

DRAFT REPORT

998

SCOPE OF WORK RI/FS ACTIVITIES

**NAVAL EDUCATION AND TRAINING CENTER,
NEWPORT, RHODE ISLAND**

**Contract No. N62472-86-C-1282
December, 1992**

**Prepared For:
Northern Division
Naval Facilities Engineering Command
Lester, Pennsylvania**

**Submitted By:
TRC Environmental Corporation
5 Waterside Crossing
Windsor, Connecticut**

TRC

TRC Environmental Corporation

**U.S. DEPARTMENT OF NAVY
INSTALLATION RESTORATION PROGRAM**

**DRAFT
SCOPE OF WORK - RI/FS ACTIVITIES
NAVAL EDUCATION AND TRAINING CENTER,
NEWPORT, RHODE ISLAND**

**Prepared by:
TRC Environmental Corporation
Windsor, CT**

**Prepared for:
Northern Division - Naval Facilities
Engineering Command
Lester, Pennsylvania**

December, 1992

**TRC-EC Project No. 6760-N81-160
Contract No. N62472-86-C-1282**

TRC

TRC Environmental Corporation

5 Waterside Crossing
Windsor, CT 06095
☎ (203) 289-8631 Fax (203) 298-6399

A TRC Company

Printed on Recycled Paper

TABLE OF CONTENTS

<u>SCOPE OF WORK</u>		<u>Page</u>
	List of Acronyms	iii
1.0	INTRODUCTION	1
1.1	PURPOSE	1
1.2	SCOPE	2
2.0	BACKGROUND	2
2.1	SITE LOCATION	2
2.2	HISTORY	2
3.0	INITIAL ASSESSMENT STUDY	7
4.0	CONFIRMATION STUDY	7
5.0	CURRENT RI/FS PROGRAM STATUS	8
5.1	PHASE I REMEDIAL INVESTIGATION	8
5.2	PHASE II REMEDIAL INVESTIGATION/FEASIBILITY STUDY	8
5.3	STUDY AREA SCREENING EVALUATIONS	9
6.0	PROJECT ORGANIZATION AND MANAGEMENT	10
7.0	DELIVERABLES AND SCHEDULE	11
8.0	REFERENCES	11

TABLES

TABLE 1	SUMMARY OF NETC HAZARDOUS WASTE SITES
TABLE 2	STATUS SUMMARY OF NETC HAZARDOUS WASTE SITES
TABLE 3	SUMMARY OF PHASE I ACTIVITIES
TABLE 4	SUMMARY OF PROPOSED PHASE II ACTIVITIES
TABLE 5	PRIMARY AND SECONDARY DOCUMENT SUMMARY

TABLE OF CONTENTS

SCOPE OF WORK

FIGURES

FIGURE 1	REMEDIAL RESPONSE PROCESS
FIGURE 2	SITE LOCUS
FIGURE 3	HAZARDOUS WASTE SITES LOCUS PLAN
FIGURE 4A	ESTIMATED SCHEDULE - SASE ACTIVITIES
FIGURE 4B	ESTIMATED SCHEDULE - RI/FS ACTIVITIES SITES 1, 9, 12 AND 13
FIGURE 4C	ESTIMATED SCHEDULE - RI/FS ACTIVITIES SITE 1 - McAllister Point Landfill
FIGURE 5A	PRIMARY DOCUMENT REVIEW
FIGURE 5B	SECONDARY DOCUMENT REVIEW

List of Acronyms

ARAR	Applicable or Relevant and Appropriate Requirement
CS	Confirmation Study
CERCLA	Comprehensive Environmental Response Compensation and Liabilities Act
DERP	Defense Environmental Restoration Program
DOD	Department of Defense
EFD	Engineering Field Division
EPA	Environmental Protection Agency
FFA	Federal Facilities Agreement
FUDS	Formerly-Used Defense Site
FS	Feasibility Study
FSP	Field Sampling Plan
HASP	Health and Safety Plan
IAS	Initial Assessment Study
IRA	Interim Remedial Action
IRP	Installation Restoration Program
QAPP	Quality Assurance Project Plan
NACIP	Naval Assessment and Control of Installation Pollutants
NAVFACENGCOM	Naval Facilities Engineering Command
NCP	National Contingency Plan
NETC	Naval Education and Training Center
NEESA	Naval Energy and Environmental Support Activity
NORTHDIV	Northern Division NAVFACENGCOM
NPL	National Priorities List
NUWC	Naval Undersea Warfare Center
RI	Remedial Investigation
RIDEM	Rhode Island Department of Environmental Management
RI/FS	Remedial Investigation/Feasibility Study
RPM	Remedial Project Manager
SASE	Study Area Screening Evaluation
SER	Shore Establishment Realignment
SOW	Scope of Work
TRC	Technical Review Committee
TRC-EC	TRC Environmental Corporation

1.0 INTRODUCTION

This Scope of Work (SOW) provides an overview of the Remedial Investigation/Feasibility Study (RI/FS) being conducted at the Newport Naval Base in Newport, Rhode Island. This document identifies past environmental work completed at the Newport Naval Base - Naval Education and Training Center (NETC), and provides a framework and estimated time frame to complete the remaining investigation/cleanup process.

The remedial response process that will be followed at NETC Newport is shown in Figure 1.

1.1 PURPOSE

The purpose of the RI/FS process is to:

- Implement a RI to assess the nature and extent of contamination that was caused by the possible release of hazardous substances at NETC Newport.
- Identify and expedite the implementation of Interim Remedial Actions (IRAs) that are appropriate to protect human health and/or the environment prior to implementing the final cleanup remedies.
- Prepare a FS which will systematically evaluate and screen possible site cleanup technologies. This process allows the definition and development of a focused range of comprehensive cleanup techniques. The cleanup techniques will be compared and will provide the basis for the selection of a recommended remedial alternative(s) which will eliminate or minimize potential risks to human health and/or the environment.
- Implement the final remedial alternative(s) in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and in compliance with other Applicable or Relevant and Appropriate Requirements (ARARs).

1.2 SCOPE

The SOW encompasses environmental investigation and restoration activities undertaken at NETC, Newport. These include the 1983 Initial Assessment Study (IAS - Envirodyne Engineers), the 1986 Confirmation Study (CS - Loureiro Engineering Associates), the current RI/FS, and the Study Area Screening Evaluations (SASEs). In addition, the Scope of Work addresses the process to be followed to implement selected cleanup activities.

2.0 BACKGROUND

2.1 LOCATION

The NETC is located within the Newport Naval Base, which encompasses approximately six miles of the western shore of Aquidneck Island, Newport County, Rhode Island. Aquidneck Island is comprised of three towns; Newport, Middletown, and Portsmouth. NETC serves as a training facility and provides logistic support for the Newport Naval Base. A plan indicating the location of the Newport Naval Base is provided as Figure 2.

