



DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
2155 EAGLE DR. P.O. BOX 190010
NORTH CHARLESTON SC 29419 9010

32501.000
03.03.00.0030
N00204.AR.000526
NAS PENSACOLA
5090.3a
PLEASE ADDRESS REPLY TO THE
COMMANDING OFFICER, NOT TO
THE SIGNER OF THIS LETTER
REFER TO
5090/11
1851

16 APR 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Allison Drew, RPM
U.S. Environmental Protection Agency
Region IV
4WD/FFB
345 Courtland Street, N.E.
Atlanta, GA 30365

Subj: INFORMAL DISPUTE RESOLUTION; FY93 SITE **MANAGEMENT** PLAN
SMP) FOR NAVAL AIR STATION (NAS), PENSACOLA, FL

Dear Ms. Drew:

This letter is provided pursuant to the general agreement reached between USEPA, FDER, and the Navy at the 4 February 1993, informal dispute resolution meeting regarding what steps should be taken to resolve the current dispute over the final terms of the subject SMP. Enclosed is the Navy's Rev Final 1993 Yearly Site Mangement Plan.

Should you have any technical questions concerning these matters, please contact Linda Martin, Code 1851, at (803) 743-0574. **Any** legal questions should be referred to Stephen Beverly, at (803) 743-0708.

Sincerely,

R. DAVID CRISWELL, P.E.
BRANCH HEAD, INSTALLATION
RESTORATION, SECTION I

copy to:
FDER (Mr. Eric Nuzie)
NAS Pensacola (Code 18520, Mr. Ron Joyner)
E/A&H (Mr. Henry H. Beiro)

REV FINAL
1993 SITE MANAGEMENT PLAN (SMP)
OF THE INSTALLATION RESTORATION PROGRAM
FOR THE
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APRIL 1993

Prepared By:
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
Charleston, South Carolina
24918

1. THE BASIS FOR A SITE MANAGEMENT PLAN (SMP)

The requirement for the Site Management Plan (SMP) is identified in the Federal Facilities Agreement (FFA) signed by the Environmental Protection Agency (EPA), the State of Florida, Florida Department of Environmental Regulation (FDER), and the Department of the Navy (DoN). The FFA was entered into based on the requirement for an interagency agreement identified in the Superfund Amendments and Reauthorization Act (SARA), Section 120 (e)(2). The intent of the plan is to provide: (1) an action deemed necessary to mitigate any immediate threat to human health of the environment, (2) a list of Operable Units (OUs) subject to the tenets of the FFA, (3) a prioritization and rationale for the OUs at NAS Pensacola, (4) activities and schedules for work planned the current year, including the submittal schedule for both primary and secondary documents, and (5) work projections for subsequent calendar years. With the FFA being signed on 23 October 1990, and having a declared effective date of 1 November, this is the second Yearly Update of the SMP.

2. OVERALL MANAGEMENT APPROACH

Three major investigations have been conducted at NAS Pensacola. The DoN developed the Navy Assessment and Control of Installation Pollutants (NACIP) Program to identify and control environmental contamination from past use and disposal of hazardous substances at Navy and Marine Corps Installations. The NACIP Program is now part of the Navy's Installation Restoration Program (NIRP), and is similar to the EPA "Superfund" Program authorized by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. The three major investigation activities performed at NAS Pensacola under the NIRP or Superfund Programs are the following: (1) Initial Assessment Study (IAS) or Preliminary Assessment (PA), (2) Verification Study (VS) or Site Inspection (SI), (3) and the Confirmation Study (CS) or Extended Site Inspection (ESI). The IAS (1982-1983) was conducted by the Naval Energy and Environmental Support Activity (NEESA) which identified and assessed 29 potential sources of contamination (PSC) at NAS Pensacola, and which could pose a potential threat to human health or the environment as a result of contamination derived from past Naval operations. The VS (1984) and the CS (1985-1986) were conducted by Geraghty & Miller, Inc. to confirm or refute the presence of contamination at the PSC sites identified in the IAS, as well as possibly locate additional PSCs. If contamination was detected, the magnitude and the extent of contamination would have been evaluated to allow for the recommendation of future remedial response action at these PSCs.

In addition to the NIRP/CERCLA Program, NAS Pensacola has other active regulatory programs. A Florida Resource Conservation and Recovery Act (RCRA) permit was issued to NAS Pensacola by the FDER. Concurrently, a RCRA/Hazardous and Solid Waste Amendments (HSWA) permit was issued to the installation by EPA on July 1988. A RCRA Facility Assessment (RFA) was included in the EPA issued permit, and additional PSCs sites were located. An Underground Storage Tank (UST) Program is currently investigating multiple tank sites as provided by the Florida Administrative Code, Section 17-770.

There is a total of 42 PSCs which have been identified at NAS Pensacola (See Table 1-1). Of the 42 PSCs (see Table 1-11, seventeen (17) PSCs are undergoing screening and twenty (20) PSCs require RI/FS as identified in the FFA. The screening process of the 17 PSCs is due to the present data quality objective inadequacies and data gaps, or due to a preliminary determination that no further action is required. The 17 PSCs undergoing screening will not be included or tracked in the SMP, unless they have been categorized with Operable Units for investigative and reporting purposes. Each Operable Unit Narrative thus identifies and briefly describes all sites to which the accompanying Operable Unit specific schedules applies. The schedules are enforceable, however, only for these sites for which an RI/FS has been required. Screening is currently underway or planned for seventeen (17) PSCs in the IR program, and a schedule status will continually track the investigation progress and provide updates to the Remedial Project Managers (RPMs). Each screening PSC will remain as a screening PSC until such time as defensible and validated Level III or IV data becomes available. Once available, the Navy will utilize such data to either prepare individual PSC assessment reports to support a No Further Remedial Action Planned (NFRAP) determination with USEPA/FDER concurrence or immediately reclassify the site to RI/FS status. When any screening PSC is reclassified to RI/FS status, each existing category's nonenforceable due dates will become enforceable due dates. The five (5) remaining PSCs have will not proceeded in the IR Program are PSCs Sites 19, 20, 21, 23, and 37, and these sites have always been transferred to the Underground Storage Tank (UST) Program. These five (5) PSCs are not included or tracked in this SMP. The UST Program is a State and EPA regulated program, in which the State of Florida has a regulated process for the remediation of petroleum contaminated sites.

The SMP provides a PSC Installation Restoration (IR) Program event management plan. Included in the SMP is a description of NAS Pensacola's PSC program arrangement into Remedial Activity groupings or Operable Units (OUs). The SMP discusses and identifies the management and deliverables of those PSCs undergoing the RI/FS Phase I and Phase II for 1992-1993 such as field work, data reports, and workplans. This SMP also projects the management and the deliverables for outlying years 1994, 1995, 1996, and 1997

SITE MANAGEMENT PLAN
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APP 1993
PAGE 3 OF 48

such as Baseline Risk Assessment Report, Feasibility Study, proposed Remedial Action Plan (RAP), and the Record of Decision. The projected scheduling of the IR program tasks is shown through the signing of the record of decision and the published public notice. Detailed within this SMP are the program events to take place in the upcoming year (1992-1993), as well as the delivery due dates for draft primary documents and target dates for secondary program documents.

TABLE 1-1

IDENTIFICATION OF PSCS REQUIRING ACTION
 NAS PENSACOLA

Category#	OU#	PSC#	Site Description	FFA Requires	Type of Contamination
1	-	13	Magazine Point Rubble Disposal	C screen	Rubble, metal, concrete,
1	10	32	IWTP Sludge Drying Beds	H,C RI/FS	F006 HW
1	10	33	WWTP Ponds	H,C RI/FS	F006 HW wood, bricks
1		35	Miscellaneous IWTP SWMUs	H,C screen	unknown
2	1	1	Sanitary Landfill	H,C RI/FS	Solvents, PCB, Plating Soln, oil, paints, mercury, and asbestos.
2	-	25	Radium Spill Site	C screen	Radioactive waste
2	7	27	Radium Dial Shop Sewer	H,C RI/FS	Radium, phosphors,
2	12	39	Oak Grove Campground Site	H,C RI/FS	Debris, POL, broken clay coal cleaning soln
3	3	2	Waterfront Sediments	H,C RI/FS	Solvents, Cyanide, metals
3	2	11	N. Chevalier Disposal Field	H,C RI/FS	Industrial waste, oils, HW
3	5	30	Bldg. 649 & 755 Bldg. 648 (previously PSC 31) Sewer Line TL 045/A north to IWTP	H,C RI/FS	Metals, acids caustic, degreasers, chromatic soln, cyanide, paint, pesticides, paint thinner and sludge, Industrial waste

TABLE 1-1 (Continued)

IDENTIFICATION OF PSCS REQUIRING ACTION
 NAS PENSACOLA

Category#	OU#	PSC#	Site Description	FFA Requires	Type of Contamination
3	11	38	Bldg. 71 Sewer Line TL 073/C south- west to the end	H,C RI/FS	Paint stripper, ketone, TCE, Industrial waste
4	15	40	Bayou Grande Area	C RI/FS	unknown
4	16	41	NASP Wetlands	C RI/FS	unknown
4	17	42	Pensacola Bay	C RI/FS	unknown
5	8	3	Crash Crew Training	H,C RI/FS	Leaded gas
5	6	9	Navy Yard Disposal	C RI/FS	trash, and refuse
5	-	10	Commodores Pond	C screen	underwater storage of oak timbers
5	-	14	Dredge Spoil Fill	C screen	Dredge
5	6	29	Soil South of Bldg 3460	H,C RI/FS	Slimy black substance (unknown)
5	-	34	Solvent North of Bldg 3557	W,C screen	solvent detergent
6	4	15	Pesticide Rinsate Disposal Area	H,C RI/FS	Organic pesticide
6	14	17	Transformer Storage Yard	H,C RI/FS	Dielectric oils, PCBs
6	-	18	PCB Spill Area	C screen	Transformer oil, PCBs
6	-	24	DDT Mixing Area	C screen	DDT w/diesel fuel
6	-	28	Transformer Accident	C screen	Transformer oil

TABLE 1-1 (Continued)

IDENTIFICATION OF PSCS **REQUIRING** ACTION
 NAS PENSACOLA

Category#	OU#	PSC#	Site Description	FFA Requires	Type of Contamination
7	-	4	Army Rubble Disposal	C screen	Rubble, timber pipes, other wastes
7	-	5	Borrow Pit	C screen	unknown
7	-	6	Fort Redoubt Rubble Disposal	C screen	Concrete, asphalt rubble, wood, metal, plastics, and other debris
7	-	7	Firefighting School	C screen	POLS
7	-	8	Rifle Range Disposal	C screen	solid waste, paper
7	-	12	Scrap Bins	C screen	Wet garage material
7	-	16	Brush Disposal Area	C screen	pruning and tree trimming refuse
7	13	22	Refueler Repair Shop	C RI/FS	Aviation gas, JP w/ lead
7	18	26	Supply Department Outside Storage	H,C RI/FS	Industrial waste, oils
8	-	36	IWTP Sewer Line	H,C screen	Industrial waste
-	-	19	Fuel Farm Pipeline Leak	UST	JP-4
-	-	20	Pier Pipe Leak	U screen	POLS
-	-	21	Sludge at Fuel Tanks	U screen	AVGAS
-	-	23	Chevalier Field Leak	U screen	NSFO, DFM
-	-	37	Sherman Field Fuel Farm	U screen	JP, POL

** Explanation:
 Statutes: H- HWSA
 C- CERCLA
 U- UST

In addition, the CERCLA Remedial **Investigation/Feasibility** Study (RI/FS) process will be tailored to allow prioritization of PSCs according to potential threat to human health and the environment. The process will initially focus on source identification, with delineation of soil/sediment, groundwater and surface water contamination. In this process data are continually assessed and sites are evaluated to determine if contamination is present, if it presents a threat, if it has been delineated, and finally what further action is needed (i.e., delineation, IRA, or evaluation of remedial alternatives). This process will attempt to reduce lengthy interim report development and review times by allowing continual data assessment and rapid decision-making. In addition, the ideal purpose of this approach is to eliminate the need for the development of formal interim data reports. Specifically, the data gaps and the information needed to fill those gaps shall be identified by evaluating the data itself rather than by evaluating a formal data report. The formal report shall be prepared once the nature and extent of contamination has been adequately delineated for the purposes of performing a Baseline Risk Assessment (BRA) and selecting a Remedial Action.

