1/23/95	2/13/95
Prepare Final ROD	21ed	2/13/95	3/6/95
Submit Final ROD	0ed	3/6/95	3/6/95
Remedial Design (1,2)	305ed	3/6/95	1/5/96
Procure RA Contractor (1,2)	60ed	1/5/96	3/5/96
Remedial Action (1,2)	0ed	3/5/96	3/5/96



(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section

Table 4 - 4: Site Management Schedule

Site 2 (Operable Unit No. 5), MCB Camp Lejeune, NC

Activity	Days	Start	Finish
Project Management	283d	4/15/93	5/16/94
Subcontractor Procurement	30ed	4/16/93	5/16/93
Field Investigation	41d	4/16/93	6/12/93
Mobilization	30ed	4/16/93	5/16/93
Surveying (Pre-Inv.)	5ed	5/10/93	5/15/93
Soil Investigation	24ed	5/17/93	6/10/93
Groundwater Investigation	5ed	5/28/93	6/2/93
SW/SD Investigation	2ed	5/24/93	5/26/93
Surveying (Post-Inv.)	2ed	6/1/93	6/3/93
Aquifer Tests	5ed	6/7/93	6/12/93
Sample Analysis/Validation	93ed	5/17/93	8/18/93
Data Evaluation	21ed	8/18/93	9/8/93
Risk Assessment	42ed	9/8/93	10/20/93
RI Report	193d	9/8/93	6/4/94
Preliminary Draft RI	49ed	9/8/93	10/27/93
Comment Period	21ed	10/27/93	11/17/93
Draft RI Report	21ed	11/24/93	12/15/93
Comment Period	30ed	12/22/93	1/21/94
Draft Final RI	30ed	2/20/94	3/22/94
Comment Period	21ed	4/14/94	5/5/94
Final RI Report	21ed	5/14/94	6/4/94

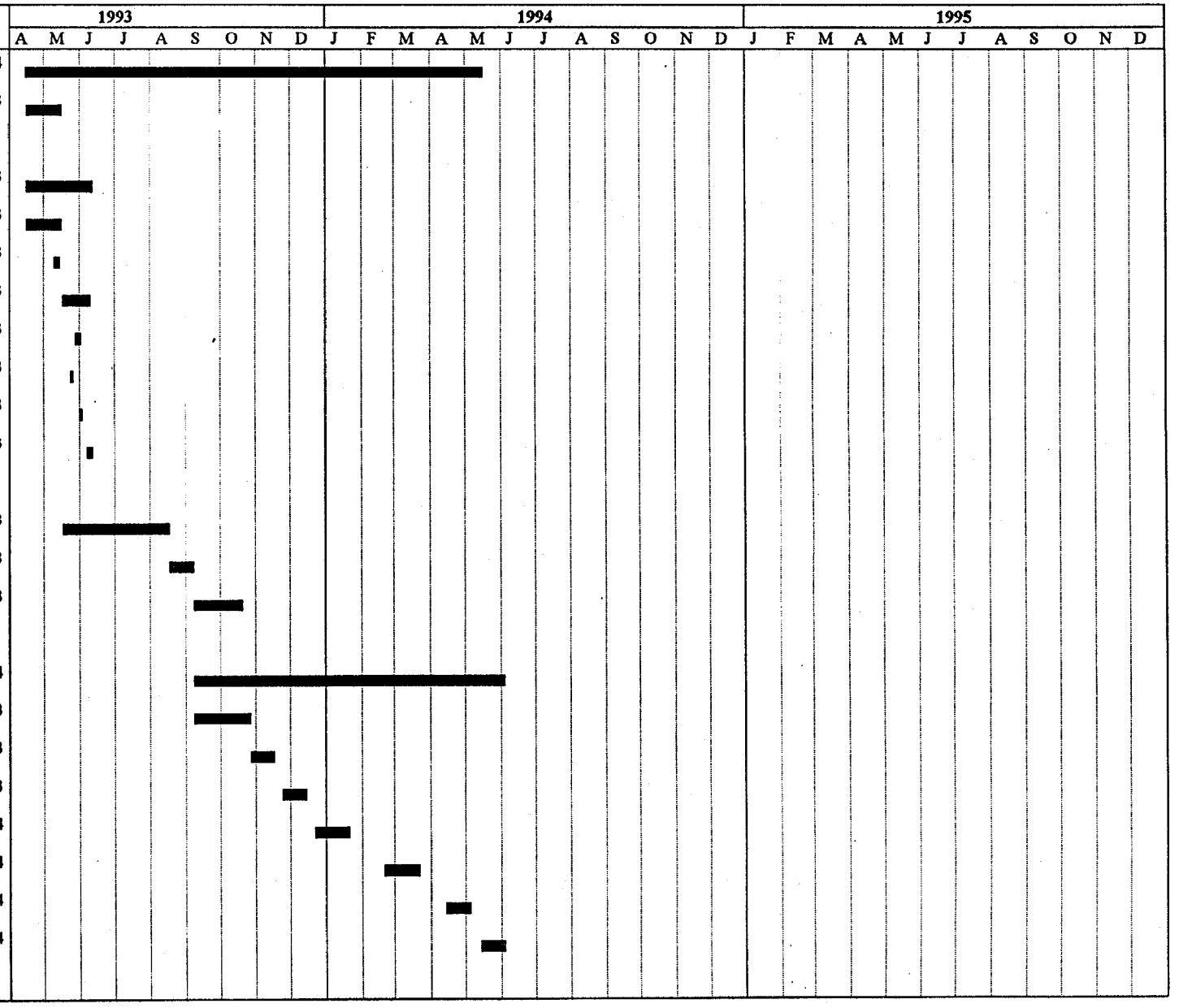


Table 4 - 4: Site Management Schedule

Site 2 (Operable Unit No. 5), MCB Camp Lejeune, NC

Activity	Days	Start	Finish
Alternative Screening	21ed	7/28/93	8/18/93
Alternative Evaluation	21ed	8/18/93	9/8/93
FS Report	169d	9/8/93	5/3/94
Preliminary Draft FS	56ed	9/8/93	11/3/93
Comment Period	28ed	11/3/93	12/1/93
Draft FS/PRAP	21ed	12/1/93	12/22/93
Comment Period	30ed	12/22/93	1/21/94
Draft Final FS/PRAP	30ed	1/21/94	2/20/94
Comment Period	21ed	2/20/94	3/13/94
Final FS/PRAP	21ed	3/13/94	4/3/94
Public Comment	30ed	4/3/94	5/3/94
ROD	102d	12/1/93	4/22/94
Preliminary Draft ROD	28ed	12/1/93	12/29/93
Comment Period	21ed	12/29/93	1/19/94
Draft ROD	14ed	1/19/94	2/2/94
Comment Period	30ed	2/2/94	3/4/94
Draft Final ROD	21ed	3/4/94	3/25/94
Comment Period	14ed	3/25/94	4/8/94
Final ROD	14ed	4/8/94	4/22/94
Remedial Design	305ed	4/22/94	2/21/95
Procure RA Contractor	60ed	2/21/95	4/22/95
Remedial Action	0ed	4/22/95	4/22/95