Eighteen potentially contaminated sites at NETC were identified by the IAS in 1983. A summary of site characteristics, studies completed, and plan of action for each of the eighteen sites is provided in Table 1. Table 2 provides a status summary for each of these sites. The location of each of the sites at NETC is provided in Figure 3.

2.2 HISTORY

The entire NETC was listed on the U.S. Environmental Protection Agency, (EPA) National Priorities List (NPL) of abandoned or uncontrolled hazardous waste sites in November 1989. The NPL identifies those sites which may pose a significant threat to the public health and environment. The listing for NETC also included: i) the real property comprising the Naval Undersea Warfare Center (NUWC formerly the Naval Underwater Systems Command 'NUSC') Division Newport which is contiguous to NETC Newport; and, ii) those portions of Gould Island which are currently owned by the Navy.

DRAFT

A Federal Facilities Interagency Agreement (FFA) was signed by the U.S. Department of the Navy, the State of Rhode Island, and the EPA on March 23, 1992. The FFA outlines response action requirements under the Department of Defense Installation Restoration Program at NETC Newport. The FFA was developed, in part, to ensure that environmental impacts associated with past and present activities at NETC Newport are thoroughly investigated and remediated, as necessary.

NETC Newport facilities have been under assessment through the Department of the Navy's Assessment and Control of Installation Pollutants (NACIP) program. The NACIP program was established to identify and control environmental contamination from past use and disposal of hazardous substances at Naval installations. The NACIP program is part of the Department of Defense (DOD) Installation Restoration Program (IRP), which is similar to the U.S. EPA's Superfund program authorized by CERCLA as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA).

The NACIP program consists of three phases: Phase I - IAS, Phase II - CS, and Phase III - Remedial Measures phase. The IAS is discussed in Section 3.0, the CS in Section 4.0 and Remedial Measures relative to investigation activities is discussed in Section 5.0.

A brief chronology of the interaction between the Rhode Island Department of Environmental Management (RIDEM), other regulators, and NETC Newport concerning environmental issues at the Naval Base is presented below.

Mid-1960's - burning of oil tank bottom sludges generated from NETC Newport Tank Farms was discontinued due to air pollution regulations.

Unknown Date - the NETC Newport shoreline is closed to shellfishing due to concerns about bioaccumulation of contaminants in Narragansett Bay from sites at the facility.

Post 1971 - the required scrubbers were installed on the Navy's classified document incinerator.

April 1973 - the Shore Establishment Realignment (SER) Program resulted in drastic reductions in Navy personnel at NETC Newport and initiated the process of excessing (selling) large portions of the base's real estate.

September 11, 1980 - the NACIP program was initiated. The purpose of this program is to systematically identify, assess, and control environmental contamination from past use and disposal of hazardous substances at Navy and Marine Corps installations.

1982 - RIDEM adopted hazardous waste regulations which classified waste oil as a hazardous waste.

March 1983 - the IAS of NETC Newport was completed. Eighteen potentially contaminated sites were identified under the IAS. (Table 1)

1984 - The Navy ceased using Tanks 53 and 56 at Tank Farm Five for waste oil storage.

1984 - The Defense Environmental Restoration Program (DERP) was established to promote and coordinate efforts for the evaluation and cleanup of contamination at DOD installations. A major element of the program was the establishment of the IRP. The IRP involves the investigation and cleanup of contaminated sites in compliance with the procedural and substantive requirements of CERCLA, as amended by SARA, as well as regulations promulgated under these acts or by applicable state law.

1986 - RIDEM implemented new regulations for the operation and closure of underground storage tanks used to hold oils and hazardous materials.

May 1986 - the CS for NETC Newport was completed at the following six sites:

- Site 01 - McAllister Point Landfill,
- Site 02 - Melville North Landfill,
- Site 07 - Tank Farm One,
- Site 12 - Tank Farm Four,
- Site 14 - Gould Island Disposal Area, and
- Site 17 - the Gould Island Electroplating Shop.

1987 - A Tank Closure Plan for Tanks 53 and 56 located at Tank Farm Five was completed (Environmental Resource Associates).

1988 - A Technical Review Committee (TRC) was convened to facilitate communication of information with regard to actions to be undertaken at NETC Newport. TRC members include representatives from the U.S. Navy, EPA - Region I, RIDEM, the City of Newport, the Towns of Portsmouth and Middletown, and local citizens groups.

November 21, 1989 - NETC Newport was listed on the NPL.

1989 - A Phase I RI/FS Work Plan for four NETC Newport sites was prepared. These sites included:

- McAllister Point Landfill (Site 01),
- Old Fire Fighting Training Area (Site 09),
- Tank Farm Four (Site 12), and
- Tank Farm Five (Site 13).

1989 - The Phase I RI/FS Work Plan was also developed for Site 02 - Melville North Landfill. This Work Plan was undertaken pursuant to the Navy's authority under CERCLA, Executive Order 12580, and the DERP. The Melville North Landfill was exscessed (or sold) by the Navy prior to being listed on the NPL and is being addressed by the Navy as a Formerly-Used Defense Site (FUDS).

1990 - A Community Relations Plan was issued for NETC Newport by the Navy. Public Information Repositories were also established to allow public access to NETC Newport documents.

June 1991 - A ground water investigation was conducted under the tank closure investigation of Tanks 53 and 56 at Tank Farm Five.

November 1991 - The draft Phase I RI and Risk Assessment Report on the four NETC Newport sites and Melville North Landfill was completed.

July 1992 - A draft Study Area Screening Evaluation (SASE) Work Plan for investigation of six suspected sites at NETC Newport was completed. The sites include:

- Coddington Cove Rubble Fill Area (Site 04),
- Tank Farm One (Site 07),
- NUSC Disposal Area (Site 08),
- Tank Farm Two (Site 10),
- Tank Farm Three (Site 11), and
- the Gould Island Electroplating Shop (Site 17).

Summer 1992 - The contents of Tanks 53 and 56 at Tank Farm Five were removed and the tank interiors cleaned.

August 1992 - The Defense Fuel Supply Point (DFSP) initiates investigations of Tank Farm One, Tank Farm Two, and Tank Farm Three.

September 1992 - The draft Phase II RI/FS Work Plan for the four NETC Newport and Melville North Landfill sites was completed.

October 1992 - A soils investigation was conducted under the tank closure investigation of Tanks 53 and 56 at Tank Farm Five.

December 1992 - The final Study Area Screening Evaluation (SASE) Work Plan for investigation of three suspected sites at NETC Newport was completed. The three sites include:

- Coddington Cove Rubble Fill Area (Site 04),
- NUSC Disposal Area (Site 08), and
- the Gould Island Electroplating Shop (Site 17).