Decisions concerning data assessment and actions to be taken will be made during Remedial Project Managers (RPM) meetings which will include representatives from EPA, FDER, and the Navy. These meetings will provide a forum for discussion of investigative results and proposed actions. The verbal decisions may be final with no reporting and review time required.

If initial data evaluation shows groundwater and/or surface water to be an immediate threat to human health or the environment, interim actions **may** be performed to mitigate further transport from the site. If groundwater or surface water contamination is not judged to be an immediate threat, delineation may be performed on a larger scale by viewing local aquifer and surface water systems as an individual operable unit(s) which may be impacted by several sites simultaneously.

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

Through this approach, the **RI/FS** process can be responsive to individual **PSC** characteristics and technical requirements, and attempt to minimize lengthy delays between field actions. This provides the Navy the flexibility to address **PSC(s)**, **OU(s)**, or a set of **PSC(s)/OU(s)** separately or as a whole. In addition, specific matrices (i.e., soil/sediment, groundwater, surface water, or air) of individual **PSC(s)**, or **OU(s)**, can be treated separately if necessary, or a single matrix may be investigated at one time across the entire facility.

As agreed upon in the **FFA**, the **DoN** shall update the **SMP** yearly. Updates (due September 1 of each year) will reflect changes in project priorities, changes in scheduling, and the addition or deletion of sites due to the site condition or program accomplishments with the continued regulatory agency and the Technical Review Committee (**TRC**) review.

3. RATIONALE FOR OPERABLE UNIT SITE GROUPINGS

To facilitate implementation of the **NAS** Pensacola **RI/FS** program, the 20 **PSCs** requiring **RI/FS** have been clustered into 20 Operable Units (**Ous**). The scheduled work at these **Ous** is being offset based on relative potential threat, schedule optimization and task management. The category priorities were formulated in the Site Management Plan, at the June 1992 **RPM** meeting for Category 1-4 and the last week in August 1992 for Category 5-7 for the yearly **SMP** submittal. The criteria used to generate the **RI/FS** **Ous** is as follows:

- 1) geographic proximity of sites;
- 2) similar contamination types;
- 3) similar aquifer contamination zones;
- 4) similar potential investigation methods;
- 5) potential scope and complexity of the investigation;
- 6) mission impact of remedial activities;
- 7) regulatory concerns; and
- 8) similarity of potential remedial actions.
- 9) potential for human exposure/contact
- 10) suspected mobility of potential contaminants
- 11) potential for off-site migration and exposure
- 12) relative threat to groundwater (e.g., suspected date, and volume of release)

These Operable Units **may** be re-defined as more data is collected and evaluated. Ultimately, an Operable Unit will consist of **PSCs** and matrices which require similar remedial efforts, or potential for human exposure/contact, or for earlier remediation.

Due to the large number of PSCs on NAS Pensacola overall, the number of PSCs in each RI/FS OU, and the aggregate complexity of the contamination problem at each OU, the commencement of work at all Ous concurrently is not feasible; therefore, a phased approach has been implemented. The schedule is staggered in nature to provide for a coherent effort by the investigative and engineering team to enable a higher quality assessment of the problem and more accurate identification of a suitable remedial response action required.

The aggregation of the PSCs and the assignment of phasing priorities was based on the twelve (12) criteria stated above. The specific aggregation issues are discussed in the accompanying OU specific narratives. The assignment of priorities was driven by the actual or potential threat posed by the PSC's known or suspected contamination, and early remediation.

4. PSC SITE SMP EXCLUSION

The 17 potential sources of contamination (PSCs) undergoing screening activities are not included nor otherwise addressed hereafter in the SMP, unless they have been grouped with Operable Units for investigative and reporting purposes. After screening the 17 PSCs, the DoN will determine future response activities. If RI/FS activities are recommended, the DoN shall incorporate these PSCs into existing Operable Units, or designate them as new Operable Units following the criteria listed in Section 3. When established, the future additional Ous shall become part of the SMP, and a revision to the SMP shall be made.

5. OPERATIONAL UNIT SCHEDULING

The schedules of the operable units are based on the issuance of draft primary and secondary submittals. The schedule allows for review and comment periods as identified in the FFA. If these review and comment periods are shortened by the parties of the FFA by their ability to perform the required review in less than the provided periods, the DoN may be able to start and execute plans earlier. Also, the following line items have been listed as a reminder:

- (1) The SMP schedule assumes no dispute resolution.
- (2) Quarterly reports will be submitted as required in the FFA .
- (3) Due to present contracting procedures Sampling and Analysis Plans and Health and Safety Plans are submitted separate to the work plan and are listed as separate deliverables, in some Ous.

6. OPERATIONAL W IT NARRATIVES

The following are narratives describing the contents of each OU. A brief description of each OU and what is **known** about the contamination and an assessment of its present threat is included. The events for the upcoming year are listed, and the due dates of primary documents and the target dates of secondary documents are provided. A schedule of the projected submittal dates for primary documents only is included for the first outlying year. The upcoming and outlying year are on one **time** line schedule for each Category. For the long **term** view, a list of projected schedule program tasks through the published public notice of the record of decision is identified.

NOTES :

THE FOLLOWING TASK CHARTS FOR ALL Ous ARE CATEGORY SPECIFIC RATHER THAN OU-SPECIFIC FOR FIELD WORK. IN THE FY 93 SMP SUBMITTAL ONLY ONE TASK CHART WILL BE PROVIDED PER CATEGORY.

(P) DESIGNATES A PRIMARY DOCUMENT ACCORDING TO PAGE 21 OF FFA

(S) DESIGNATES A SECONDARY DOCUMENT ACCORDING TO PAGE 22 OF FFA

RI/FS OPERABLE UNIT #10: IWTP SLUDGE DRYING BEDS, PSC SITE 32; AND
WWTP PONDS. PSC SITE 33; CATEGORY #11

DESCRIPTION:

PSC Site 32- Industrial Wastewater Treatment Plant (IWTP) Sludge Drying Beds- These contiguous units have been operated with the IWTP from 1971 to 1984. These units received listed hazardous waste sludges (F006) from the RCRA surface impoundment (IWTP Surge Pond), and, as a result, underwent RCRA closure in 1989. The contents of the drying beds (remaining sludge and leachate drainage system) and an underlying layer of sand were removed to about six feet below ground's surface. The material removed was disposed of as a hazardous waste. The site was then backfilled with clean sand and capped with high density asphalt. The site's groundwater is monitored by three (3) monitoring wells and the surrounding HSWA permit groundwater monitoring system. The site will continue to be monitored under the HSWA permit as a part of the IR Program.

PSC Site 33- Wastewater Treatment Pond- Surface Impoundments consisting of the domestic polishing pond, phenol/stabilization pond and industrial surge pond. In 1987, the EPA RCRA Compliance Branch determined that the polishing and stabilization ponds received listed F006 hazardous waste from the surge pond. The ponds were taken out-of-service at that time. In 1988-1989, the ponds underwent RCRA permitted "clean closures". The sediment in the ponds was removed and disposed of as hazardous waste. No further formal monitoring of these surface impoundments is required, but they are in range of the HSWA permit monitoring system. The industrial surge pond was taken out-of-service and underwent closure in 1989. The industrial surge pond is suspected of being the prime contribution to the IWTP groundwater contamination. The surge pond was completely removed down to the groundwater table. The groundwater table is approximately six (6) feet below ground level. All removed material was disposed of as a hazardous waste. The surge pond site will continue to be monitored under the HSWA permit as part of the IR program.

The following Screening Site which will be investigated and reported on concurrently with this Operable Unit include; PSC site 35: Miscellaneous IWTP SWMUs; and PSC Site 13; Magazine Point Rubble Disposal. These sites are within the same area as site 32 and 33, and they were found after the construction in 1971 and upgrading of the existing WWTP to provide tertiary treatment of industrial wastes and secondary treatment of the domestic wastes by NAS Pensacola.

RI/FS OPERABLE UNIT #10 - IWTP SLUDGE DRYING BEDS, PSC SITE 32; AND
WWTP PONDS, PSC SITE 33; CATEGORY #1 continued:

DESCRIPTION:

These PSC sites were grouped together due to the following: geographic proximity of sites, similar contamination types, and similar groundwater flow. The prioritization of these sites was due to the suspected magnitude and toxicity of contamination, the potential for off-site migration of contaminants via several pathways, and the potential for human exposure.

1993 Primary Deliverable6:

Due Date:

DRAFT RI/BRA REPORT (P)
DRAFT FS REPORT (P)
SITE MANAGEMENT PLAN

NAV 07 JUN 93
NAV 05 SEP 93
YEARLY update SEP 93

1993 Secondary Deliverables:

Target Date:

QUARTERLY REPORTS

NAV 30 SEP, APR,
JUL, and OCT

Projected Deliverables

Projected Date:

DRAFT/FINAL RI/BRA (P)
DRAFT/FINAL FS REPORT (P)
FINAL RI/BRA (P)
FINAL FS Report (P)
DRAFT PP (P)

NAV 13 DEC 93
NAV 13 MAR 94
NAV 12 JAN 94
NAV 12 APR 94
NAV 28 MAY 94

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 13 OF 48

RI/FS CATEGORY #1: OPERABLE UNIT 10: SITE 32: IWTP SLUDGE DRYING
 BEDS, SITE 33; WWTP PONDS, SITE 35: MISCELLANEOUS IWTP SWMU'S AND
 SCREENING SITE 13: MAGAZINE POINT RUBBLE DISPOSAL:

Task Name	Start Date	End Date	Duratn (Days)
-----	-----	-----	-----
RI/FS	8-Jan-93	12-Apr-94	460.0
DATA VALIDATION	8-Jan-93	7-Apr-93	90.0
RI REPORT w/BRA	8-Apr-93	12-Jan-94	280.0
PREPARE DFT RI RPT	8-Apr-93	6-Jun-93	60.0
SUBMIT DRAFT RI RPT	7-Jun-93	7-Jun-93	1.0
AGENCY REVIEW	8-Jun-93	5-Sep-93	90.0
NAVY RECVS COMMENTS	6-Sep-93	12-Sep-93	7.0
ADDRESS COMMENTS	13-Sep-93	27-Oct-93	45.0
MAIL COMMENTS	28-Oct-93	28-Oct-93	1.0
PREPARE DRAFT/FINAL	29-Oct-93	12-Dec-93	45.0
SUBMIT DRAFT/FINAL	13-Dec-93	13-Dec-93	1.0
RI RPT FINALIZED	14-Dec-93	12-Jan-94	30.0
FEASIBILITY STUDY	8-May-93	12-Apr-94	340.0
SUBMIT DRAFT FS	5-Sep-93	5-Sep-93	1.0
PREPARE DRAFT FS	8-May-93	4-Sep-93	120.0
AGENCY REVIEW	6-Sep-93	4-Dec-93	90.0
NAVY RCVS COMMENTS	5-Dec-93	11-Dec-93	7.0
ADDRESS COMMENTS	12-Dec-93	25-Jan-94	45.0
MAIL COMMENTS	26-Jan-94	26-Jan-94	1.0
PREPARE DRFT/FINAL	27-Jan-94	12-Mar-94	45.0
SUBMIT DRAFT/FINAL	13-Mar-94	13-Mar-94	1.0
FS RPT FINALIZED	14-Mar-94	12-Apr-94	30.0
PROPOSED PLAN	13-Apr-94	19-Mar-95	341.0
PREPARE PP	13-Apr-94	27-May-94	45.0
SUBMIT DRAFT PP	28-May-94	28-May-94	1.0
AGENCY REVIEW	29-May-94	12-Jul-94	45.0
NAVY RCV COMMENTS	13-Jul-94	19-Jul-94	7.0
ADDRESS COMMENTS	20-Jul-94	2-Sep-94	45.0
MAIL COMMENTS	3-Sep-94	3-Sep-94	1.0
PREPARE DRAFT/FINAL	4-Sep-94	18-Oct-94	45.0
SUBMIT DRAFT/FINAL	19-Oct-94	19-Oct-94	1.0
PP FINALIZED	20-Oct-94	18-Nov-94	30.0
PREPARE PUBLIC NOTICE	19-Nov-94	3-Dec-94	15.0
PUBLISH PUBLIC NOTICE	4-Dec-94	2-Jan-95	30.0
PUBLIC COMMENT PERIOD	3-Jan-95	16-Feb-95	45.0
PUBLIC MEETING	17-Feb-95	17-Feb-95	1.0
RESPONSIVENESS SUMMARY	18-Feb-95	19-Mar-95	30.0
RECORD OF DECISION	19-Nov-94	13-Aug-95	268.0
PREPARE DRAFT ROD	19-Nov-94	2-Jan-95	45.0
SUBMIT DRAFT ROD	3-Jan-95	3-Jan-95	1.0
AGENCY REVIEW	4-Jan-95	3-Apr-95	90.0
NAVY RCV COMMENTS	4-Apr-95	10-Apr-95	7.0
ADDRESS COMMENTS	11-Apr-95	25-May-95	45.0
MAIL COMMENTS	26-May-95	26-May-95	1.0

SITE MANAGEMENT PLAN
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APR 1993
PAGE 14 OF 48

Task Name	Start Date	End Date	Duratn (Days)
.....	-----	-----	-----
PREPARE DRAFT/FINAL	27-May-95	10-Jul-95	45.0
SUBMIT DRAFT FINAL	11-Jul-95	11-Jul-95	1.0
ROD FINALIZED	12-Jul-95	10-Aug-95	30.0
ROD SIGNATURE	11-Aug-95	13-Aug-95	3.0

RI/FS OPERABLE W I T #1: SAN Y LANDFILL. PSC S1 #1t CATEGORY #2

DESCRIPTION:

This large Solid Waste Management Unit (SWMU) received both sanitary and industrial waste over a 20 year period. Over the years, this site has received various wastes. These waste include solvents, PCBs, plating solutions, pesticides, oils, paints, and mercury. Reportedly, asbestos is also buried here. Twelve (12) shallow and three (3) deep monitoring well are located in the site vicinity. Samples taken from monitoring well indicate groundwater contamination exists in both the shallow and deep layer of the uppermost aquifer. These aquifers are separated by a locally semi-confining clay layer. Shallow groundwater moves north and east and discharges into the Bayou Grande. The flow direction in the underlying aquifer is southward. Two (2) deep wells used as occasional potable water supply tap into the deep aquifer. These wells are southwest within one (1) mile radius of the site. None of these wells are known to be contaminated. PSC 1 was identified prior to preparation of the IAS report in 1983. The site was given a very high investigative priority relative to other PSCs identified at this time. This priority was due to the suspected magnitude and toxicity of contamination, the potential for off-site migration of contaminations via several pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

SITE MANAGEMENT PLAN

DUE DATE:

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

QUARTERLY REPORTS

TARGET DATE:

NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES

DRAFT RI/BRA (P)
DRAFT FS REPORT (P)
DRAFT/FINAL RI/BRA (P)
DRAFT/FINAL FS REPORT (P)
FINAL RI/BRA (P)
FINAL FS REPORT (P)

PROJECTED DATE:

NAV 12 JAN 94
NAV 11 FEB 94
NAV 20 JUL 94
NAV 19 AUG 94
NAV 19 AUG 94
NAV 18 SEP 94

RI/FS OPERABLE UNIT 17: RADIUM DIAL SHOP SEWER, PSC SITE 27;
CATEGORY 12:

DESCRIPTION:

From 1940's to 1976, Building 709 was used to rework instrument dials that were painted with radium containing paint. Spent cleaning solutions and luminous paint were routinely poured into the sanitary sewer at a rate of around 1500 gallons per year. In 1976, the building was dismantled and the drain pipe found to be radioactive at a rate of 1.2 Mr/hr. The drain pipe was removed to a depth of 18 inches. The remaining lateral underground portion of the pipe was capped and covered with concrete. The sewer discharge location is not reported.

Sites 25 has been grouped with Site 27 to investigate the extent of contamination. One (1) shallow well and one (1) deep monitoring well was installed near the drain of Site 27. Analyses of shallow samples indicate gross Alpha concentrations in the shallow groundwater are below the primary drinking water standard. Chlorinated hydrocarbons were detected. Chlorinated hydrocarbons were not detected in samples from the deeper wells. The groundwater flow direction is, reportedly, north-northeast and toward the drainage ditch. Several analyses for chlorinated VOCs from the installed monitoring wells indicated traces of solvents are present in the groundwater.

The following Screening Site will be investigated and reported on concurrently with this Operable Unit include: PSC Site 25: Radium Spill Area. At Site 25, the radium removal operations at NAS Pensacola involve stripping radium-containing paint from instrument dials prior to repainting. From 1965 to 1975, these operations were conducted in building 709. In 1975, all activities related to radium painted instruments including stripping and re-painting, were permanently moved to building 780. At the present, aircraft instruments containing radium are disassembled in building 780.

It is estimated that 5,000 to 7,000 instruments a year were processed in building 780. Dials were stripped using a thick paint thinner, then soaked in a lye and nitric acid solution. Contaminated instruments cases were processed by soaking in a "turco" acid solution. The components were cleaned with a wire brusks to remove all residue. Approximately one drum of solid waste and two drums of liquid waste mixed with vermiculite were generated each year from the operations conducted in building 780. On 14 Oct 1992 the UST program transferred 709D-N, which is at Site 25, to the IR Program.

RI/FS OPERABLE UNIT #7: RADIUM DIAL SEOP SEWER, PSC SITE 27;
CATEGORY #2 CONTINUED:

DESCRIPTION [

These sites were grouped together mainly due to the following: geographic proximity of sites, and the potential for off-site migration and its impact on the other site. The prioritization of these sites was due to the suspected magnitude and toxicity of contamination, the potential for off-site migration of contaminants via several pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

SITE MANAGEMENT PLAN

DUE DATE:

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

QUARTERLY REPORTS

TARGET DATE:

NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES

DRAFT RI/BRA (P)
DRAFT FS REPORT (P)
DRAFT/FINAL RI/BRA (P)
DRAFT/FINAL FS REPORT (P)
FINAL RI/BRA (P)
FINAL FS REPORT (P)

PROJECTED DATE:

NAV 12 JAN 94
NAV 11 FEB 94
NAV 20 JUL 94
NAV 19 AUG 94
NAV 19 AUG 94
NAV 18 SEP 94

**RI/FS OPERABLE UNIT #12: OAK GROVE CAMPGROUND AREA, PSC SITE 39;
CATEGORY #2:**

DESCRIPTION:

Oak Grove is a campground area located immediately South of Sherman Field on the South side of Radford Boulevard. An area of stressed vegetation and stained soil approximately 150 feet in diameter was found near the Pensacola Bay. A small amount of construction debris consisting of old brick, broken clay pipe and coal is scattered across the site. Records indicate that a saw mill was once located near this site. Investigations are currently underway to determine if the debris is the remains of this old mill or if this was an old dump site. Preliminary tests of the surface soil showed that the stained soil is the result of petroleum contamination.

1993 PRIMARY DELIVERABLES:

SITE MANAGEMENT PLAN

DUE DATE:

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

QUARTERLY REPORTS

TARGET DATE:

NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES

DRAFT RI/BRA (P)
DRAFT FS REPORT (P)
DRAFT/FINAL RI/BRA (P)
DRAFT/FINAL FS REPORT (P)
FINAL RI/BRA (P)
FINAL FS REPORT (P)

PROJECTED DATE:

NAV 12 JAN 94
NAV 11 FEB 94
NAV 20 JUL 94
NAV 19 AUG 94
NAV 19 AUG 94
NAV 18 SEP 94

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 19 OF 48

RI/FS CATEGORY #2: OPERABLE WIT 1: SITE 1; SANITARY LANDFILL,
 OPERABLE UNIT 7: SITE 25: RADIUM SPILL AREA AND SITE 27: RADIUM
 DIAL SHOP SEWER: OPERABLE UNIT 12: SITE 39: OAK GROVE CAMPGROUND
 AREA :