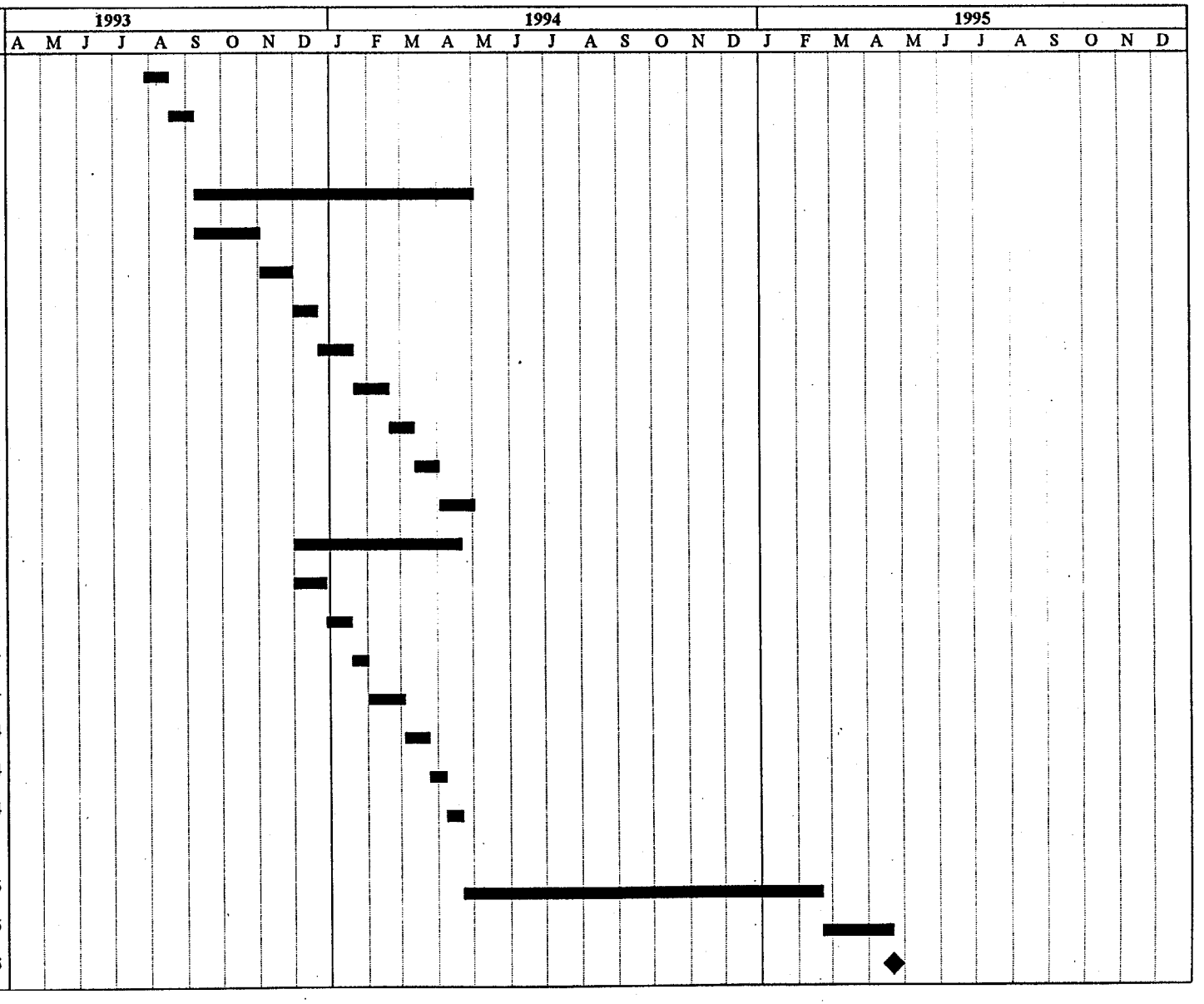
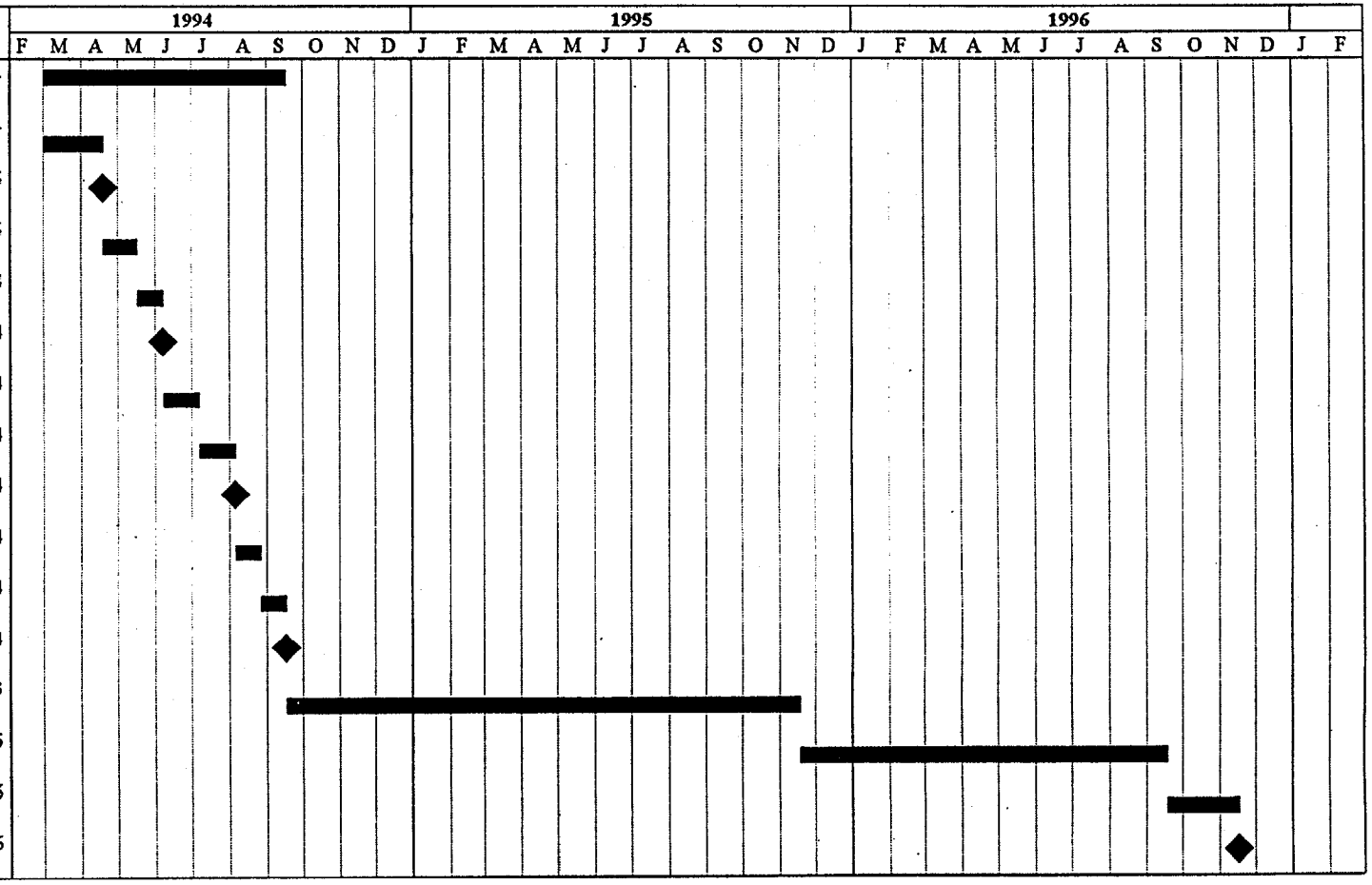


Table 5: Expedited Site Management Schedule

Sites 36, 43, 44, 54 and 86 (Operable Unit No. 6), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	144d	3/1/94	9/17/94
Prepare Prelim. Draft RI/FS Proj. Plans	49ed	3/1/94	4/19/94
Submit Prelim. Draft RI/FS Proj. Plans	0ed	4/19/94	4/19/94
LANTDIV Review	28ed	4/19/94	5/17/94
Prepare Draft RI/FS Project Plans	21ed	5/17/94	6/7/94
Submit Draft RI/FS Project Plans	0ed	6/7/94	6/7/94
Agency Review	30ed	6/7/94	7/7/94
Prepare Draft Final RI/FS Project Plans	30ed	7/7/94	8/6/94
Submit Draft Final RI/FS Project Plans	0ed	8/6/94	8/6/94
Agency Review	21ed	8/6/94	8/27/94
Prepare Final RI/FS Project Plans	21ed	8/27/94	9/17/94
Submit Final RI/FS Project Plans	0ed	9/17/94	9/17/94
RI/FS, PRAP, and ROD (1)	427ed	9/17/94	11/18/95
Remedial Design (2)	305ed	11/18/95	9/18/96
Procure RA Contractor (2)	60ed	9/18/96	11/17/96
Begin Remedial Action (2)	0ed	11/17/96	11/17/96



(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(e)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 6: Expedited Site Management Schedule

Sites 1, 28, and 30 (Operable Unit No. 7), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	160d	3/1/93	10/9/93
Prepare Prelim Draft RI/FS Project Plans	60ed	3/1/93	4/30/93
Submit Prelim Draft RI/FS Project Plans	0ed	4/30/93	4/30/93
LANTDIV Review	30d	4/30/93	6/10/93
Prepare Draft RI/FS Project Plans	30ed	5/30/93	6/29/93
Submit Draft RI/FS Project Plans	0ed	6/29/93	6/29/93
Agency Review	30ed	6/29/93	7/29/93
Prepare Draft Final RI/FS Project Plans	30ed	7/29/93	8/28/93
Submit Draft Final RI/FS Project Plans	0ed	8/28/93	8/28/93
Agency Review	21ed	8/28/93	9/18/93
Prepare Final RI/FS Project Plans	21ed	9/18/93	10/9/93
Submit Final RI/FS Project Plans	0ed	10/9/93	10/9/93
Field Investigation	63ed	1/3/94	3/7/94
Sample Analysis / Validation	119ed	1/3/94	5/2/94
Data Evaluation	21ed	5/2/94	5/23/94
Risk Assessment	42ed	5/23/94	7/4/94
RI Report	144d	6/6/94	12/23/94
Preliminary Draft RI Report	42ed	6/6/94	7/18/94
Comment Period	28ed	7/18/94	8/15/94
Draft RI	28ed	8/15/94	9/12/94
Comment Period	30ed	9/12/94	10/12/94
Draft Final RI Report	30ed	10/12/94	11/11/94
Comment Period	21ed	11/11/94	12/2/94
Final RI	21ed	12/2/94	12/23/94

