August 99
Revision 0

Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage

1-30-003B

Restoration Advisory Board

Workbook

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

June 27, 2002
Bethpage Community Center, Bethpage, NY
7:00 p.m.

Welcome and Agenda Review
Judithanne Hare
Naval Air Systems Command

Review and Approval of Minutes
All Members

Operable Unit 2 Groundwater ROD
Summary of Navy/Northrop Grumman activities
Jim Colter
Engineering Field Activity, Northeast

Technical Advisory Committee Meeting
Discuss meeting of Technical Advisory Committee held on June 26, 2002
Jim Colter
Engineering Field Activity, Northeast

Action Item Review and Dates and Discussion Topics for Future Meetings
All Members

Closing Remarks
Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.

S. Scharf

DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
1421 JEFFERSON DAVIS HWY
ARLINGTON, VA 22243

IN REPLY REFER TO

RECEIVED
MAY 05 1999
Bureau of Eastern
Remedial Action

AIR-80Y2A/2009
30 April 1999

Dear TRC Member:

The Technical Review Committee (TRC) for Naval Weapons Industrial Reserve Plant (NWIRP), Bethpage is being converted to a Restoration Advisory Board (RAB). This expanded board will add more community members and thus ensure that all stakeholders have an opportunity to actively participate in review of Installation Restoration (IR) documents and present various points of view on IR issues at the facility. All RAB meetings will be open to the public and held on a quarterly, or as needed, basis.

The TRC will become the core of the RAB; however, like the TRC, the RAB is strictly voluntary. I invite you to continue the working relationship you have with the Navy and become a member of the RAB.

There will be a public meeting at 6:00 p.m. on Monday, May 24, 1999, at theBethpage High School, Stewart Avenue, Bethpage, New York, to announce the formation of the RAB and to discuss membership opportunities. If you have any questions about the RAB, please contact Mr. James Colter at (610) 595-0567 extension 163.

I look forward to seeing you at this meeting.

Sincerely,

JUDITHANNE P. HARE
by Direction

April 1999

RESTORATION ADVISORY BOARD
Naval Weapons Industrial Reserve Plant
Bethpage, New York

FACT SHEET

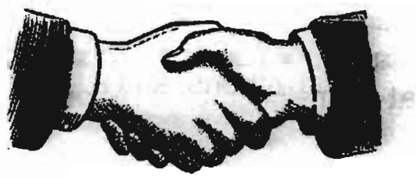
INTRODUCTION

In 1975, The Department of Defense (DOD) took the first step to create a program to identify and clean up environmental problems at federal facilities. These problems were a result of past industrial processes and waste handling practices, which included on-site disposal of daily operational wastes such as chemicals, petroleum products, cleaning solvents, and degreasers. Although acceptable for many years, the old industrial processes and ways of handling wastes are now known to be potentially damaging to the environment.

DOD tasked the Armed Services with investigating sites where on-site disposal, spills, or storage of these materials may have occurred. This program became known as the DOD Installation Restoration (IR) Program. One policy of this program is to involve the local community throughout the IR process by: establishing communication channels with representatives of the community; making information available in a timely manner; providing opportunities for public comment on documents; and, most recently, establishing Restoration Advisory Boards (RABs).

WHAT IS A RAB?

A RAB is an advisory board designed to act as a focal point for the exchange of information between the U.S. Navy and the local community regarding environmental restoration activities. The RAB is intended to bring together community members who reflect the diverse interests within the community, enabling an early and continued "two-way" flow of information, concerns, values, and needs between the community and the decision-makers for the Navy's property. The RAB works in partnership with the decision-makers on cleanup issues and related matters.



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- Provide a forum for individual members to provide input and make recommendations on environmental restoration issues to the Navy. RABs do not vote on issues or make recommendations as a body.
- Establish a procedure for public participation and responding to questions and comments for the public at RAB meetings.

JOIN US!

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►►►►

Mr. James Colter (Code 1821/JLC) at
Northern Division, NAVFAC
10 Industrial Highway, Mail Stop 82
Lester, PA 19113-2090
(610) 595-0567 extension 163

You may also review information about the environmental programs underway at the facility by visiting the public Information Repository. Documents at the Repository include technical work plans, reports, and a Community Relations Plan. All documents are available to be photocopied at a small expense for personal reference.