Task Name	Start Date	End Date	Duratn (Days)
RI/FS	7-Feb-93	18-Sep-94	589.0
FINALIZE SAP	7-Feb-93	8-Mar-93	30.0
FIELD WORK	17-May-93	13-Sep-93	120.0
DATA VALIDATION	14-Sep-93	12-Nov-93	60.0
RI REPORT w/ BRA	13-Nov-93	19-Aug-94	280.0
PREPARE DFT RI RPT	13-Nov-93	11-Jan-94	60.0
SUBMIT DRAFT RI RPT	12-Jan-94	12-Jan-94	1.0
AGENCY REVIEW	13-Jan-94	12-Apr-94	90.0
NAVY RECVS COMMENTS	13-Apr-94	19-Apr-94	7.0
ADDRESS COMMENTS	20-Apr-94	3-Jun-94	45.0
MAIL COMMENTS	4-Jun-94	4-Jun-94	1.0
PREPARE DRAFT/FINAL	5-Jun-94	19-Jul-94	45.0
SUBMIT DRAFT/FINAL	20-Jul-94	20-Jul-94	1.0
RI RPT FINALIZED	21-Jul-94	19-Aug-94	30.0
FEASIBILITY STUDY	13-Dec-93	18-Sep-94	280.0
PREPARE DRAFT FS	13-Dec-93	10-Feb-94	60.0
SUBMIT DRAFT FS	11-Feb-94	11-Feb-94	1.0
AGENCY REVIEW	12-Feb-94	12-May-94	90.0
NAVY RCVS COMMENTS	13-May-94	19-May-94	7.0
ADDRESS COMMENTS	20-May-94	3-Jul-94	45.0
MAIL COMMENTS	4-Jul-94	4-Jul-94	1.0
PREPARE DRFT/FINAL	5-Jul-94	18-Aug-94	45.0
SUBMIT DRAFT/FINAL	19-Aug-94	19-Aug-94	1.0
FS RPT FINALIZED	20-Aug-94	18-Sep-94	30.0
PROPOSED PLAN	19-Sep-94	9-Oct-95	386.0
PREPARE PP	19-Sep-94	2-Nov-94	45.0
SUBMIT DRAFT PP	3-Nov-94	3-Nov-94	1.0
AGENCY REVIEW	4-Nov-94	1-Feb-95	90.0
NAVY RCV COMMENTS	2-Feb-95	8-Feb-95	7.0
ADDRESS COMMENTS	9-Feb-95	25-Mar-95	45.0
MAIL COMMENTS	26-Mar-95	26-Mar-95	1.0
PREPARE DRAFT/FINAL	27-Mar-95	10-May-95	45.0
SUBMIT DRAFT/FINAL	11-May-95	11-May-95	1.0
PP FINALIZED	12-May-95	10-Jun-95	30.0
PREPARE PUBLIC NOTICE	11-Jun-95	25-Jun-95	15.0
PUBLISH PUBLIC NOTICE	26-Jun-95	25-Jul-95	30.0
PUBLIC COMMENT PERIOD	26-Jul-95	8-Sep-95	45.0
PUBLIC MEETING	9-Sep-95	9-Sep-95	1.0
RESPONSIVENESS SUMMARY	10-Sep-95	9-Oct-95	30.0
RECORD OF DECISION	11-Jun-95	4-Mar-96	268.0
PREPARE DRAFT ROD	11-Jun-95	25-Jul-95	45.0
SUBMIT DRAFT ROD	26-Jul-95	26-Jul-95	1.0
AGENCY REVIEW	27-Jul-95	24-Oct-95	90.0
NAVY RCV COMMENTS	25-Oct-95	31-Oct-95	7.0

SITE MANAGEMENT PLAN
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APR 1993
PAGE 20 OF 48

Task Name	Start Date	End Date	Duratr (Days)
-----	-----	-----	-----
.ADDRESS COMMENTS	1-Nov-95	15-Dec-95	45.0
MAIL COMMENTS	16-Dec-95	16-Dec-95	1.0
PREPARE DRAFT/FINAL	17-Dec-95	30-Jan-96	45.0
SUBMIT DRAFT FINAL	31-Jan-96	31-Jan-96	1.0
ROD FINALIZED	1-Feb-96	1-Mar-96	30.0
ROD SIGNATURE	2-Mar-96	4-Mar-96	3.0

SITE MANAGEMENT PLAN
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APR 1993
PAGE 21 OF 48

RI/FS OPERABLE UNIT #3: WATERFRONT SEDIMENT AREA, PSC TE 2;
CATEG# #3

DESCRIPTION:

Documented quantities of industrial and hazardous waste discharged to Pensacola Bay by storm sewers over a 35 year period. Examples of these hazardous wastes are solvents, cyanide and heavy metals. Sediments samples taken approximately 300 feet off-shore in 30 feet of water show only trace amounts of metals when analyzed by EP Toxicity. Fish kills were not uncommon in this area during 1940's, 1950's, and 1960's. Periodic dredging has occurred in this area to accommodate the aircraft carrier USS Lexington. Dredging has been done to widen and deepen the channel for the USS Kitty Hawk. Concern remains over the location of the sampling sites, methods and depth of sediment sampling. There is doubt that EP extraction is the most appropriate analytical method. In addition to our in depth study, the Marine and Estuarine Branch will provide comments before the site is removed from consideration for further study.

The prioritization of this site was due to the suspected magnitude and toxicity of contamination, pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

SITE MANAGEMENT PLAN

1993 SECONDARY DELIVERABLES:

FINAL SAP
QUARTERLY REPORTS

PROJECTED DELIVERABLES

DRAFT RI/BRA (P)
DRAFT FS REPORT (P)

DUE DATE:

YEARLY update Sep 93

TARGET DATE:

NAV 16 MAY 93
NAV 30 SEP, APR,
JUL, and OCT

ESTD DATE:

NAV 18 APR 94
Nav 18 MAY 94

RI/FS OPERABLE W IT #2 - NORTH CHEVALIER DISPOSAL AREA, PSC SITE 11;
CATEGORY #3;

DESCRIPTION:

PSC Site 11- North Chevalier Field Disposal Area: This site received industrial waste and oils, including hazardous waste. Eleven (11) shallow monitoring wells have been installed, three (3) of which have been destroyed. One (1) deep well is also in place. Analytical data from the wells indicate both shallow and deep contamination of groundwater with heavy metals and VOCs. Ground water flow in the shallow system is westward toward the creek leading into the Bayou Grande. Sediment samples taken during the NACIP Study showed high concentrations of heavy metal. Borings to define the lateral and vertical extent of the landfill indicate construction debris east of the creek. The total lateral extent of the site is unknown. Old topographic surveys indicate the fill encompasses several hundred thousand square feet of the original tidal creek area.

The prioritization of these sites was due to the suspected magnitude and toxicity of contamination, pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

SITE MANAGEMENT PLAN

DUE DATE:

YEARLY update Sep 93

1993 SECONDARY DELIVERABLES:

FINAL SAP
QUARTERLY REPORTS

TARGET DATE:

NAV 16 MAY 93
NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES

DRAFT RI/BRA (P)
DRAFT FS REPORT (P)

PROJECTED DATE:

NAV 18 APR 94
Nav 18 MAY 94

RI/FS OPERABLE UNIT #5: BUILDINGS 648 (previously OU-9, PSC 32) 649 and 755, AND INDUSTRIAL SEWER LINE (TL 045/A north to IWTP), PSC SITE 30; CATEGORY #3:

DESCRIPTION:

Over a fifteen (15) year period north of Bldg. 648, 300,000 gallons of waste paint, thinner and paint sludges were poured onto the ground. The only monitoring well near the site indicated low concentrations of chlorinated hydrocarbons. A second round of samples from this monitoring well detected no chlorinated volatiles. The exact location of the disposal site in relation to the monitoring wells is not reported. The plume of contamination may have already passed the monitoring point. Further indepth etudy will be conducted. On 14 OCT 1992 the UST Program transferred 647N and 648N, which are at previous Site 31, to the IR Program.

Building 649 housed a tin/cadmium plating shop with fifteen (15) tanks of 200 and 500 gallon capacity each. These tanks, along with a 250 gallon tank of trichlorethylene, were emptied monthly or quarterly into a ditch leading to a creek discharging into the Bayou Grande. Acids, caustics, degreasers, and chromatic solutions were also drained into this ditch. After twenty (20) years, this operation was replaced with a magnesium treatment line. The magnesium treatment line operated for ten (10) years.

Building 755 operated 50 tanks over a ten year period as a plating facility for nickel, lead, tin, chromium and miscellaneous metals. These tanks, ranging in size from 50 gallons to 200 gallons, were drained periodically into the ditch described above. Sediment samples from four (4) separate locations in the ditch were analyzed for metals and cyanide. Low levels of metal (below EP Toxic) were found. The waste constituents most probably did not enter the groundwater from the ditch, but were probably washed downstream into the Bayou Grande. On 14 OCT 1992 the UST Program transferred 647E, 647N, 649N, and 649W, which are at Site 30, to the IR Program.

Waste from various types of operations enter the Industrial Sewer Line (TL 045/A north to the IWTP) without any pretreatment or segregation. Consequently, the waste stream may consist of everything that is generated or used in the facility, including paint strippers, heavy metals, pesticides, radioactive wastes, fuels cyanide wastes (prior to 1962), solvents, and waste oils. In 1979, a pump failure at the final industrial waste life station, located approximately 2,000 feet southwest of the Industrial Waste Treatment Plant, caused a spill of approximately 80,000 gallons of industrial waste into a nearby unnamed creek, which lead8 into the south arm of Bayou Grande. The spill was invested by the Florida

SITE MANAGEMENT PLAN
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APR 1993
PAGE 24 OF 48

RI/FS OPERABLE UNIT #5: BUILDINGS 648 (previously OU-9, PSC 32) 649
and 755, AND INDUSTRIAL SEWER LINE (TL 045/A north to IWTP), PSC
SITE 30: CATEGORY #3:

DESCRIPTION continued:

Department of Environmental Regulation (FDER), and a warning notice was issued to NAS Pensacola. The spill caused a minor fish kill in the creek.

The prioritization of this site was due to the suspected magnitude and toxicity of contamination, the potential for off-site migration of contaminants via several pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

SITE MANAGEMENT PLAN

DUE DATE:

YEARLY update Sep 93

1993 SECONDARY DELIVERABLES:

FINAL SAP
QUARTERLY REPORTS

TARGET DATE:

NAV 16 MAY 93
NAV 30 SEP, APR,
JUL, and OCT

TEI DELIVERABLES

DRAFT RI/BRA (P)
DRAFT FS REPORT (P)

PROJECTED DATE:

NAV 18 APR 94
Nav 18 MAY 94

RI/FS OPERABLE W I T #11: BUILDING 71 AND INDUSTRIAL SEWER LINE (TL 073/C southwest to the end), PSC SITE 38; CATEGORY #3;

DESCRIPTION:

Building 71 is undergoing RCRA closure. This building was a storage area for hazardous waste. In accordance with the closure plan, no soils testing was required. The soil testing which was conducted detected hazardous waste constituents, the presence of which is consistent with the use of Building 49, 71, and 72 during the period from about 1935 to the late 1970's for aircraft paint stripping and painting operations. These activities are described in the IAS in detail. The study documents identify the use of paint strippers, ketone, and trichloroethylene (for parts cleaning) in buildings 49 and 71. Ten 550 gallon tanks were located in these facilities which were periodically drained through the underground lines from the buildings to the bay. A cyanate spill in the area near buildings 71 and 104 and the presence of cyanates in the adjacent bay waters also are documented in the report. Prior use of the facility is described in more detail in the referenced report.

Waste from various types of operations enter the Industrial Sewer Line (TL 073/C southwest to the end) without any pretreatment or segregation. Consequently, the waste stream may consist of everything that is generated or used in the facility, including paint strippers, heavy metals, pesticides, fuels, cyanide wastes (prior to 1962), solvents, and waste oils. In the spring of 1981, several people received minor skin burns from a black, slimy material in the soil. This incident occurred while these people were repairing a 16-inch water main south of Building 3460. A black layer of an unknown substance was floating on the water in a trench that had been excavated to repair the main. When the water was pumped out, the black, filmy residue coated the sides of the trench and the pipe. It is reported there was a noticeable odor, "similar to paint remover", during the excavation. An industrial gravity line from the old paint strip area, buildings 71 and 72, lies approximately 100 feet from the incident site. There, it is suspected industrial waste from the gravity line might have leaked into the surrounding soil creating a possible health hazard to anyone working in or near the open excavation.