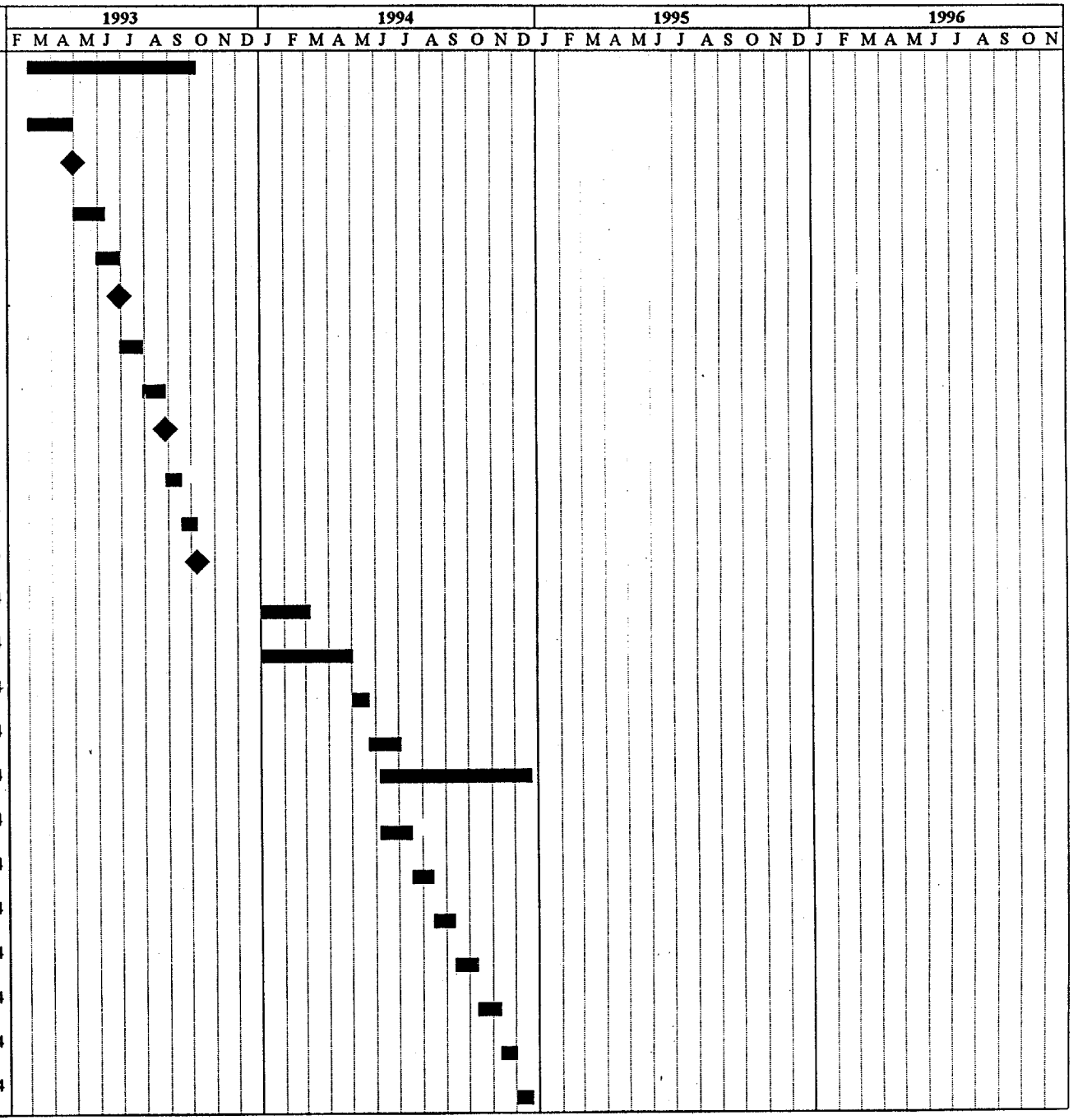
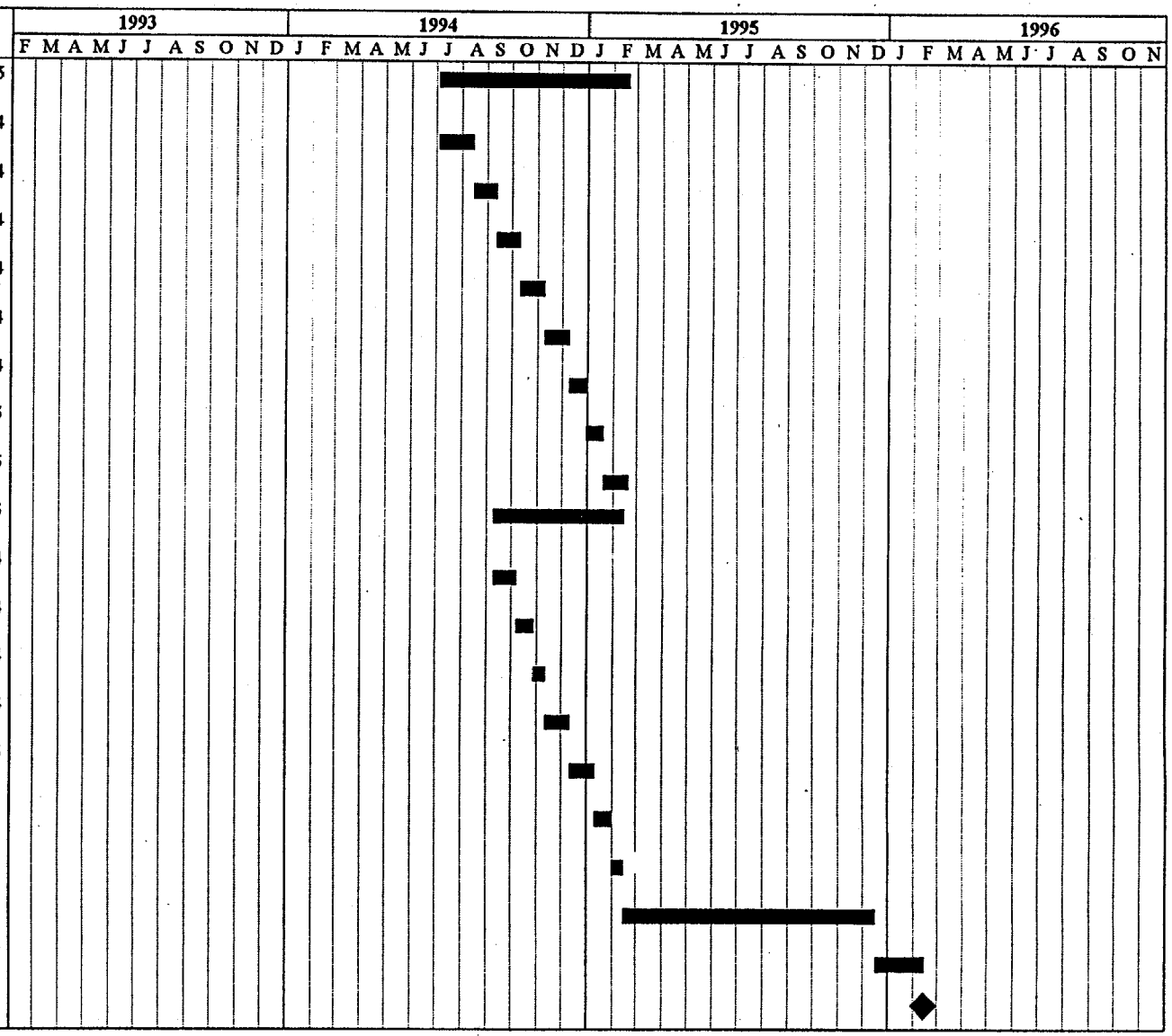


Table 6: Expedited Site Management Schedule

Sites 1, 28, and 30 (Operable Unit No. 7), MCB Camp Lejeune, NC

Task	Days	Start	Finish
FS Report / PRAP	165d	7/4/94	2/19/95
Preliminary Draft FS / PRAP	42ed	7/4/94	8/15/94
Comment Period	28ed	8/15/94	9/12/94
Draft FS / PRAP	28ed	9/12/94	10/10/94
Comment Period	30ed	10/10/94	11/9/94
Draft Final FS / PRAP	30ed	11/9/94	12/9/94
Comment Period	21ed	12/9/94	12/30/94
Final FS / PRAP	21ed	12/30/94	1/20/95
Public Comment Period	30ed	1/20/95	2/19/95
ROD	112d	9/9/94	2/14/95
Preliminary Draft ROD	28ed	9/9/94	10/7/94
Comment Period	21ed	10/7/94	10/28/94
Draft ROD	14ed	10/28/94	11/11/94
Comment Period	30ed	11/11/94	12/11/94
Draft Final ROD	30ed	12/11/94	1/10/95
Comment Period	21ed	1/10/95	1/31/95
Final ROD	14ed	1/31/95	2/14/95
Remedial Design (1,2)	305ed	2/14/95	12/16/95
Procure RA Contractor	60ed	12/16/95	2/14/96
Begin RA (1,2)	0ed	2/14/96	2/14/96



(1) Remedial Design/Remedial Action Schedules are estimates and will be established and detailed at the conclusion of RI/FS.

(2) Remedial Design (RD) duration (15 months) is based on the requirement of Section 120(e)(2) of CERCLA. Actual RD Schedule will be established following the RI/FS.