SASE investigations of Tank Farm One (SA-07), Tank Farm Two (SA-10), and Tank Farm Three (SA-11) are being reevaluated pending a review of the findings of on-going DFSP (Defense Fuel Supply Point) contracted investigation activities of these areas.

The above chronology pertinent to NETC Newport site investigations was obtained from the 1983 IAS the 1986 CS, the 1988 Draft Tank Closure Plan for Tanks 53 and 56, the 1991 Phase I RI/FS, the March 23, 1992 FFA, and a review of information available in RIDEM files.

3.0 INITIAL ASSESSMENT STUDY

The IAS, conducted by Envirodyne Engineers, Inc. of St. Louis, Missouri, for the Navy in 1983, identified sites where contamination is suspected to exist and which may pose a threat to human health or the environment. This study included a review of archival and activity records, interviews with activity personnel, an on-site survey of the activity, and an off-site activity investigation.

A total of eighteen potential sites were identified by the IAS. The IAS concluded that no further action was required at three of the areas (sites 4, 8, and 9). Two of the areas (sites 3 and 16) were found to be outside of the scope of the NACIP program and were not discussed further in the report. Further investigation was recommended at the remaining thirteen areas. Of the eighteen sites, eight (sites 2, 3, 5, 6, 14, 15, 16, and 18) are outside the real property boundaries of NETC Newport.

4.0 CONFIRMATION STUDY

A CS was conducted at six of the thirteen areas recommended in the IAS for further investigation. The CS was conducted by Loureiro Engineering Associates, Avon, Connecticut, and was completed in 1986. Confirmation studies were conducted at the following six sites:

- Site 01 - McAllister Point Landfill,
- Site 02 - Melville North Landfill,
- Site 07 - Tank Farm One,
- Site 12 - Tank Farm Four,
- Site 14 - the Gould Island Disposal Area, and
- Site 17 - the Gould Island Electroplating Shop.

The Confirmation Studies were completed in two steps: a Verification Step and a Characterization Step. The objectives of the Verification Step were to identify sources of contamination, assess the presence of specific toxic and hazardous materials, and assess general

site hydrogeology characteristics. The objective of the Characterization Step was to develop a quantitative assessment of the extent of any contamination identified in the Verification Step.

Verification Step results were summarized in a report dated May 8, 1984, and Characterization step results were discussed in a report dated July 26, 1985. The final CS findings, which includes results of both the Verification and Characterization steps are presented in a report dated May 15, 1986.

5.0 CURRENT RI/FS PROGRAM STATUS

5.1 PHASE I REMEDIAL INVESTIGATION

A Phase I Remedial Investigation (RI) has been conducted at the following five NETC Newport sites.

Site 01 - McAllister Point Landfill,
Site 02 - Melville North Landfill,
Site 09 - Old Fire Fighting Training Area,
Site 12 - Tank Farm Four, and
Site 13 - Tank Farm Five.

Findings of the Phase I RI are presented in a draft Phase I RI report (TRC-EC, 1991). A summary of Phase I RI activities conducted at each of the sites is provided in Table 3.

5.2 PHASE II REMEDIAL INVESTIGATION/FEASIBILITY STUDY

A Phase II Remedial Investigation/Feasibility Study (RI/FS) is planned for each of the five sites investigated during the Phase I RI/FS. A draft Phase II Work Plan was developed for each site in September, 1992. The planned Phase II investigation activities build upon the existing database at each site and are intended to provide site-specific information sufficient to support informed risk management decisions regarding any necessary or appropriate site remedies.

A summary of the currently planned Phase II investigation activities at the following five sites is provided in Table 4. The Phase II RI/FS plan is currently under review by the EPA and RIDEM and will be revised upon receipt of their comments.

Project plans for the Phase II work effort include the site-specific Field Sampling Plan (FSP), a Quality Assurance Project Plan (QAPP), and a project Health and Safety Plan (HASP). In addition, the Phase II Work Plan includes discussions of NETC Newport and site-specific background information which has been updated to include the results of the Phase I RI, a discussion of ARARs and preliminary action alternatives, a Data Evaluation and Assessment Plan which addresses data management and the RI Report outline, a supplemental Human Health Risk Assessment Plan, and an Ecological Risk Assessment Plan. A discussion of treatability studies and pilot testing is also included in a Treatability Study and Feasibility Study Plan.

5.3 STUDY AREA SCREENING EVALUATIONS

The objective of the Study Area Screening Evaluation (SASE) investigations are to assess the presence and any nature of environmental contamination at suspected locations. The site investigations will be conducted at each site to assess the presence of any hazardous substances, the nature of any materials disposed, and the potential for releases of any contamination. The findings of these SASE investigations will be used to assess the need to perform any further environmental investigations at each site.

SASE investigations are currently planned at the following three areas:

- Study Area 04 - Coddington Cove Rubble Fill Area
- Study Area 08 - NUSC Disposal Area
- Study Area 17 - Gould Island Electroplating Shop

SASE investigations of Tank Farm One (SA-07), Tank Farm Two (SA-10), and Tank Farm Three (SA-11) are being reevaluated pending a review of the findings of on-going DFSP (Defense Fuel Supply Point) contracted investigation activities of these areas.

6.0 PROJECT ORGANIZATION AND MANAGEMENT

The Naval Facilities Engineering Command (NAVFACENGCOM) has overall responsibility for the Installation Restoration (IR) program at NETC Newport. This responsibility includes identifying the level of funding available for the program and reviewing and commenting on primary and secondary documents. Technical work for NETC Newport will be managed by the Northern Division (NORTHDIV), Engineering Field Division (EFD) of NAVFACENGCOM. NORTHDIV is headquartered in Lester, Pennsylvania.

Several support activities are available to advance NAVFACENGCOM's mission. Support activities include the Naval Energy and Environmental Support Activity (NEESA) among others. In general, NEESA provides technical and administrative support including: guidance documents, technical review and recommendations of RI/FS and Remedial Action plans, field sampling teams if necessary, maintenance of program documents, providing IR related training, and other program and technical analyses as requested.

Coordination and day-to-day management of the NETC Newport IR program is the responsibility of the NORTHDIV Remedial Project Manager (RPM). The RPM is the prime contact for remedial or other response actions at sites in the IR program. The RPM's responsibilities include:

- a. Coordinating, directing and reviewing the IR Program work.
- b. Assuring compliance with the National Contingency Plan (NCP).
- c. Recommending action for decisions.