INFORMATION REPOSITORY

Bethpage Public Library
47 Powel Avenue
Bethpage, New York 11714
(516) 931-3907

Hours of Operation:
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Sat: 9:30 a.m. - 5 p.m.
Sun: 12 p.m. - 4 p.m. (Oct. - April only)

May 1999 **INSTALLATION RESTORATION PROGRAM**

FACT SHEET

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
Bethpage, New York

INTRODUCTION

This fact sheet provides an update on the progress made at Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage under the Navy Installation Restoration (IR) Program. The purpose of the IR Program is to identify and clean up past hazardous waste sites at Navy installations.

ABOUT NWIRP BETHPAGE

NWIRP Bethpage is a 108-acre site surrounded by the 505-acre Northrop Grumman complex in the Hamlet of Bethpage. NWIRP Bethpage was established in 1943 with the primary mission of assembling military aircraft. These activities involved the use of a number of industrial chemicals and materials that resulted in contamination of several areas of the facility. Three sites and two areas of concern (AOCs) have been identified under the IR Program at NWIRP Bethpage. These sites and AOCs are described below.

SITE AND AOC DESCRIPTION

Site 1 – Former Drum Marshalling Area

Until 1982, Site 1 was used as a marshalling area for drummed waste at NWIRP Bethpage prior to off-site disposal. A sanitary leach field was present underneath the drum marshalling pads and a sludge drying bed was present northeast of the pads.

In the early 1990's, solvents, metals, and PCBs were detected in soils and metals and solvents were detected in the groundwater at Site 1. In 1995, a Record of Decision (ROD) was signed that identified remedial actions for Sites 1, 2, and 3. The ROD identified excavation and off-site disposal of metal and PCB contaminated soils and in situ treatment of solvents in soils and shallow groundwater for Site 1. Deeper and down gradient groundwater contamination from the site is being addressed by a groundwater containment system on the Northrop Grumman property. As required by the ROD, an air sparging and soil vapor extraction system to remove solvents from Site 1 soils and groundwater has been running since 1997. The metal and PCB contaminated soil will be excavated after the solvents have been removed from site soils and groundwater.

Site 2 – Recharge Basin Area

Recharge basins naturally filter surface water back into the groundwater. Storm water and non contact cooling water from the Plant No. 3 area were discharged to the recharge basins at Site 2. Sludge drying beds were located adjacent to the recharge basins. The sludge drying beds have not been active since the 1970s and were reportedly removed. The recharge basins continue to be used for storm water management.

In the early 1990's, PCBs and low levels of solvents and metals were detected in the soils and groundwater at Site 2. As required by the ROD, the PCB contaminated soils were excavated in 1996. The solvents and metals were at a low enough level that remediation was not required. Groundwater flowing from this site is contained by the Northrop Grumman groundwater containment system.

Site 3 – Salvage Storage Area

Metal parts were stored at the salvage storage area prior to recycling. In the early 1990's, low levels of solvents and metals were detected in site soils and groundwater. As provided in the ROD, soils and groundwater at Site 3 do not require remediation. Groundwater flowing from this site is contained by the Northrop Grumman containment system.

AOCs 20-08 and 34-07 – Dry Wells

Dry wells, located in and around Plant No. 3, were investigated. Most of the dry wells were either found to be clean or the well contents were excavated to remove contamination. Currently, two dry wells remain contaminated and are being investigated to determine the extent of contamination.

AOC 22 – Former Underground Storage Tanks

Until the early 1980s, three underground storage tanks were located south of Plant No. 3. Soil testing conducted in the area found low to moderate levels of fuels in the soils. Testing results were not conclusive as to whether groundwater contamination or free product at the water table was present. This area is being investigated to determine the extent of contamination.

Regional Groundwater

Groundwater underneath NWIRP Bethpage starts at a depth of approximately 60 feet below ground surface and extends to a depth of approximately 500 feet. The predominant groundwater flow in the area is to the southeast toward the Atlantic Ocean. Solvents have been found in the on site and off site groundwater. Options for remediating this groundwater are currently being evaluated. In the interim, a groundwater containment system has been installed on Northrop Grumman property to control the migration of solvents in groundwater. To ensure protection of the local water supply, a system for filtering the solvents from the groundwater is in place at the affected extraction wells.