Table 7: Expedited Site Management Schedule

Site 16 (Operable Unit No. 8), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	146d	11/15/93	6/7/94
Prepare Prelim Draft RI/FS Project Plans	60ed	11/15/93	1/14/94
Submit Prelim Draft RI/FS Project Plans	0ed	1/14/94	1/14/94
LANTDIV Review	21ed	1/14/94	2/4/94
Prepare Draft RI/FS Project Plans	21ed	2/4/94	2/25/94
Submit Draft RI/FS Project Plans	0ed	2/25/94	2/25/94
Agency Review	30ed	2/25/94	3/27/94
Prepare Draft Final RI/FS Project Plans	30ed	3/27/94	4/26/94
Submit Draft Final RI/FS Project Plans	0ed	4/26/94	4/26/94
Agency Review	21ed	4/26/94	5/17/94
Prepare Final RI/FS Project Plans	21ed	5/17/94	6/7/94
Submit Final RI/FS Project Plans	0ed	6/7/94	6/7/94
RI/FS, PRAP, and ROD	427ed	6/7/94	8/8/95
Remedial Design	305ed	8/8/95	6/8/96
Procure RA Contractor	60ed	6/8/96	8/7/96
Begin Remedial Action	0ed	8/7/96	8/7/96

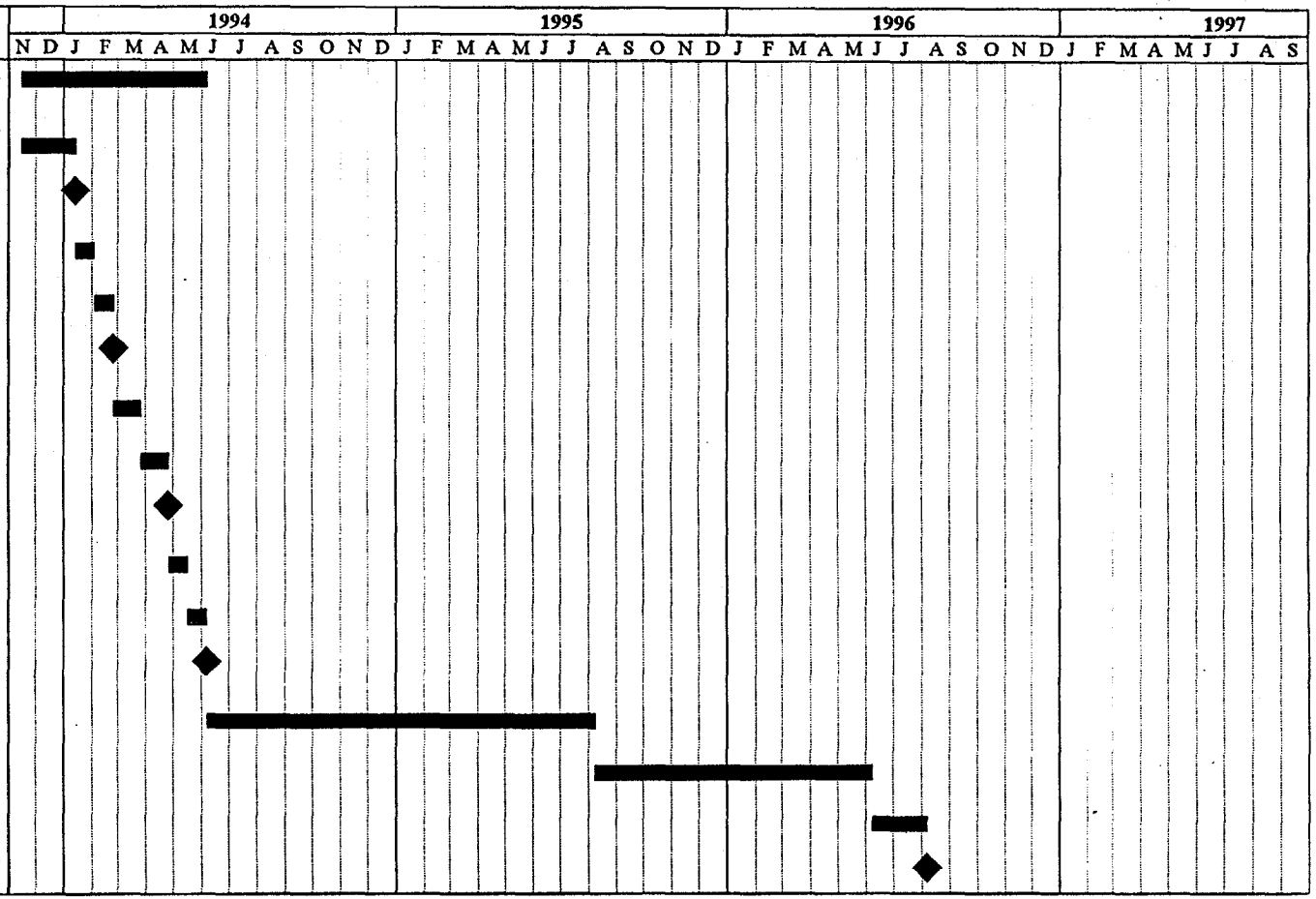


Table 8: Expedited Site Management Schedule

Sites 65 and 73 (Operable Unit No. 9), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	151d	4/1/94	10/29/94
Prepare Prelim Draft RI/FS Project Plans	60ed	4/1/94	5/31/94
Submit Prelim Draft RI/FS Project Plans	0ed	5/31/94	5/31/94
LANTDIV Review	28ed	5/31/94	6/28/94
Prepare Draft RI/FS Project Plans	21ed	6/28/94	7/19/94
Submit Draft RI/FS Project Plans	0ed	7/19/94	7/19/94
Agency Review	30ed	7/19/94	8/18/94
Prepare Draft Final RI/FS Project Plans	30ed	8/18/94	9/17/94
Submit Draft Final RI/FS Project Plans	0ed	9/17/94	9/17/94
Agency Review	21ed	9/17/94	10/8/94
Prepare Final RI/FS Project Plans	21ed	10/8/94	10/29/94
Submit Final RI/FS Project Plans	0ed	10/29/94	10/29/94
RI/FS PRAP, and ROD	427ed	10/29/94	12/30/95
Remedial Design	305ed	12/30/95	10/30/96
Procure RA Contractor	60ed	10/30/96	12/29/96
Begin Remedial Action	0ed	12/29/96	12/29/96