In addition, the RPM meets with representatives from the U.S. Environmental Protection Agency (EPA), the Rhode Island Department of Environmental Management (RIDEM), project contractors, and other members of the Technical Review Committee (TRC) on a regular basis to discuss the progress of the program. Members of the TRC will review and provide comments of the execution of the IR program at NETC Newport.

7.0 DELIVERABLES AND SCHEDULE

A projected schedule for completion of Study Area Screening Evaluations (SASE) is provided as Figure 4A (Sites 4, 8 and 17). A projected schedule for completion of the Remedial Investigation/Feasibility Studies (RI/FS) is provided as Figure 4B (Sites 1, 9, 12, and 13). A projected schedule for completion of RI/FS activities at Site 1 - McAllister Point Landfill is provided as Figure 4C. Projected schedules were prepared in accordance with Section XIV of the March 23, 1992 FFA between the U.S. Environmental Protection Agency, the State of Rhode Island, and the U.S. Department of the Navy.

A summary of Primary and Secondary Documents as defined in the FFA is provided as Table 5. Flow charts indicating the process which will be used to review Primary and Secondary Documents are provided as Figures 5A and 5B, respectively. Secondary Documents include those documents that are discrete portions of the Primary Documents and are typically input or feeder documents.

8.0 REFERENCES

Envirodyne Engineers, Inc., 1983. Initial Assessment Study Naval Education and Training Center, Newport, RI, prepared for the Navy.

Environmental Resource Associates, Inc., 1987. Tank Closure Plan for Tanks 53 and 56, Tank Farm 5, Naval Education and Training Center, Newport, RI, prepared for the Navy.

Loureiro Engineering Associates, 1986. Confirmation Study Report, Naval Education and Training Center, Newport, RI, prepared for the Navy.

TRC Environmental Corporation, November, 1991, Draft Final Report Remedial Investigation, Naval Education and Training Center, Newport, Rhode Island, prepared for the Northern Division, Naval Facilities Engineering Command.

TABLES

TABLE 1

SUMMARY OF NETC HAZARDOUS WASTE SITES

No.	Site	Characteristics/Studies/Plan of Action
1	McAllister Point Landfill	<u>1955-1970s</u> - The landfill received all waste generated at the Newport Naval Complex. This site contains wastes from operation (machine shops, electroplating, etc.), Navy housing, and ships homeported in Newport. Materials disposed of at this site would be mostly domestic-type refuse but also include spent acids, paints, solvents, waste oils (lube, diesel, and fuel), and PCB-contaminated oil. An IAS and CS were conducted of the site. Site is being investigated under the current RI/FS.
2	Melville North Landfill	<u>WWII-1955</u> - The landfill received mostly domestic-type refuse and also spent acids, waste paints, solvents, waste oils, and PCBs. Several areas are covered with oil and oily sludge on the site. The site has been excessed and is owned by Melville Marine Industries. An IAS and CS were conducted of the site. Site is being investigated under a separate RI/FS as a Formerly Used Defense Site (FUDS).
3	Structure #214 - Melville North	<u>1980-1982</u> - Substation #214. The site has been excessed. NETC cleaned the site under a removal action.
4	Cooddington Cove Rubble Fill	<u>1978-1982</u> - Rubble dump which contains inert items including scrap lumber, tires, wire, cable, and empty paint cans. An IAS conducted of the site recommended no further action. The site is being investigated under a SASE.
5	Melville North Area	<u>1978-1982</u> - Twenty barrels of waste oil stored on an asphalted area. Oil was spilled in the area. The site has been excessed. An IAS was conducted of the site. NETC cleaned the site under a removal action.
6	STP Sludge Drying Bed	<u>1982-1983</u> - Site is located in Melville North at the old sewage treatment plant. Oily waste has been disposed of at this site. Site has been excessed. An IAS was conducted of the site. NETC cleaned the site under a removal action.
7	Tank Farm #1	<u>WWII-1970</u> - Located in Melville North. Contains six 60,000-barrel underground storage tanks (USTs) for diesel oil, fuel oil, jet fuel, 100 octane gasoline, and aviation fuel. Tank bottom sludge generated from cleaning the tanks was placed in on-site pits. Approximately 6,000 gallons of tank bottom oil sludge was reportedly disposed of at the site. An IAS and CS were conducted of the site. The site is currently being investigated under a DFSP contract.
8	NUSC Disposal Area	<u>Early 1970s</u> - Located in Cooddington Cove. Contains rubble, inert materials including scrap lumber, tires, wire, cable, and empty paint cans. An IAS conducted on the site recommended no further action. The site is being investigated under a SASE.
9	Old Fire Fighting Training Area	<u>WWII-1972</u> - Located on Coaster's Harbor Island. Waste oils were used at the site to train personnel in fire fighting operations. Site has been excavated to remove contaminated soils. An IAS conducted of the site recommended no further action. Oil discovered at the site during a recent geotechnical investigation for the expansion of an operating facility on the site indicated the need for further investigation of the site. The site is being investigated under the current RI/FS.
10	Tank Farm #2	<u>WWII-1970</u> - Located in Melville. Contains eleven 60,000-barrel USTs for fuel. Approximately 100,000-175,000 gallons of sludge were disposed in on-site pits. An IAS was conducted of the site. The site is being investigated under a DFSP contract.
11	Tank Farm #3	<u>WWII-1970</u> - Located in Melville. Contains seven 60,000-barrel USTs for fuel. Tank sludge bottoms were disposed in burning chambers. The burning chambers had steel sides and sand bottoms. An IAS was conducted on the site. The site is currently being investigated under a DFSP contract.
12	Tank Farm #4	<u>WWII-1970</u> - Located in Melville. Contains twelve 60,000-barrel USTs for fuel. Approximately 10,000-190,000 gallons of tank sludge bottoms were disposed of on site. An IAS and CS were conducted of the site. Site is being investigated under the current RI/FS.

No.	Site	Characteristics/Studies/Plan of Action
13	Tank Farm #5	<u>WWII-1970</u> - Located in Midway. Contains eleven 60,000-barrel USTs for fuel. Tank bottom sludge was burned on site. Approximately 10,000-175,000 gallons of oily sludge was disposed of on site. A tank closure investigation is being conducted for two USTs at the site. An IAS was conducted of the site. Site is being investigated under the current RI/FS.
14	Gould Island Disposal Area	<u>WWII</u> - All wastes generated on the island consisting of domestic trash, metal scrap, wood, pipes, rusted drums, two diesel oil tanks, and concrete. Wastes from electroplating and degreasing operations may also have been disposed of at the site. An IAS and CS were conducted of the site. Site will be investigated by the Army Corps of Engineers.
15	Gould Island Bunker #11	<u>WWII</u> - Site had drums containing possible hazardous waste from electroplating operations. An IAS was conducted on the site. NETC cleaned the site under a removal action.
16	Gould Island Incinerator	<u>WWII</u> - Six-ton capacity incinerator. An IAS conducted on the site concluded that no action is required at site.
17	Gould Island Electroplating Shop	<u>WWII</u> - Wastes generated from electroplating and degreasing operations. Wastes included muratic acid, chromic acid, copper cyanide, sodium cyanide, sodium hydroxide, nickel sulfate, Anodex leaner and degreasing solvents. Site has been excessed. An IAS and CS were conducted of the site. The site is being investigated under a SASE.
18	Structure #214 - Melville North	<u>1980-1982</u> - Area adjacent to structure #214. Drums of waste oil and oily spillage. Site has been excessed. NETC cleaned the site under a removal action.