1993 PRIMARY DELIVERABLES:

DUE DATE:

SITE MANAGEMENT PLAN

YEARLY update Sep 93

SITE MANAGEMENT PLAN
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APR 1993
PAGE 26 OF 48

RI/FS OPERABLE UNIT #11: BUILDING 71 AND INDUSTRIAL SEWER LINE (TL
073/C southwest to the end). PSC SITE 38; CATEGORY #3:

DESCRIPTION continued:

1993 SECONDARY DELIVERABLES:

FINAL SAP
QUARTERLY REPORTS

TARGET DATE:

NAV 16 MAY 93
NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES

DRAFT RI/BRA (P)
DRAFT FS REPORT (P)

PROJECTED DATE:

NAV 18 APR 94
Nav 18 MAY 94

RI/FS CATEGORY #3: OPERABLE W I T 11: SITE 38: BUILDING 71 AND SEWER LINE (TL 073/C SOUTHWEST TO END OF LINE), OPERABLE W I T 5: SITE 30; BUILDINGS 648, 649, AND 755, AND SEWER LINE (TL 145/A NORTH TO IWTP), OPERABLE W I T 2: SITE 11; NORTH CHEVALIER DISPOSAL AREA, OPERABLE UNIT 3: SITE 2: WATERFRONT SEDIMENT AREA:

Task Name	Start Date	End Date	Duratr (Days)
RI/FS	17-May-93	23-Dec-94	586.0
FIELD WORK	17-May-93	12-Dec-93	210.0
DATA VALIDATION	13-Dec-93	16-Feb-94	66.0
RI REPORT	17-Feb-94	23-Nov-94	280.0
PREPARE DFT RI RPT	17-Feb-94	17-Apr-94	60.0
SUBMIT DRAFT RI RPT	18-Apr-94	18-Apr-94	1.0
AGENCY REVIEW	19-Apr-94	17-Jul-94	90.0
NAVY RECVS COMMENTS	18-Jul-94	24-Jul-94	7.0
ADDRESS COMMENTS	25-Jul-94	7-Sep-94	45.0
MAIL COMMENTS	8-Sep-94	8-Sep-94	1.0
PREPARE DRAFT/FINAL	9-Sep-94	23-Oct-94	45.0
SUBMIT DRAFT/FINAL	24-Oct-94	24-Oct-94	1.0
RI RPT FINALIZED	25-Oct-94	23-NOV-94	30.0
FEASIBILITY STUDY	19-Mar-94	23-Dec-94	280.0
PREPARE DRAFT FS	19-Mar-94	17-May-94	60.0
SUBMIT DRAFT FS	18-May-94	18-May-94	1.0
AGENCY REVIEW	19-May-94	16-Aug-94	90.0
NAVY RCVS COMMENTS	17-Aug-94	23-Aug-94	7.0
ADDRESS COMMENTS	24-Aug-94	7-Oct-94	45.0
MAIL COMMENTS	8-Oct-94	8-Oct-94	1.0
PREPARE DRFT/FINAL	9-Oct-94	22-Nov-94	45.0
SUBMIT DRAFT/FINAL	23-Nov-94	23-Nov-94	1.0
FS RPT FINALIZED	24-Nov-94	23-Dec-94	30.0
PROPOSED PLAN	24-Dec-94	28-Jan-96	401.0
PREPARE PP	24-Dec-94	21-Feb-95	60.0
SUBMIT DRAFT PP	22-Feb-95	22-Feb-95	1.0
AGENCY REVIEW	23-Feb-95	23-May-95	90.0
NAVY RCV COMMENTS	24-May-95	30-May-95	7.0
ADDRESS COMMENTS	31-May-95	14-Jul-95	45.0
MAIL COMMENTS	15-Jul-95	15-Jul-95	1.0
PREPARE DRAFT/FINAL	16-Jul-95	29-Aug-95	45.0
SUBMIT DRAFT/FINAL	30-Aug-95	30-Aug-95	1.0
PP FINALIZED	31-Aug-95	29-Sep-95	30.0
PREPARE PUBLIC NOTICE	30-Sep-95	14-Oct-95	15.0
PUBLISH PUBLIC NOTICE	15-Oct-95	13-Nov-95	30.0
PUBLIC COMMENT PERIOD	14-Nov-95	28-Dec-95	45.0
PUBLIC MEETING	29-Dec-95	29-Dec-95	1.0
RESPONSIVENESS SUMMARY	30-Dec-95	28-Jan-96	30.0
RECORD OF DECISION	30-Sep-95	23-Jun-96	268.0
PREPARE DRAFT ROD	30-Sep-95	13-Nov-95	45.0
SUBMIT DRAFT ROD	14-Nov-95	14-Nov-95	1.0
AGENCY REVIEW	15-Nov-95	12-Feb-96	90.0
NAVY RCV COMMENTS	13-Feb-96	19-Feb-96	7.0
ADDRESS COMMENTS	20-Feb-96	14-Mar-96	22.0

SITE MANAGEMENT PLAN
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APR 1993
PAGE 26 OF 48

Task Name	Start Date	End Date	Duratn (Days)
MAIL COMMENTS	5-Apr-96	5-Apr-96	1.0
PREPARE DRAFT/FINAL	6-Apr-96	20-May-96	45.0
SUBMIT DRAFT FINAL	21-May-96	21-May-96	1.0
ROD FINALIZED	22-May-96	20-Jun-96	30.0
ROD SIGNATURE	21-Jun-96	23-Jun-96	3.0

RI/FS OPERABLE UNIT #15: BAYOU GRANDE, PSC SITE 40; CATEGORY #4:

DESCRIPTION:

NAS Pensacola is bordered on the south by Big Lagoon and Pensacola Bay, on the east by Pensacola Bay, and on the north by Bayou Grande. Only a very small portion of the western end of NAS is farther than a mile from one of these bodies of water. Swampy areas exist on or near the western portion of NAS Pensacola. Man-made drainage ways and storm drains feed into the short intermittent streams emptying into the bays and the bayou. No perennial streams enter or exist the air station, but the marshy areas (wetlands) and their small lakes retain water throughout the year. During contamination assessment investigations, medium to high levels of TRPHs and high levels of metals, PAHs, and phenols were detected in nearshore Bayou Grande sediment samples, and high levels of metals were detected in nearshore Bayou Grande surface water samples. Fourteen sites (1, 3, 9, 10, 11, 15, 16, 29, 30, 32, 33, 34, 35, and 36) are believed to potentially contribute to the concentrations found in Bayou Grande.

1993 PRIMARY DELIVERABLES:

DUE DATE:

SITE MANAGEMENT PLAN

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

TARGET DATE:

QUARTERLY REPORTS

NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES

PROJECTED DATE:

DRAFT/FINAL RI/FS WORKPLAN (P)
FINAL RI/FS WORKPLAN (P)

NAV 22 NOV 93
NAV 28 DEC 93

RI/FS OPERABLE UNIT #16: NAVAL AIR STATION PENSACOLA (NASP)
WETLANDS. PSC SITE 41; CATEGORY #4;

DESCRIPTION:

An EPA inventory of wetlands identified and enumerated 79 wetlands complexes on NAS Pensacola. Two other wetlands were identified during habitat/biota surveys. For the purpose of these studies, freshwater and brackish water ponds, drainage ditches, and seagrass beds are included as wetlands. The majority and largest of the wetlands on NAS are located in the western portion of the installation, primarily south and west of Sherman Field. Only about a third of the 81 wetlands are located east of Sherman Field, where most of the IRP sites are located. These are small and remnant wetlands that have been heavily impacted by base activities.

Contamination was detected in all eight wetlands that have been sampled during contamination assessments. Nineteen sites (1, 3, 4, 5, 6, 9, 10, 11, 13, 14, 16, 29, 30, 32, 33, 34, 35, 36, and 39,) on Nas are suspected sources of contamination to these wetlands.

1993 PRIMARY DELIVERABLES:

DUE DATE:

SITE MANAGEMENT PLAN

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

TARGET DATE:

QUARTERLY REPORTS

NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES

PROJECTED DATE:

DRAFT/FINAL RI/FS WORKPLAN (P)
FINAL RI/FS WORRPLAN (P)

NAV 22 NOV 93
NAV 28 DEC 93

RI/FS OPERABLE UNIT #17: PENSACOLA BAY AREA, PSC SITE 42;
CATEGORY #4:

DESCRIPTION:

NAS Pensacola is bordered on the south by Big Lagoon and Pensacola Bay, on the east by Pensacola Bay, and on the north by Bayou Grande. Only a very small portion of the western end of NAS is farther than a mile from one of these bodies of water. Swampy areas exist on or near the western portion of NAS Pensacola. Man-made drainage ways and storm drains feed into the short intermittent streams emptying into the bays and the bayou. No perennial streams enter or exist the air station, but the marshy areas (wetlands) and their small lakes retain water throughout the year. During contamination assessment investigations, elevated levels of metals, total recoverable petroleum hydrocarbons (TRPHs), Polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) were detected in sediment samples collected along the southeastern waterfront of Pensacola Bay. Fourteen sites (2, 3, 4, 13, 14, 17, 18, 28, 32, 33, 35, 36, 28, and 39) on NAS are suspected sources of contaminants to Pensacola Bay.

1993 PRIMARY DELIVERABLES:

DUE DATE:

SITE MANAGEMENT PLAN

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

TARGET DATE:

QUARTERLY REPORTS

NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES

PROJECTED DATE:

DRAFT/FINAL RI/FS WORKPLAN (P)
FINAL RI/FS WORKPLAN (P)

NAV 22 NOV 93
NAV 28 DEC 93

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 32 OF 48

RI/FS CATEGORY #4: OPERABLE WIT 15: SITE 40: BAYOU GRANDE AREA,
OPERABLE UNIT 16: SITE 41; NAS PENSACOLA WETLANDS AREA, OPERABLE
UNIT 17: SITE 42; PENSACOLA BAY AREA:

Task Name	Start Date	End Date	Duratr (Days)
RI/FS	30-Mar-93	1-Apr-96	1,099.0
WORKPLAN DEVELOPMENT	30-Mar-93	28-Dec-93	274.0
ADDRESS COMMENTS	30-Mar-93	15-Sep-93	170.0
MAIL COMMENTS	16-Sep-93	22-Sep-93	7.0
PREPARE DRAFT FINAL	23-Sep-93	21-Nov-93	60.0
SUBMIT DRAFT FINAL	22-Nov-93	28-Nov-93	7.0
WORK PLAN FINALIZED	29-Nov-93	28-Dec-93	30.0
RI REPORT w/BRA	29-Dec-93	1-Apr-96	825.0
FIELDWORK	29-Dec-93	27-Jan-95	395.0
DATA VALIDATION	28-Jan-95	27-Apr-95	90.0
PREPARE DFT RI RPT	28-Apr-95	25-Aug-95	120.0
SUBMIT DRAFT RI RPT	26-Aug-95	26-Aug-95	1.0
AGENCY REVIEW	27-Aug-95	24-Nov-95	90.0
NAVY RECVS COMMENTS	25-Nov-95	1-Dec-95	7.0
ADDRESS COMMENTS	2-Dec-95	15-Jan-96	45.0
MAIL COMMENTS	16-Jan-96	16-Jan-96	1.0
PREPARE DRAFT/FINAL	17-Jan-96	1-Mar-96	45.0
SUBMIT DRAFT/FINAL	2-Mar-96	2-Mar-96	1.0
RI RPT FINALIZED	3-Mar-96	1-Apr-96	30.0
FEASIBILITY STUDY	28-May-95	2-Mar-96	280.0
PREPARE DRAFT FS	28-May-95	26-Jul-95	60.0
SUBMIT DRAFT FS	27-Jul-95	27-Jul-95	1.0
AGENCY REVIEW	28-Jul-95	25-Oct-95	90.0
NAVY RCVS COMMENTS	26-Oct-95	1-Nov-95	7.0
ADDRESS COMMENTS	2-Nov-95	16-Dec-95	45.0
MAIL COMMENTS	17-Dec-95	17-Dec-95	1.0
PREPARE DRFT/FINAL	18-Dec-95	31-Jan-96	45.0
SUBMIT DRAFT/FINAL	1-Feb-96	1-Feb-96	1.0
FS RPT FINALIZED	2-Feb-96	2-Mar-96	30.0
PROPOSED PLAN	3-Mar-96	23-Mar-97	386.0
PREPARE PP	3-Mar-96	16-Apr-96	45.0
SUBMIT DRAFT PP	17-Apr-96	17-Apr-96	1.0
AGENCY REVIEW	18-Apr-96	16-Jul-96	90.0
NAVY RCV COMMENTS	17-Jul-96	23-Jul-96	7.0
ADDRESS COMMENTS	24-Jul-96	6-Sep-96	45.0
MAIL COMMENTS	7-Sep-96	7-Sep-96	1.0
PREPARE DRAFT/FINAL	8-Sep-96	22-Oct-96	45.0
SUBMIT DRAFT/FINAL	23-Oct-96	23-Oct-96	1.0
PP FINALIZED	24-Oct-96	22-Nov-96	30.0
PREPARE PUBLIC NOTICE	23-Nov-96	7-Dec-96	15.0
PUBLISH PUBLIC NOTICE	8-Dec-96	6-Jan-97	30.0
PUBLIC COMMENT PERIOD	7-Jan-97	20-Feb-97	45.0
PUBLIC MEETING	21-Feb-97	21-Feb-97	1.0
RESPONSIVENESS SUMMARY	22-Feb-97	23-Mar-97	30.0

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 33 OF 48

Task Name	Start Date	End Date	Duratn (Days)
RECORD OF DECISION	23-Nov-96	17-Aug-97	268.0
PREPARE DRAFT ROD	23-Nov-96	6-Jan-97	45.0
SUBMIT DRAFT ROD	7-Jan-97	7-Jan-97	1.0
AGENCY REVIEW	8-Jan-97	7-Apr-97	90.0
NAVY RCV COMMENTS	8-Apr-97	14-Apr-97	7.0
ADDRESS COMMENTS	15-Apr-97	29-May-97	45.0
MAIL COMMENTS	30-May-97	30-May-97	1.0
PREPARE DRAFT/FINAL	31-May-97	14-Jul-97	45.0
SUBMIT DRAFT FINAL	15-Jul-97	15-Jul-97	1.0
ROD FINALIZED	16-Jul-97	14-Aug-97	30.0
ROD SIGNATURE	15-Aug-97	17-Aug-97	3.0

RI/FS OPERABLE UNIT #6: SOIL SOUTH OF BUILDING 3460. PSC SITE 29;
AND NAVY YARD DISPOSAL AREA. PSC SITE 9; CATEGORY #5:

DESCRIPTION:

PSC Site 29: Soil South of Building 3460. In 1981, workers excavating soil beneath the concrete apron south of Building 3460 received skin burns from a "black slimy liquid" in the soil. Types of chemicals involved and extent of contamination are unknown. A leak in the nearby pressurized industrial sewer line from the Naval Aviation Depot (NADEP) facility is the expected source. This site is part of the group including sites 9, 10, and 34 studied together. There were no analyses of groundwater for non-halogenated hydrocarbons volatiles, extractables, exotic or parameters other than method 601 VOCs. There is concern over placement of the monitoring wells.

PSC Site 9: Navy Yard Disposal Area. This site was used for the disposal of trash and refuse during the period between 1917 and the early 1930's. It is reported that the site is shown on several old maps as the Navy Yard Dump or the Warrington Village Dump (NEESA 1983). In the late 1960's, while trenching for the Industrial Wastewater Treatment Plant (IWTP) system, part of site 9 was excavated. Glass, scrap metal, and debris were unearthed. No unusual odor was reported associated with the site. The IAS report concluded that no further study was necessary and the site did not constitute a threat to human health or the environment. During the VS of this site, monitoring wells were installed at the southwest corner of Chevalier Field to determine shallow groundwater flow and groundwater samples taken to further delineate the contamination problem in the general area of sites 34, 10, and 29. Groundwater samples were analyzed for VOCs; however, no VOCs were detected in any samples obtained.

The Screening Sites which will be investigated and reported on concurrently with this Operable Unit include; PSC Site 10; Commodore's Pond; PSC Site 34: Solvent North of Building 3557. PSC Site 10 was formerly the location of a small surface water body. In the mid-nineteenth century, the pond was used for the underwater storage of shaped oak timbers. This underwater storage method preserved the wood prior to its use for shipbuilding. The original pond is no longer in existence; therefore, its exact dimensions are unknown. Site debris was unearthed in the late 1960's during trenching operations for installations of the IWTP system. Abandoned oak timbers were exhumed and reburied on Magazine Point. It is reported that no hazardous materials were encountered during this effort.

RI/FS OPERABLE UNIT #6: SOIL SOUTH OF BUILDING 3460, PSC SITE 29;
AND NAVY YARD DISPOSAL AREA, PSC SITE 9; CATEGORY #5 continued:

DESCRIPTION continued:

PSC Site 34. During May 1984, a leak occurred in a pipeline at the north end of Building 3557. The leak reportedly resulted in the loss of approximately 45,000 gallons of a solvent detergent used for cleaning aircraft. The solution contained 1.7 percent chlorinated aromatic hydrocarbons solvent, or approximately 750 gallons of solvent. Contamination of site soils and groundwater may have occurred as the result of the solvent detergent release. Contamination may have penetrated beneath the apron via the expansion joints which separated individual concrete tiles and via runoff of escaped solvent to the unpaved storage tank area. The unpaved drainage ditch in the tank area is suspected to have carried contamination off-site and is presumed to be connected to the paved drainage ditch located west Chevalier Field. It is unknown whether or not site contamination entered into the NAS Pensacola storm sewer system.

These PSC sites were grouped together mainly due to the following: geographic proximity of sites, and the potential for off-site migration and its impact on the other site. The prioritization of these sites was due to the suspected magnitude and toxicity of contamination, the potential for off-site migration of contaminants via several pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

DUE DATE:

SITE MANAGEMENT PLAN

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

TARGET DATE:

DRAFT HASP
QUARTERLY REPORTS

NAV 20 SEP 93
NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES:

PROJECTED DATE:

DRAFT SAP
FINAL HASP
FINAL SAP
DRAFT RI/BRA (P)
DRAFT RI/FS REPORT (P)

NAV 06 OCT 93
NAV 19 OCT 93
NAV 19 DEC 93
NAV 27 AUG 94
NAV 26 SEP 94

RI/FS OPERABLE UNIT #8: CRASH CREW TRAINING AREA. PSC SITE 3;
CATEGORY #5:

DESCRIPTION:

These areas are near Sherman Airfield. Personnel have been trained to fight aviation fires at these areas since 1955. Ignitable fuels are poured into shallow, unlined depressions and set a fire. The fires are extinguished with foam agents. Eighteen (18) soil borings were made to locate free products at this site. Six (6) monitoring wells are installed to monitor for volatile organic compounds (VOCs). No free products was found although halogenated VOCs were detected in low concentrations in three (3) of the monitoring wells. A storm drain parallel to the runway may affect the shallow groundwater flow direction. No analysis for non-halogenated volatiles have been made. No sampling of water in the storm drain has been made. In addition to the in depth study, modifications which eliminate pouring fuels directly into porous unlined pits have been adopted. The remedial investigation will include a determination of the storm drain discharge point. Since leaded gasoline is involved, the need to sample for heavy metals at the discharge point is indicated.

Screening sites PSC Site 19; Fuel Farm Pipeline Leak Area and PSC Site 37; Sherman Field Fuel Farm Area; were investigated and moved to UST. The prioritization of these sites was due to the suspected magnitude and toxicity of contamination, the potential for off-site migration of contaminants via several pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

DUE DATE:

SITE MANAGEMENT PLAN

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

TARGET DATE:

DRAFT HASP
QUARTERLY REPORTS

NAV 20 SEP 93
NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES:

PROJECTED DATE:

DRAFT SAP
FINAL HASP
FINAL SAP
DRAFT RI/BRA (P)
DRAFT RI/FS REPORT (P)

NAV 06 OCT 93
NAV 19 OCT 93
NAV 19 DEC 93
NAV 27 AUG 94
NAV 26 SEP 94

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 37 OF 48

RI/FS CATEGORY #5: OPERABLE UNIT 6: SITE 9: NAVY YARD DISPOSAL AREA
 AND SITE 29: SOIL SOUTH OF BUILDING 3460. OPERABLE UNIT 8: SITE 3;
 CRASH CREW TRAINING AREA. SCREENING SITE 10; COMMODORE'S POND.
 SCREENING SITE 14: DREDGE SPOIL FILL AREA, AND SCREENING SITE 34:
 SOLVENT NORTH OF BUILDING 3557:

Task Name	Start Date	End Date	Duratr (Days)
RI/FS	7-Sep-93	3-May-95	604.0
DRFT HASP	7-Sep-93	20-Sep-93	14.0
NAVY REVIEW	21-Sep-93	4-Oct-93	14.0
ADDRESS COMMENTS	5-Oct-93	18-Oct-93	14.0
SUBMIT FINAL HASP	19-Oct-93	19-Oct-93	1.0
PREPARE DRFT SAP	7-Sep-93	6-Oct-93	30.0
AGENCY REVIEW	7-Oct-93	5-Nov-93	30.0
NAVY RCVS COMMENTS	6-Nov-93	12-Nov-93	7.0
SUBMIT FINAL SAP	13-Nov-93	26-Nov-93	14.0
SAP FINALIZED	27-Nov-93	26-Dec-93	30.0
FIELD WORK	27-Dec-93	28-Apr-94	123.0
DATA VALIDATION	29-Apr-94	27-Jun-94	60.0
RI REPORT w/ BRA	28-Jun-94	3-Apr-95	280.0
PREPARE DFT RI RPT	28-Jun-94	26-Aug-94	60.0
SUBMIT DRAFT RI RPT	27-Aug-94	27-Aug-94	1.0
AGENCY REVIEW	28-Aug-94	25-Nov-94	90.0
NAVY RCVS COMMENTS	26-Nov-94	2-Dec-94	7.0
ADDRESS COMMENTS	3-Dec-94	16-Jan-95	45.0
MAIL COMMENTS	17-Jan-95	17-Jan-95	1.0
PREPARE DRAFT/FINAL	18-Jan-95	3-Mar-95	45.0
SUBMIT DRAFT/FINAL	4-Mar-95	4-Mar-95	1.0
RI RPT FINALIZED	5-Mar-95	3-Apr-95	30.0
FEASIBILITY STUDY	28-Jul-94	3-May-95	280.0
PREPARE DRAFT FS	28-Jul-94	25-Sep-94	60.0
SUBMIT DRAFT FS	26-Sep-94	26-Sep-94	1.0
AGENCY REVIEW	27-Sep-94	25-Dec-94	90.0
NAVY RCVS COMMENTS	26-Dec-94	1-Jan-95	7.0
ADDRESS COMMENTS	2-Jan-95	15-Feb-95	45.0
MAIL COMMENTS	16-Feb-95	16-Feb-95	1.0
PREPARE DRFT/FINAL	17-Feb-95	2-Apr-95	45.0
SUBMIT DRAFT/FINAL	3-Apr-95	3-Apr-95	1.0
FS RPT FINALIZED	4-Apr-95	3-May-95	30.0
PROPOSED PLAN	4-May-95	7-Jun-96	401.0
PREPARE PP	4-May-95	2-Jul-95	60.0
SUBMIT DRAFT PP	3-Jul-95	3-Jul-95	1.0
AGENCY REVIEW	4-Jul-95	1-Oct-95	90.0
NAVY RCV COMMENTS	2-Oct-95	8-Oct-95	7.0
ADDRESS COMMENTS	9-Oct-95	22-Nov-95	45.0
MAIL COMMENTS	23-Nov-95	23-Nov-95	1.0
PREPARE DRAFT/FINAL	24-Nov-95	7-Jan-96	45.0
SUBMIT DRAFT/FINAL	8-Jan-96	8-Jan-96	1.0
PP FINALIZED	9-Jan-96	7-Feb-96	30.0
PREPARE PUBLIC NOTICE	8-Feb-96	22-Feb-96	15.0

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 38 OF 48

Task Name	Start Date	End Date	Duratn (Days)
PUBLISH PUBLIC NOTICE	23-Feb-96	23-Mar-96	30.0
PUBLIC COMMENT PERIOD	24-Mar-96	7-May-96	45.0
PUBLIC MEETING	8-May-96	8-May-96	1.0
RESPONSIVENESS SUMMARY	9-May-96	7-Jun-96	30.0
RECORD OF DECISION	8-Feb-96	1-NOV-96	268.0
PREPARE DRAFT ROD	8-Feb-96	23-Mar-96	45.0
SUBMIT DRAFT ROD	24-Mar-96	24-Mar-96	1.0
AGENCY REVIEW	25-Mar-96	22-Jun-96	90.0
NAVY RCV COMMENTS	23-Jun-96	29-Jun-96	7.0
ADDRESS COMMENTS	30-Jun-96	13-Aug-96	45.0
MAIL COMMENTS	14-Aug-96	14-Aug-96	1.0
PREPARE DRAFT/FINAL	15-Aug-96	28-Sep-96	45.0
SUBMIT DRAFT FINAL	29-Sep-96	29-Sep-96	1.0
ROD FINALIZED	30-Sep-96	29-Oct-96	30.0
ROD SIGNATURE	30-Oct-96	1-Nov-96	3.0

RI/FS OPERABLE UNIT #4: PESTICIDE RINSATE DISPOSAL AREA. PSC SITE
15: CATEGORY #6:

DESCRIPTION:

The site is located at the golf course maintenance area. It was used for over sixteen (16) years as a disposal area for **rinse** water from cleaning pesticide mixing and spray equipment. The quantity disposed of in this area is unknown. Analysis of soil samples show the presence of organic pesticides and EP Toxic concentrations of arsenic in the soil. Two (2) shallow monitoring wells are installed. Analysis of groundwater for pesticides and PCB indicate that arsenic is present in groundwater. Groundwater flow direction is presumed northerly towards the Bayou Grande. In-depth studies will be conducted to help define the contamination plume and definitive flow direction.

The following Screening site which will be investigated and reported concurrently with this Operable Unit include: PSC Site 24: DDT Mixing Area; From the early 1950s until the early 1960s, this site was used as a location for mixing DDT with diesel fuel for mosquitos control. Spill occurred within the mixing area when DDT was transferred from drums to spray tanks. The unintentional spillage of DDT concentrate may have contaminated site soil and groundwater.

These PSC sites were grouped together mainly due to geographic proximity of sites, similar contamination types, and similar potential investigation methods. The prioritization of these sites was due to the suspected magnitudes and toxicity of contamination, the potential for off-site migration of contaminants via several pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

SITE MANAGEMENT PLAN

DUE DATE:

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

DRAFT HASP
QUARTERLY REPORTS

TARGET DATE:

NAV 20 SEP 93
NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES:

DRAFT SAP (S)
FINAL HASP (S)
FINAL SAP (S)

PROJECTED DATE:

NAV 06 OCT 93
NAV 19 OCT 93
NAV 19 DEC 93

SITE MANAGEMENT PLAN
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APR 1993
PAGE 40 OF 48

RI/FS OPERABLE UNIT #4; PESTICIDE RINSATE DISPOSAL AREA, PSC SITE
15; CATEGORY #6, continued:

PROJECTED DELIVERABLES:

PROJECTED DATE:

DRAFT RI/BRA (P)
DRAFT RI/FS REPORT (P)

NAV 28 JUN 94
NAV 28 JUL 94

RI/FS OPERABLE UNIT #14: TRANSFORMER STORAGE YARD, PSC SITE 17;
CATEGORY #6:

DESCRIPTION:

PSC Site 17: Transformer Storage Yard: Transformer containing PCBs as well as PCB-free transformers were stored on this paved area. A black oily residue on the pavement was found to contain high levels of PCBs as well as other chlorinated hydrocarbons. Three (3) soil borings drilled through the pavement found significant concentrations of PCBs only near the catch basin; leakage through joints in the pavement is the suspected cause. PCB concentrations were below the EP toxic standard.

No sampling of soil outside of the paved area has been done. In addition, no samples were taken from sediments or soils within or under joints, cracks in the catch basin, or the storm sewer. Further study will be conducted of this site.

The following Screening Site which will be investigated and reported on concurrently with this Operable Unit include; PSC Site 18: PCB Spill Area; and PSC Site 28: Transformer Accident Area. The PSC Site 18: In 1966, a transformer at substation A reportedly failed, spilling approximately 50 gallons of transformer oil containing an unknown concentration of PCBs on the small gravel-covered area along the northeast side of substation A. It is assumed that no clean-up effort was conducted. During IAS field investigations, analysis of a field sample indicated that Arochlor 1260 was present at a concentration of 4 ppm, which was less than that considered hazardous under the Toxic Substance Control Act.

PSC Site 28: In 1969, a transformer fell from a truck traveling on Radford Avenue, just north of Building 632. The transformer broke open and spilled approximately 50 gallons of transformer oil onto the pavement. It is not known whether the oil contained PCBs. The oil was reportedly washed into a nearby storm sewer drain.

These PSC sites were grouped together due to the following: geographic proximity of sites, similar contamination types, and similar groundwater flow. The prioritization of these sites was due to the suspected magnitude and toxicity of contamination, the potential for off-site migration of contaminants via several pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

DUE DATE:

SITE MANAGEMENT PLAN

YEARLY update SEP 93

SITE MANAGEMENT PLAN
NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA

15 APR 1993
PAGE 42 OF 40

RI/FS OPERABLE UNIT #14: TRANSFORMER STORAGE YARD. PSC SITE 17;
CATEGORY #6, continued:

3993 SECONDARY DELIVERABLES:

TARGET DATE:

DRAFT HASP
QUARTERLY REPORTS

NAV 20 SEP 93
NAV 30 SEP, APR,
JUL, and OCT

PROJECTED DELIVERABLES:

PROJECTED DATE:

DRAFT SAP (S)
FINAL HASP (S)
FINAL SAP (S)
DRAFT RI/BRA (P)
DRAFT RI/FS REPORT (P)

NAV 06 OCT 93
NAV 19 OCT 93
NAV 19 DEC 93
NAV 28 JUN 94
NAV 28 JUL 94

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 43 OF 48

RI/FS CATEGORY #6: OPERABLE WIT 4: SITE 15; PESTICIDE RINSTATE
DISPOSAL AREA, OPERABLE UNIT 14: SITE 17: TRANSFORMER STORAGE YARD,
SCREENING SITE 18; PCB SPILL AREA. SCREENING SITE 24: DDT MIXING
AREA, AND DDT MIXING SITE 28: TRANSFORMER STORAGE AREA:

Task Name	Start Date	End Date	Duratrn (Days)
RI/FS	7-Sep-93	4-Mar-95	544.0
DRFT HASP	7-Sep-93	20-Sep-93	14.0
NAVY REVIEW	21-Sep-93	4-Oct-93	14.0
ADDRESS COMENTS	5-Oct-93	18-Oct-93	14.0
SUBMIT FINAL HASP	19-Oct-93	19-Oct-93	1.0
DRFT SAP	7-Sep-93	6-Oct-93	30.0
AGENCY REVIEW	7-Oct-93	5-Nov-93	30.0
ADDRESS COMMENTS	6-Nov-93	12-Nov-93	7.0
RESUB FINAL SAP	13-Nov-93	26-Nov-93	14.0
FINALIZE SAP	27-Nov-93	26-Dec-93	30.0
FIELD WORK	27-Dec-93	27-Feb-94	63.0
DATA VALIDATION	28-Feb-94	28-Apr-94	60.0
RI REPORT W/BRA	29-Apr-94	2-Feb-95	280.0
PREPARE DFT RI RPT	29-Apr-94	27-Jun-94	60.0
SUBMIT DRAFT RI RPT	28-Jun-94	28-Jun-94	1.0
AGENCY REVIEW	29-Jun-94	26-Sep-94	90.0
NAVY RCVS COMMENTS	27-Sep-94	3-Oct-94	7.0
ADDRESS COMMENTS	4-Oct-94	17-Nov-94	45.0
MAIL COMMENTS	18-Nov-94	18-Nov-94	1.0
PREPARE DRAFT/FINAL	19-Nov-94	2-Jan-95	45.0
SUBMIT DRAFT/FINAL	3-Jan-95	3-Jan-95	1.0
RI RPT FINALIZED	4-Jan-95	2-Feb-95	30.0
FEASIBILITY STUDY	29-May-94	4-Mar-95	280.0
PREPARE DRAFT FS	29-May-94	27-Jul-94	60.0
SUBMIT DRAFT FS	28-Jul-94	28-Jul-94	1.0
AGENCY REVIEW	29-Jul-94	26-Oct-94	90.0
NAVY RCVS COMMENTS	27-Oct-94	2-Nov-94	7.0
ADDRESS COMMENTS	3-Nov-94	17-Dec-94	45.0
MAIL COMMENTS	18-Dec-94	18-Dec-94	1.0
PREPARE DRFT/FINAL	19-Dec-94	1-Feb-95	45.0
SUBMIT DRAFT/FINAL	2-Feb-95	2-Feb-95	1.0
FS RPT FINALIZED	3-Feb-95	4-Mar-95	30.0
PROPOSED PLAN	5-Mar-95	8-Apr-96	401.0
PREPARE PP	5-Mar-95	3-May-95	60.0
SUBMIT DRAFT PP	4-May-95	4-May-95	1.0
AGENCY REVIEW	5-May-95	2-Aug-95	90.0
NAVY RCV COMMENTS	3-Aug-95	9-Aug-95	7.0
ADDRESS COMMENTS	10-Aug-95	23-Sep-95	45.0
MAIL COMMENTS	24-Sep-95	24-Sep-95	1.0
PREPARE DRAFT/FINAL	25-Sep-95	8-Nov-95	45.0
SUBMIT DRAFT/FINAL	9-Nov-95	9-Nov-95	1.0
PP FINALIZED	10-Nov-95	9-Dec-95	30.0
PREPARE PUBLIC NOTICE	10-Dec-95	24-Dec-95	15.0
PUBLISH PUBLIC NOTICE	25-Dec-95	23-Jan-96	30.0