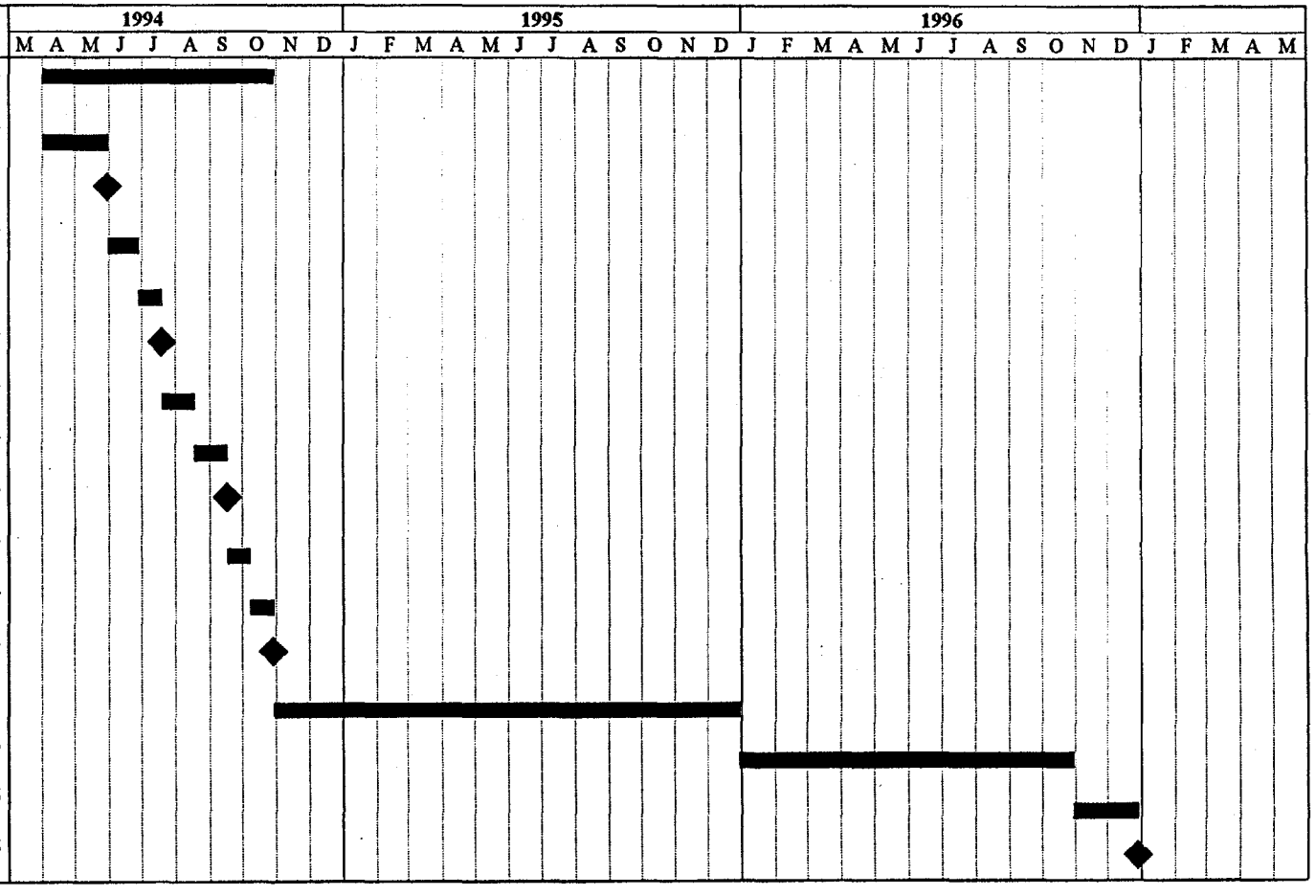


Table 9: Expedited Site Management Schedule

Site 35 (Operable Unit no. 10), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	180d	5/1/93	1/8/94
Prepare Prelim Draft RI/FS Project Plans	60ed	5/1/93	6/30/93
Submit Prelim Draft RI/FS Project Plans	0ed	6/30/93	6/30/93
LANTDIV Review	30ed	6/30/93	7/30/93
Prepare Draft RI/FS Project Plans	30ed	7/30/93	8/29/93
Submit Draft RI/FS Project Plans	0ed	8/29/93	8/29/93
Agency Review	60ed	8/29/93	10/28/93
Prepare Draft Final RI/FS Project Plans	30ed	10/28/93	11/27/93
Submit Draft Final RI/FS Project Plans	0ed	11/27/93	11/27/93
Agency Review	21ed	11/27/93	12/18/93
Prepare Final RI/FS Project Plans	21ed	12/18/93	1/8/94
Submit Final RI/FS Project Plans	0ed	1/8/94	1/8/94
Field Investigation	42ed	3/1/94	4/12/94
Sample Analysis/Validation	84ed	3/1/94	5/24/94
Data Evaluation	21ed	5/24/94	6/14/94
Risk Assessment	28ed	6/14/94	7/12/94
RI Report	144d	6/14/94	12/31/94
Preliminary Draft RI Report	42ed	6/14/94	7/26/94
Comment Period	28ed	7/26/94	8/23/94
Draft RI Report	28ed	8/23/94	9/20/94
Comment Period	30ed	9/20/94	10/20/94
Draft Final RI Report	30ed	10/20/94	11/19/94
Comment Period	21ed	11/19/94	12/10/94
Final RI	21ed	12/10/94	12/31/94

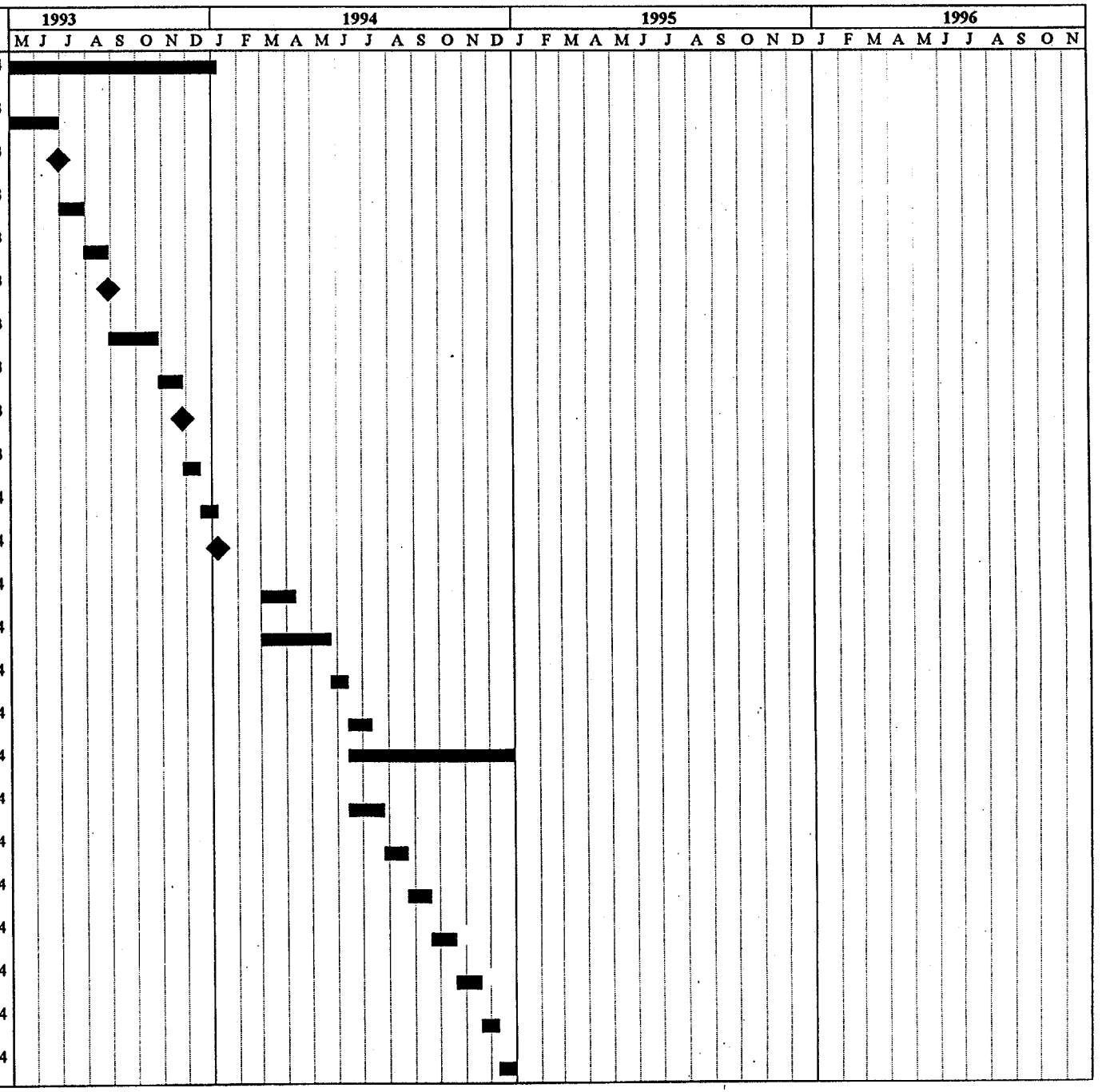


Table 9: Expedited Site Management Schedule

Site 35 (Operable Unit no. 10), MCB Camp Lejeune, NC

Task	Days	Start	Finish
FS Report/PRAP	139d	7/26/94	2/6/95
Preliminary Draft FS/PRAP	28ed	7/26/94	8/23/94
Comment Period	21ed	8/23/94	9/13/94
Draft FS/PRAP	21ed	9/13/94	10/4/94
Comment Period	30ed	10/4/94	11/3/94
Draft Final FS/PRAP	30ed	11/3/94	12/3/94
Comment Period	21ed	12/3/94	12/24/94
Final FS/PRAP	14ed	12/24/94	1/7/95
Public Comment Period	30ed	1/7/95	2/6/95
ROD	122d	10/1/94	3/22/95
Preliminary Draft ROD	28ed	10/1/94	10/29/94
Comment Period	28ed	10/29/94	11/26/94
Draft ROD	21ed	11/26/94	12/17/94
Comment Period	30ed	12/17/94	1/16/95
Draft Final ROD	30ed	1/16/95	2/15/95
Comment Period	21ed	2/15/95	3/8/95
Final ROD	14ed	3/8/95	3/22/95
Remedial Design	305ed	3/22/95	1/21/96
Procure RA Contractor	60ed	1/21/96	3/21/96
Begin RA	0ed	3/21/96	3/21/96