TABLE 2

STATUS SUMMARY OF NETC NEWPORT HAZARDOUS WASTE SITES

No.	Site	Present Owner	Action
1	McAllister Point Landfill	Navy	IAS/CS, RI/FS
2	Melville North Landfill	Private	IAS/CS, RI/FS
3	Transformer Vault Structure #214 - Melville North	Private	Navy Clean-Up
4	Coddington Cove Rubble Fill	Navy	IAS, SASE ⁽¹⁾
5	Melville North Area	Private	IAS, Navy Clean-up
6	STP Sludge Drying Bed	Private	IAS, Navy Clean-up
7	Tank Farm One	Navy	IAS/CS ⁽²⁾
8	NUSC Disposal Area	Navy	IAS, SASE ⁽¹⁾
9	Old Fire Fighting Training Area	Navy	IAS, RI/FS ⁽³⁾
10	Tank Farm Two	Navy	IAS ⁽²⁾
11	Tank Farm Three	Navy	IAS ⁽²⁾
12	Tank Farm Four	Navy	IAS/CS, RI/FS
13	Tank Farm Five	Navy	IAS, RI/FS
14	Gould Island Disposal Area	State	IAS/CS, RI/FS ⁽⁴⁾
15	Gould Island Bunker #11	State	IAS, Navy Clean-Up
16	Gould Island Incinerator	State	No Action
17	Gould Island Electroplating Shop	Navy	IAS/CS, SASE ⁽¹⁾
18	Structure #214 - Melville North	Private	IAS, Navy Clean-Up

⁽¹⁾ A Study Area Screening Evaluation (SASE) will be performed on each of these sites to determine need for an RI/FS.

⁽²⁾ These Tank Farms are currently being investigated under a DFSP contract. SASE's of these sites are awaiting findings of the DFSP investigations.

⁽³⁾ A Confirmation Study was not performed. During a geotechnical investigation of the site, evidence of oil-contaminated soil was found thus, the site is being studied under the RI/FS.

⁽⁴⁾ Site #14 will be investigated by the Army Corps of Engineers (ACE).

TABLE 3

Summary of Phase I Activities
NETC Newport, Rhode Island

Site	Geophysics Methods	Soil Gas Points	Surface Soil Samples On/Off-Site	Boring Number/Samples	Wells Numbers/Samples	Test Pit/Tank Samples	Ground Water Samples	Surface Water/Sediment Samples	Structure Samples (soil/water)
Site - 01 McAllister Point Landfill	EM Magnetometer	-	15/2 TCL/TAL*	13/ 32 TCL/TAL*	9/ 17 TCL/TAL*	-	12 TCL/TAL	-	-
Site - 02 Melville North Landfill	EM Magnetometer	-	17 TCL/TAL*	13/ 25 TCL/TAL*	5/ 13 TCL/TAL*	4/- TCL/TAL	5 TCL/TAL	- / 3 TCL/TAL	-
Site - 09 Old Fire Fighting Training Area	EM Magnetometer	81	6 TCL/TAL*	7/ 15 TCL/TAL*	5/ 10 TCL/TAL*	-	5 TCL/TAL	-	-
Site - 12 Tank Farm Four	-	61	28 TCL/TAL* TPH	-	8/ 5 TCL/TAL*	- / 23 TCL/TAL*	8 TCL/TAL	4 / 6 TCL/TAL •	3 / 2 TCL/TAL •
Site - 13 Tank Farm Five	-	51	26 TCL/TAL* TPH	-	6/ 12 TCL/TAL*	- / 21 TCL/TAL*	13 TCL/TAL*	5 / 5 TCL/TAL •	2 / 1 TCL/TAL*

Note: "--" indicates that the activity was not conducted at that site.

TCL indicates analysis for Target Compound List parameters

TAL indicates analysis for Target Analyte List parameters

* Indicates that some samples were analyzed for a subset of TCL/TAL parameters, or for additional parameters

TPH indicates analysis for Total Petroleum Hydrocarbons

TABLE 4

Summary of Proposed Phase II Activities
NETC Newport, Rhode Island

Sit	Geophysics Methods	Soil Gas Points	Surface Soil Samples	Boring Number/ Samples	Wells Numbers/ Samples	Test Pit Samples	Ground Water Samples	Surface Water/ Sediment Samples	Structure Samples (soil/water)
Site - 01 McAllister Point Landfill	EM Seismic Refraction	30	32 TCL/TAL	13 / 26 - 39 TCL/TAL	9 / 18 - 27 TCL/TAL	-	27 TCL/TAL 3 Filtr. TAL	-	-
Site - 09 Old Fire Fighting Training Area	EM Magnetometer Seismic Refraction	-	12 TCL/TAL	11 / 22 - 33 TCL/TAL	6 / 12 - 18 TCL/TAL	4 / 8 - 12 TCL/TAL	14 TCL/TAL 3 Filtr. TAL	-	-
Site - 12 Tank Farm Four	-	-	23 TCL/TAL	-	8 / 16 - 24 TCL/TAL	-	21 TCL/TAL 3 Filtr. TAL	9 TCL/TAL Sediment List (1)	3 TCL/TAL
Site - 13 Tank Farm Five	-	-	29 TCL/TAL	-	6 / 12 - 18 TCL/TAL	-	22 TCL/TAL 3 Filtr. TAL	13 TCL/TAL Sediment List (1)	-

Note: "--" indicates that the activity will not be conducted at that site.

"Filtr" indicates field filtered samples for dissolved metals analysis.