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 44 OF 48

Task Name	Start Date	End Date	Duratr (Days)
PUBLIC COMMENT PERIOD	24-Jan-96	8-Mar-96	45.0
PUBLIC MEETING	9-Mar-96	9-Mar-96	1.0
RESPONSIVENESS SUMMARY	10-Mar-96	8-Apr-96	30.0
RECORD OF DECISION	10-Dec-95	2-Sep-96	268.0
PREPARE DRAFT ROD	10-Dec-95	23-Jan-96	45.0
SUBMIT DRAFT ROD	24-Jan-96	24-Jan-96	1.0
AGENCY REVIEW	25-Jan-96	23-Apr-96	90.0
NAVY RCV COMMENTS	24-Apr-96	30-Apr-96	7.0
ADDRESS COMMENTS	1-May-96	14-Jun-96	45.0
MAIL COMMENTS	15-Jun-96	15-Jun-96	1.0
PREPARE DRAFT/FINAL	16-Jun-96	30-Jul-96	45.0
SUBMIT DRAFT FINAL	31-Jul-96	31-Jul-96	1.0
ROD FINALIZED	1-Aug-96	30-Aug-96	30.0
ROD SIGNATURE	31-Aug-96	2-Sep-96	3.0

RI/FS OPERABLE UNIT | 3 REFUELER REPAIR SHOP. | 3. 22:
CATEGORY #7:

DESCRIPTION:

PSC Site 22: Refueler Repair Shop: The residual fuel from aircraft refueling trucks was disposed here in preparation for repair work on the trucks. An estimated 19,000 gallons of leaded aviation gasoline and jet fuel were disposed over a nineteen (19) year period. Fifteen (15) borings to detect free product on the shallow water table did not detect any free product. Further studies will be conducted. The analyses of groundwater samples for dissolved constituents such as non-halogenated volatiles, lead, and base neutral extractables will be performed. Piezometers may be placed to aid in estimating the most probable location of an exhibiting plume of contamination, and to determine if the gradient of the shallow aquifer is toward a public supply well.

The following Screening Site which will be investigated and reported on concurrently with this Operable Unit include; PSC Site 8: Rifle Range Disposal Area; the rifle range disposal area is located in the area now occupied by Building 3561. This building covers an area approximately 550 feet by 163 feet. Surrounding the building is an asphalt parking lot on the eastern, western and northern sides of the building. Along the southern side of the building lies a small grassy area. This area was reportedly used for the disposal of solid waste (primarily paper) from NAS Pensacola between 1951 and 1955, and disposal was accomplished by burning and burial.

These PSC sites were grouped together due to the following: geographic proximity of sites, similar contamination types, and similar groundwater flow. The prioritization of these sites was due to the suspected magnitude and toxicity of contamination, the potential for off-site migration of contamination via several pathways, and the potential for human exposure.

1993 PRIMARY DELIVERABLES:

DUE DATE:

SITE MANAGEMENT PLAN

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

TARGET DATE:

DRAFT HASP

NAV 22 JAN 94

DRAFT SAP

NAV 11 FEB 94

FINAL HASP

NAV 26 FEB 94

FINAL SAP

NAV 10 MAY 94

QUARTERLY REPORTS

NAV 30 SEP, APR,
JUL, and OCT

RI/FS OPERABLE UNIT #18: SUPPLY DEPARTMENT OUTSIDE STORAGE AREA,
PSC SITE 26; CATEGORY #7:

DESCRIPTION:

PSC Site 26; Supply Department Outside Storage Area: A 90 square foot outside area, south of building 684, used to store containers of industrial materials. The containers were stored on steel mats. Leakage is reported to have occurred from these containers. Since PSC Site 11 is downgradient from this area, in depth studies will be conducted.

The following Screening Site will be investigated and reported on concurrently with this Operable Unit. PSC Site 12; Scrap Bins is located approximately 800 feet northwest of Chevalier Field and 600 feet west of Site 11. Most of the site area is enclosed by a fence and covered with a large concrete pad where heavy equipment is currently kept. From the early 1930's to mid 1940's, garbage from NAS Pensacola was placed in scrap bins and stored in this area (industrial waste was sent to the North Chevalier Disposal Area). Approximately 16 cubic yards (2 truck loads) per day of wet garbage was stored here before being hauled off and used as livestock feed. There is no evidence of hazardous material disposal at this site.

1993 PRIMARY DELIVERABLES:

SITE MANAGEMENT PLAN

DUE DATE:

YEARLY update SEP 93

1993 SECONDARY DELIVERABLES:

DRAFT HASP
DRAFT SAP
FINAL HASP
FINAL SAP
QUARTERLY REPORTS

TARGET DATE:

NAV 22 JAN 94
NAV 11 FEB 94
NAV 26 FEB 94
NAV 10 MAY 94
NAV 30 SEP, APR,
JUL, and OCT

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 47 OF 48

RI/FS CATEGORY #7: OPERABLE UNIT 13: SITE: REFUELER REPAIR SHOP, OPERABLE UNIT 18: SITE 26: SUPPLY DEPARTMENT STORAGE AREA, SCREENING SITE 4; ARMY RUBBLE DISPOSAL AREA, SCREENING SITE 5; BORROW PIT, SCREENING SITE 6: FORT REDOUBT RUBBLE DISPOSAL AREA, SCREENING SITE 7: FIREFIGHTING SCHOOL TRAINING AREA, SCREENING SITE 8: RIFLE RANGE DISPOSAL AREA, SCREENING SITE 12: SCRAP BINS, AND SCREENING SITE 16: BRUSH DISPOSAL AREA:

Task Name	Start Date	End Date	Duratr (Days)
RI/FS	3-Jan-94	12-Sep-95	618.0
DRFT HASP	3-Jan-94	22-Jan-94	20.0
NAVY REVIEW	23-Jan-94	5-Feb-94	14.0
ADDRESS COMENTS	6-Feb-94	19-Feb-94	14.0
SUBMIT FINAL HASP	20-Feb-94	26-Feb-94	7.0
DRFT SAP	3-Jan-94	11-Feb-94	40.0
AGENCY REVIEW	12-Feb-94	13-Mar-94	30.0
ADDRESS COMMENTS	14-Mar-94	20-Mar-94	7.0
RESUB FINAL SAP	21-Mar-94	10-Apr-94	21.0
FINALIZE SAP	11-Apr-94	10-May-94	30.0
FIELD WORK	11-May-94	7-Sep-94	120.0
DATA VALIDATION	8-Sep-94	6-Nov-94	60.0
RI REPORT	7-Nov-94	13-Aug-95	280.0
PREPARE DFT RI RPT	7-Nov-94	5-Jan-95	60.0
SUBMIT DRAFT RI RPT	6-Jan-95	6-Jan-95	1.0
AGENCY REVIEW	7-Jan-95	6-Apr-95	90.0
NAVY RECVS COMMENTS	7-Apr-95	13-Apr-95	7.0
ADDRESS COMMENTS	14-Apr-95	28-May-95	45.0
MAIL COMMENTS	29-May-95	29-May-95	1.0
PREPARE DRAFT/FINAL	30-May-95	13-Jul-95	45.0
SUBMIT DRAFT/FINAL	14-Jul-95	14-Jul-95	1.0
RI RPT FINALIZED	15-Jul-95	13-Aug-95	30.0
FEASIBILITY STUDY	7-Dec-94	12-Sep-95	280.0
PREPARE DRAFT FS	7-Dec-94	4-Feb-95	60.0
SUBMIT DRAFT FS	5-Feb-95	5-Feb-95	1.0
AGENCY REVIEW	6-Feb-95	6-May-95	90.0
NAVY RCVS COMMENTS	7-May-95	13-May-95	7.0
ADDRESS COMMENTS	14-May-95	27-Jun-95	45.0
MAIL COMMENTS	28-Jun-95	28-Jun-95	1.0
PREPARE DRFT/FINAL	29-Jun-95	12-Aug-95	45.0
SUBMIT DRAFT/FINAL	13-Aug-95	13-Aug-95	1.0
FS RPT FINALIZED	14-Aug-95	12-Sep-95	30.0
PROPOSED PLAN	13-Sep-95	17-Oct-96	401.0
PREPARE PP	13-Sep-95	11-Nov-95	60.0
SUBMIT DRAFT PP	12-Nov-95	12-Nov-95	1.0
AGENCY REVIEW	13-Nov-95	10-Feb-96	90.0
NAVY RCV COMMENTS	11-Feb-96	17-Feb-96	7.0
ADDRESS COMMENTS	18-Feb-96	2-Apr-96	45.0
MAIL COMMENTS	3-Apr-96	3-Apr-96	1.0
PREPARE DRAFT/FINAL	4-Apr-96	18-May-96	45.0
SUBMIT DRAFT/FINAL	19-May-96	19-May-96	1.0
PP FINALIZED	20-May-96	18-Jun-96	30.0
PREPARE PUBLIC NOTICE	19-Jun-96	3-Jul-96	15.0
PUBLISH PUBLIC NOTICE	4-Jul-96	2-Aug-96	30.0

SITE MANAGEMENT PLAN
 NAVAL AIR STATION PENSACOLA
 PENSACOLA, FLORIDA

15 APR 1993
 PAGE 48 OF 4b

Task Name	Start Date	End Date	Duratn (Days)
-----	-----	-----	-----
PUBLIC COMMENT PERIOD	3-Aug-96	16-Sep-96	45.0
PUBLIC MEETING	17-Sep-96	17-Sep-96	1.0
RESPONSIVENESS SUMMARY	18-Sep-96	17-Oct-96	30.0
RECORD OF DECISION	19-Jun-96	13-Mar-97	268.0
PREPARE DRAFT ROD	19-Jun-96	2-Aug-96	45.0
SUBMIT DRAFT ROD	3-Aug-96	3-Aug-96	1.0
AGENCY REVIEW	4-Aug-96	1-Nov-96	90.0
NAVY RCV COMMENTS	2-NOV-96	8-Nov-96	7.0
ADDRESS COMMENTS	9-Nov-96	23-Dec-96	45.0
MAIL COMMENTS	24-Dec-96	24-Dec-96	1.0
PREPARE DRAFT/FINAL	25-Dec-96	7-Feb-97	45.0
SUBMIT DRAFT FINAL	8-Feb-97	8-Feb-97	1.0
ROD FINALIZED	9-Feb-97	10-Mar-97	30.0
ROD SIGNATURE	11-Mar-97	13-Mar-97	3.0