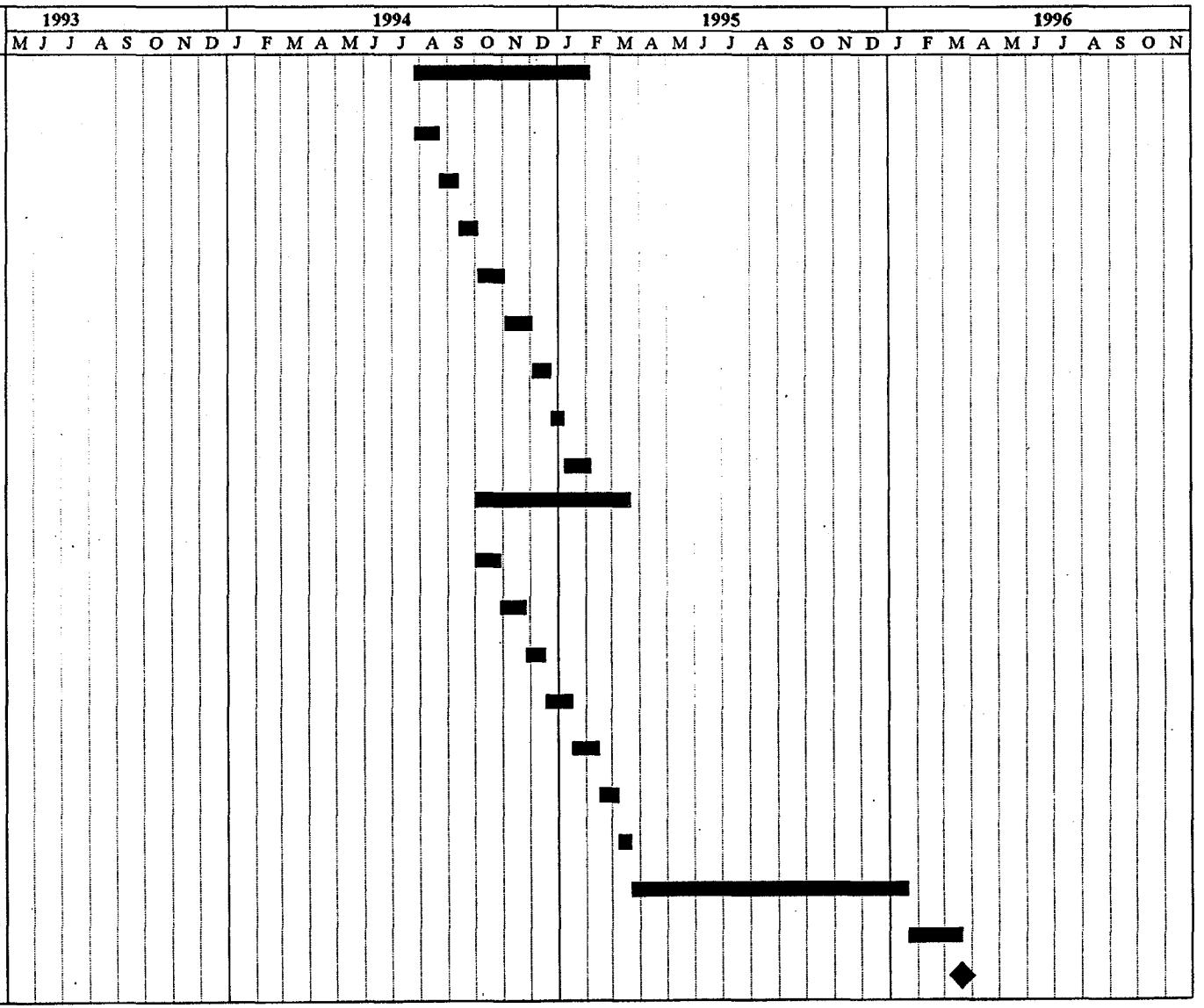
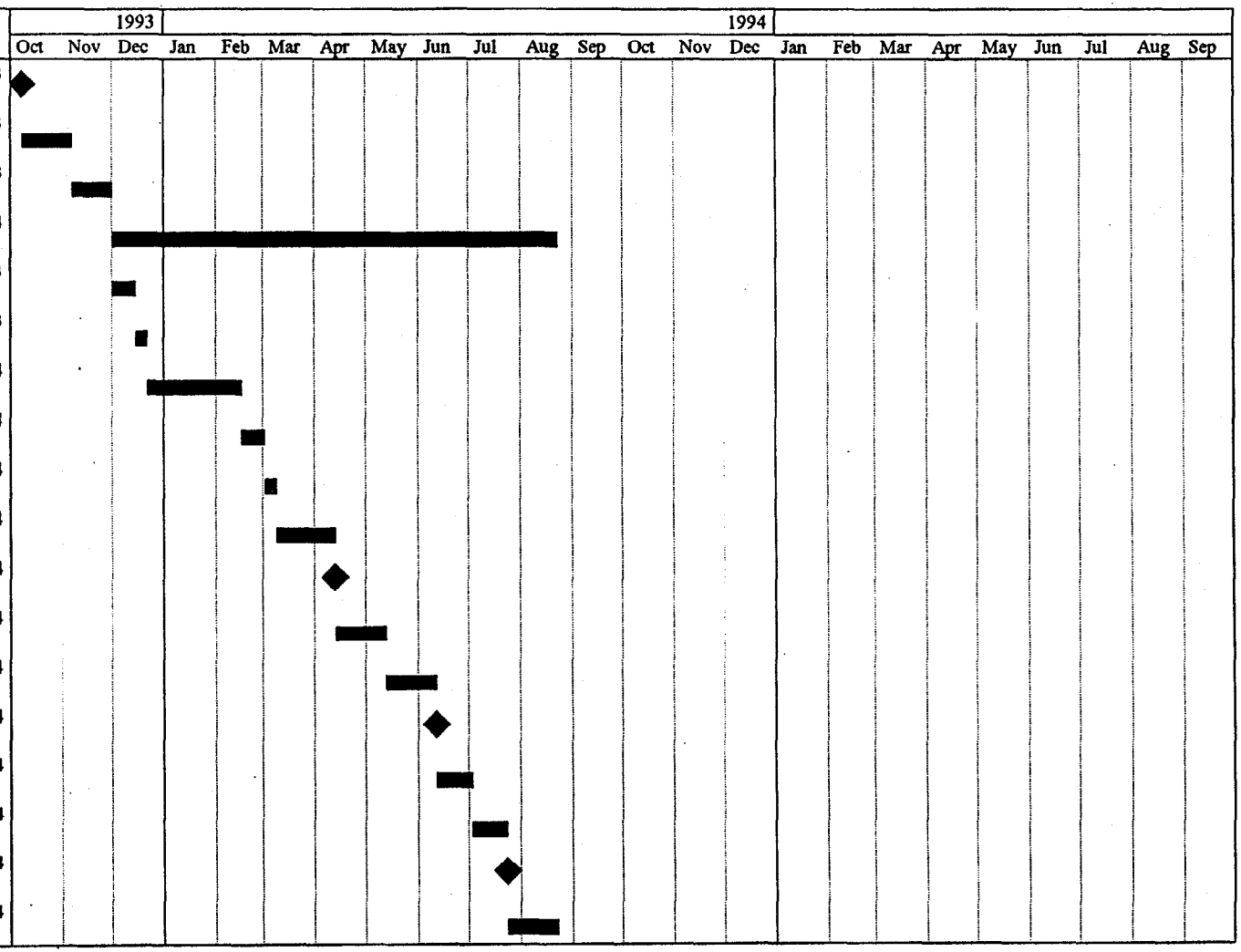


Table 10: Expedited Site Management Schedule

Interim Remedial Action (IRA) RI/FS Schedule, Site 35 (Operable Unit No. 10), MCB Camp Lejeune, NC

Task	Days	Start	Finish
Submit Draft Final IRA Project Plans	0ed	10/8/93	10/8/93
Agency Review	30ed	10/8/93	11/7/93
Final IRA Project Plans	24ed	11/7/93	12/1/93
RI/FS	265ed	12/1/93	8/23/94
Notice to Proceed/Mobilization	14ed	12/1/93	12/15/93
Field Investigation	7ed	12/15/93	12/22/93
Data Analysis/Validation	56ed	12/22/93	2/16/94
Data Evaluation	14ed	2/16/94	3/2/94
Risk Assessment	7ed	3/2/94	3/9/94
Prepare Draft RI/FS and PRAP	35ed	3/9/94	4/13/94
Submit Draft RI/FS and PRAP	0ed	4/13/94	4/13/94
Government Review	30ed	4/13/94	5/13/94
Prepare Draft Final RI/FS and PRAP	30ed	5/13/94	6/12/94
Submit Draft Final RI/FS and PRAP	0ed	6/12/94	6/12/94
Agency Review	21ed	6/12/94	7/3/94
Prepare Final RI/FS and PRAP	21ed	7/3/94	7/24/94
Submit Final RI/FS and PRAP	0ed	7/24/94	7/24/94
Public Comment Period	30ed	7/24/94	8/23/94