TCL indicates sample will be analyzed for Target Compound List

TAL indicates sample will be analyzed for Target Analyte List

(1) Sediment List is composed of TCL, TAL, total organic carbon, and acid volatile sulfides

TABLE 5

PRIMARY AND SECONDARY DOCUMENT SUMMARY

Page 1 of 2

Primary Documents

- **Study Area Screening Evaluation Report (SASE)**
- **RI/FS Work Plan**
(and any RI/FS Work Plan addendums for subsequent phases)
- **Phase I RI Report**
(including Sampling and Data Results, Risk Assessment, and Preliminary Analysis of Alternatives)
- **Phase II RI Work Plan**
- **Phase II RI Report**
(including Sampling and Data Results, Risk Assessment Addendum, if warranted by the scope of the Remedial Investigation)
- **RI/FS Report**
(including Treatability and Pilot Study(s), if warranted by the scope and findings of the Remedial Investigation and the Initial Screening and Detailed Analysis of Alternatives)
- **Proposed Plan**
- **Remedial Design (RD) Work Plan**
- **Sixty Percent (60%) Remedial Design**
(including QA/QC and Contingency Plan)
- **Final Remedial Design**
(including Remedial Action Work Plan and Final Construction QA/QC Project Plan)
- **Project Closeout Report**
- **RI/FS Scope of Work**
- **RD/RA Scope of Work**

TABLE 5

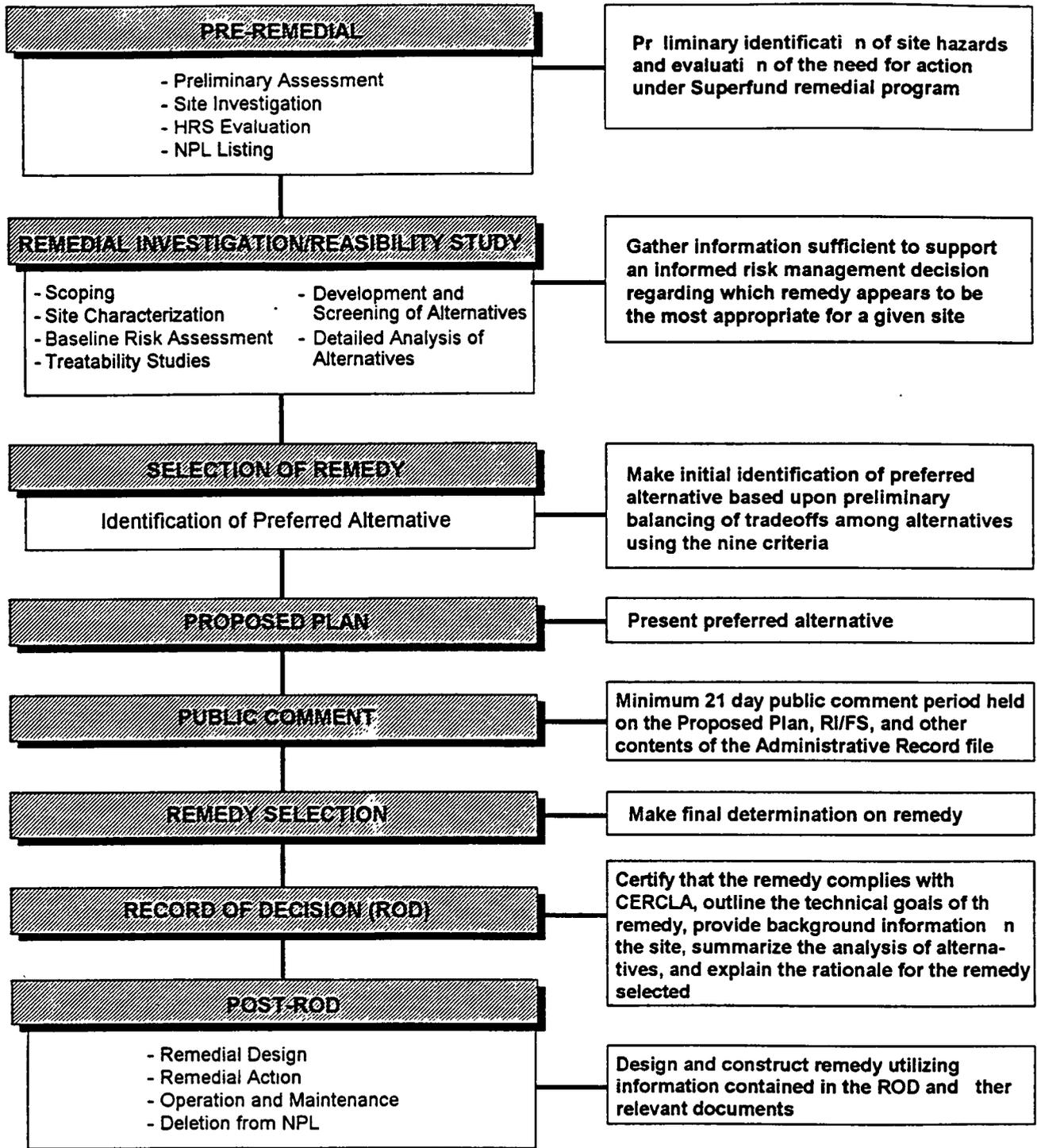
PRIMARY AND SECONDARY DOCUMENT SUMMARY

Page 2 of 2

Secondary Documents

- **Study Area Screening Evaluation (SASE) Work Plan**
- **Initial Screening of Alternatives**
- **Detailed Analysis of Alternatives**
- **Treatability and Pilot Study Work Plan**
(if warranted by the scope and findings of the RI/FS)
- **Treatability and Pilot Study(s)**
(if warranted by the scope and findings of the RI/FS)
- **Sampling and Data Results**
- **Remedial Action Work Plan**
- **Pre-Final Remedial Design (85%)**