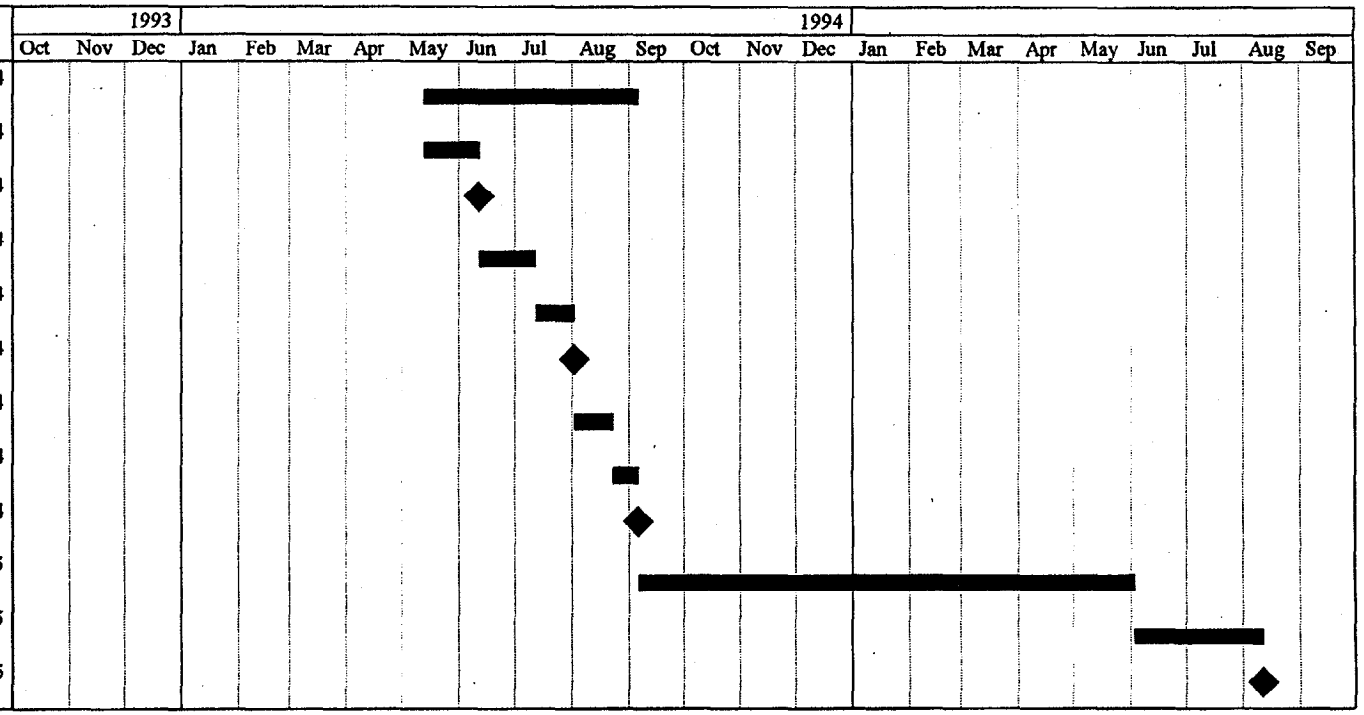


Note: Review/Responce durations are accelerated and are shorter than the FFA periods.

Table 10: Expedited Site Management Schedule

Interim Remedial Action (IRA) RI/FS Schedule, Site 35 (Operable Unit No. 10), MCB Camp Lejeune, NC

Task	Days	Start	Finish
ROD	116ed	5/13/94	9/6/94
Prepare Draft ROD	30ed	5/13/94	6/12/94
Submit Draft ROD	0ed	6/12/94	6/12/94
Agency Review	30ed	6/12/94	7/12/94
Prepare Draft Final ROD	21ed	7/12/94	8/2/94
Submit Draft Final ROD	0ed	8/2/94	8/2/94
Agency Review	21ed	8/2/94	8/23/94
Prepare Final ROD	14ed	8/23/94	9/6/94
Submit Final ROD	0ed	9/6/94	9/6/94
Remedial Design	270ed	9/6/94	6/3/95
Procure RA Contractor	70ed	6/3/95	8/12/95
Initiate Interim RA	0ed	8/12/95	8/12/95



Note: Review/Responce durations are accelerated and are shorter than the FFA periods.

Table 11 Expedited Site Management Schedule

Site 7 and 80 (Operable Unit No. 11), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	152d	12/1/93	7/1/94
Prepare Prelim Draft RI/FS Project Plans	60ed	12/1/93	1/30/94
Submit Prelim Draft RI/FS Project Plans	0ed	1/31/94	1/31/94
LANTDIV Review	28ed	1/31/94	2/28/94
Prepare Draft RI/FS Project Plans	21ed	2/28/94	3/21/94
Submit Draft RI/FS Project Plans	0ed	3/21/94	3/21/94
Agency Review	30ed	3/21/94	4/20/94
Prepare Draft Final RI/FS Project Plans	30ed	4/20/94	5/20/94
Submit Draft Final RI/FS Project Plans	0ed	5/20/94	5/20/94
Agency Review	21ed	5/20/94	6/10/94
Prepare Final RI/FS Project Plans	21ed	6/10/94	7/1/94
Submit Final RI/FS Project Plans	0ed	7/1/94	7/1/94
RI/FS PRAP, and ROD	427ed	7/1/94	9/1/95
Remedial Design	305ed	9/1/95	7/2/96
Procure RA Contractor	60ed	7/2/96	8/31/96
Begin Remedial Action	0ed	8/31/96	8/31/96

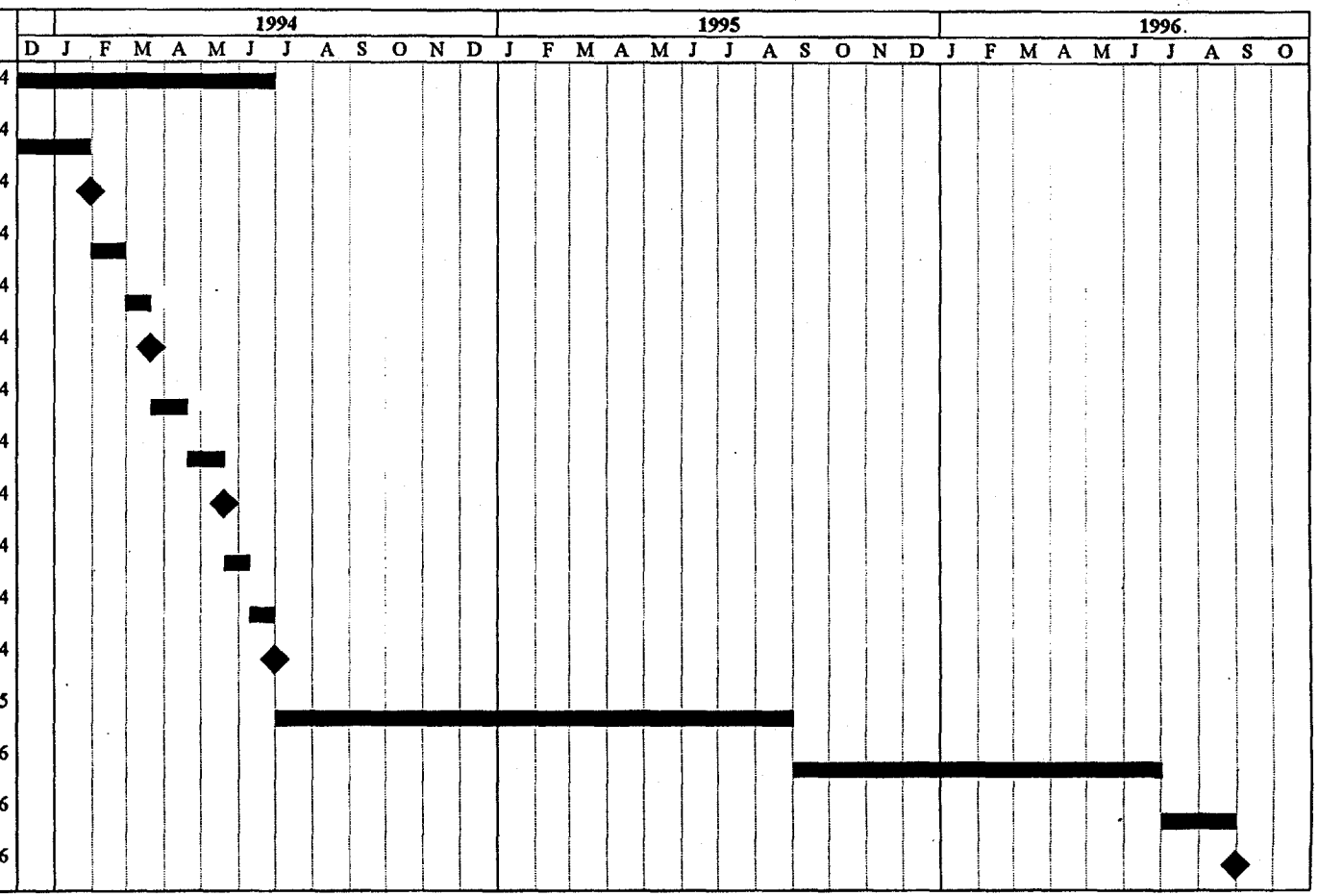


Table 12 Expedited Site Management Schedule

Site 3 (Operable Unit No. 12), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	152d	12/1/93	7/1/94
Prepare Prelim Draft RI/FS Project Plans	60ed	12/1/93	1/30/94
Submit Prelim Draft RI/FS Project Plans	0ed	1/31/94	1/31/94
LANTDIV Review	28ed	1/31/94	2/28/94
Prepare Draft RI/FS Project Plans	21ed	2/28/94	3/21/94
Submit Draft RI/FS Project Plans	0ed	3/21/94	3/21/94
Agency Review	30ed	3/21/94	4/20/94
Prepare Draft Final RI/FS Project Plans	30ed	4/20/94	5/20/94
Submit Draft Final RI/FS Project Plans	0ed	5/20/94	5/20/94
Agency Review	21ed	5/20/94	6/10/94
Prepare Final RI/FS Project Plans	21ed	6/10/94	7/1/94
Submit Final RI/FS Project Plans	0ed	7/1/94	7/1/94
RI/FS PRAP, and ROD (1)	427ed	7/1/94	9/1/95
Remedial Design (2)	305ed	9/1/95	7/2/96
Procure RA Contractor (2)	60ed	7/2/96	8/31/96
Begin Remedial Action (2)	0ed	9/2/96	9/2/96