FIGURES



SOURCE. U.S. EPA, INTERIM FINAL GUIDANCE ON PREPARING SUPERFUND DECISION DOCUMENTS, JUNE, 1989

TRC

TRC Environmental Corporation

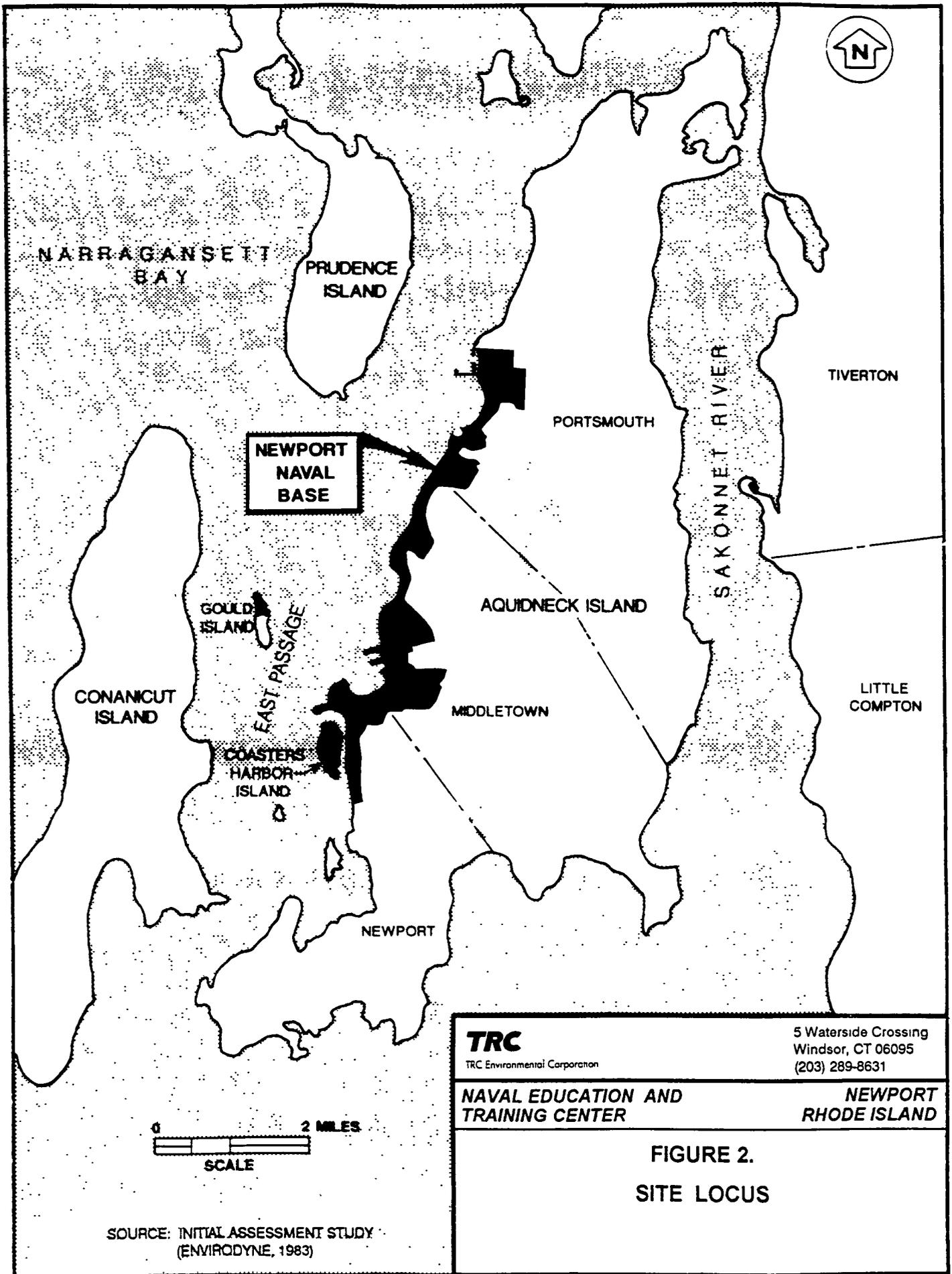
5 Waterside Crossing
Windsor, CT 06095
(203) 289-8631

NAVAL EDUCATION AND TRAINING CENTER

NEWPORT RHODE ISLAND

FIGURE 1.

REMEDIAL RESPONSE PROCESS



TRC
TRC Environmental Corporation

5 Waterside Crossing
Windsor, CT 06095
(203) 289-8631

NAVAL EDUCATION AND TRAINING CENTER

NEWPORT RHODE ISLAND

**FIGURE 2.
SITE LOCUS**

SOURCE: INITIAL ASSESSMENT STUDY
(ENVIRODYNE, 1983)

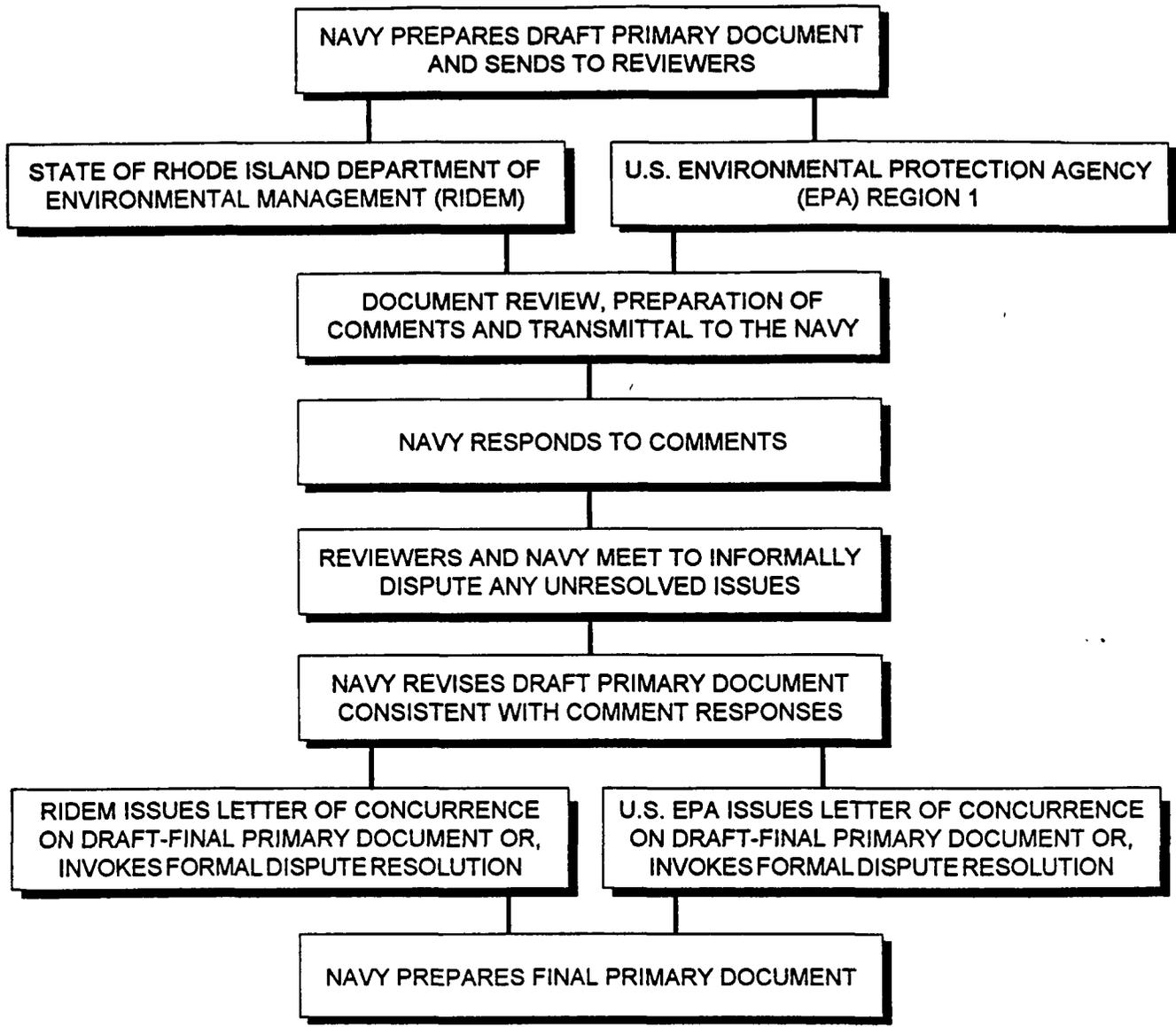
**NETC - Newport, Rhode Island
SASE Activities - Sites 4, 8 and 17
Estimated Project Schedule**

ID	Name	Duration	Scheduled Start	Scheduled Finish	Qtr 2, 1993			Qtr 3, 1993			Qtr 4, 1993			Qtr 1, 1994			
					Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	SASE Project Authorization	0d	February 22, 1993	February 22, 1993	⊙												
2	Field Team Mobilization	1w	February 22, 1993	February 26, 1993	■												
3	Field Investigations	8w	March 1, 1993	April 23, 1993		■											
4	Laboratory Analysis	4w	April 27, 1993	May 24, 1993			■										
5	Data Validation	4w	May 25, 1993	June 22, 1993				■									
6	Prepare Draft SASE Report	7w	June 23, 1993	August 11, 1993					■								
7	Transmitt Sampling and Data Results	0d	July 7, 1993	July 7, 1993					⊙								
8	Submit Draft SASE Report	0d	August 11, 1993	August 11, 1993						⊙							
9	EPA, RIDEM Review of Report	6w	August 12, 1993	September 23, 1993						■							
10	Navy Response to Comments	6w	September 24, 1993	November 5, 1993							■						
11	Meet to Discuss Comments	6w	November 8, 1993	December 21, 1993								■					
12	Prepare Draft Final SASE Report	6w	November 8, 1993	December 21, 1993									■				
13	Submit Draft Final SASE Report	0d	December 21, 1993	December 21, 1993													⊙
14	EPA/State Letter of Concurrence	4w	December 22, 1993	January 21, 1994												■	
15	Final SASE Report (No Dispute Resolution)	0d	January 21, 1994	January 21, 1994													⊙

Scheduled Start Date for Task 1 is Dependant on Award Negotiation and Project Authorization

Critical ██████████ Milestone ⊙
Noncritical ██████████

December, 1992



TRC

TRC Environmental Corporation

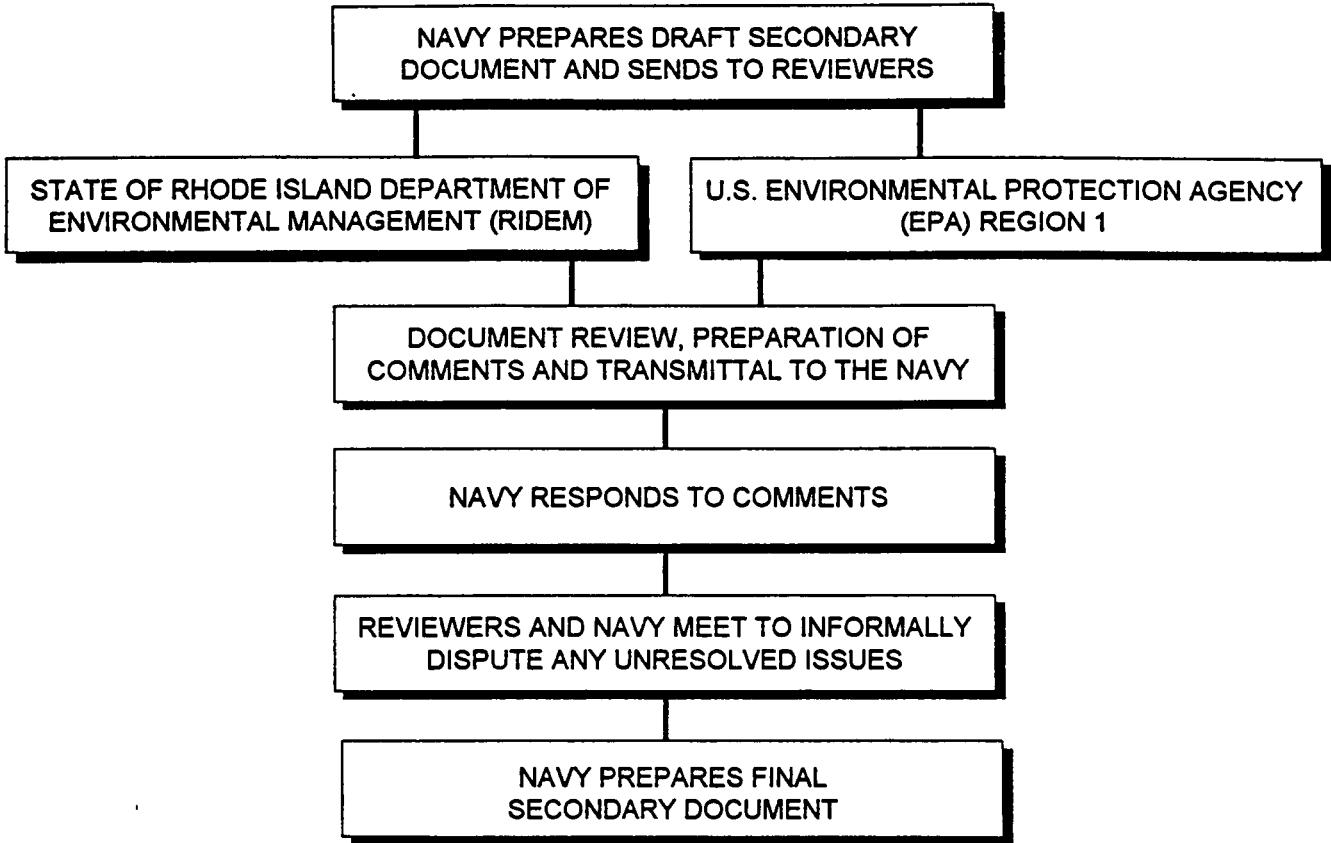
5 Waterside Crossing
Windsor, CT 06095
(203) 289-8631

NAVAL EDUCATION AND TRAINING CENTER

NEWPORT RHODE ISLAND

FIGURE 5A.

PRIMARY DOCUMENT REVIEW



TRC

TRC Environmental Corporation

5 Waterside Crossing
Windsor, CT 06095
(203) 289-8631

NAVAL EDUCATION AND TRAINING CENTER

NEWPORT RHODE ISLAND

FIGURE 5B.

SECONDARY DOCUMENT REVIEW