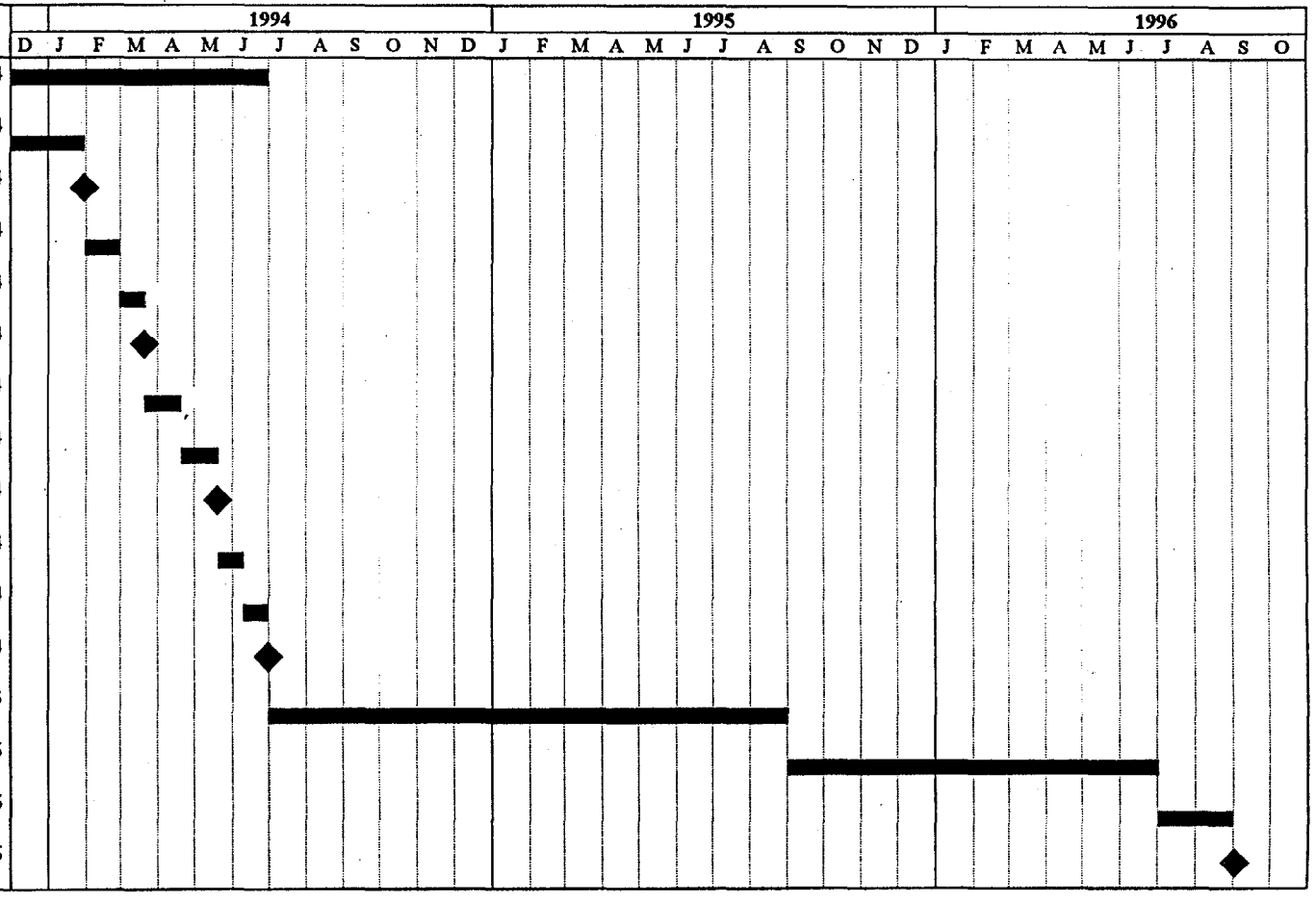
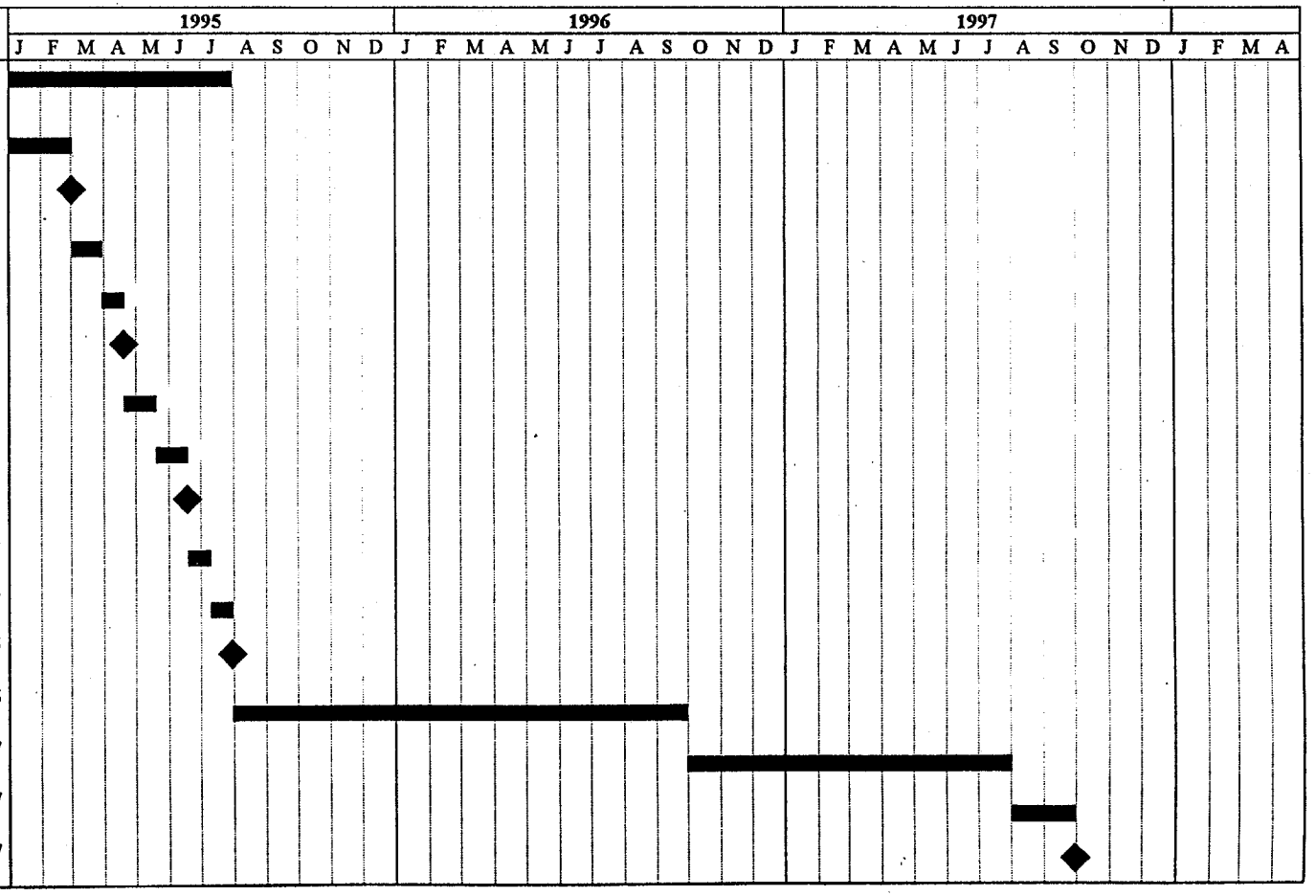


Table 13 Expedited Site Management Schedule

Site 63 (Operable Unit No. 13), MCB Camp Lejeune, NC

Task	Days	Start	Finish
RI/FS Project Plans	150d	1/1/95	7/31/95
Prepare Prelim Draft RI/FS Project Plans	60ed	1/1/95	3/2/95
Submit Prelim Draft RI/FS Project Plans	0ed	3/2/95	3/2/95
LANTDIV Review	28ed	3/2/95	3/30/95
Prepare Draft RI/FS Project Plans	21ed	3/30/95	4/20/95
Submit Draft RI/FS Project Plans	0ed	4/20/95	4/20/95
Agency Review	30ed	4/20/95	5/20/95
Prepare Draft Final RI/FS Project Plans	30ed	5/20/95	6/19/95
Submit Draft Final RI/FS Project Plans	0ed	6/19/95	6/19/95
Agency Review	21ed	6/19/95	7/10/95
Prepare Final RI/FS Project Plans	21ed	7/10/95	7/31/95
Submit Final RI/FS Project Plans	0ed	7/31/95	7/31/95
RI/FS PRAP, and ROD	427ed	7/31/95	9/30/96
Remedial Design	305ed	9/30/96	8/1/97
Procure RA Contractor	60ed	8/1/97	9/30/97
Begin Remedial Action	0ed	9/30/97	9/30/97