INFORMATION REPOSITORY

Documents related to the environmental activities being conducted under the IR Program are available in the Information Repository for NWIRP Bethpage. The Information Repository is available for public review at:

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47 Powell Avenue
Bethpage, New York, 11714
(516) 931-3907

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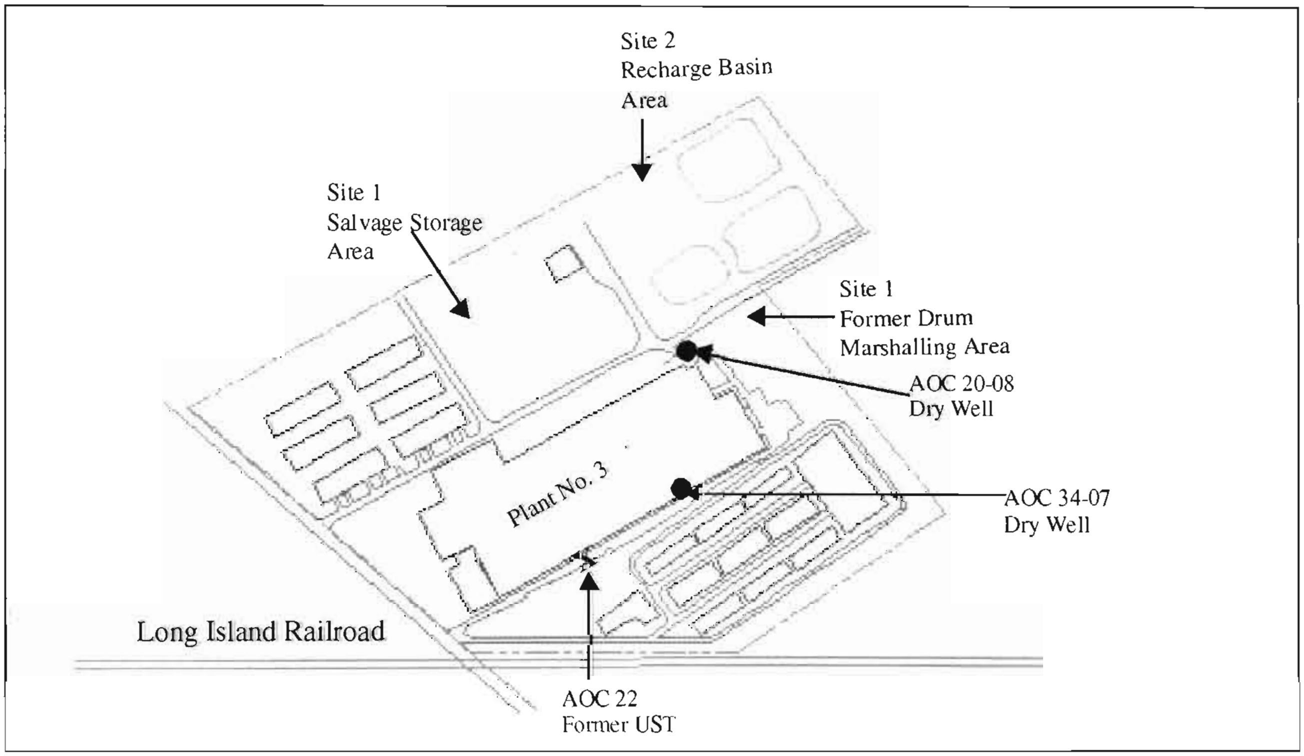

NWIRP Bethpage, Site Map

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Weapons Industrial Reserve Plant
Bethpage, New York

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Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

March 13, 2001
Bethpage Community Center, Bethpage, NY
7:00 p.m.

Welcome and Agenda Review

Judithanne Hare
Naval Air Systems Command

Review and Approval of Minutes

All Members

Status of Activities at NWIRP Bethpage

Jim Colter
Naval Facilities Engineering Command – Northern Division

Action Item Review and Dates and Discussion Topics for Future Meetings

All Members

Closing Remarks

Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.

Agenda

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RESTORATION ADVISORY BOARD (RAB) MEETING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE
BETHPAGE COMMUNITY CENTER, BETHPAGE, NEW YORK
September 20, 2001

The fifth meeting of the RAB began at 7:00 pm. RAB members attending were: Jim Colter from the Navy, community members Jim McBride, Rosemary Styne, and Edward Mangano; Steve Scharf representing New York State Department of Environmental Conservation (NYSDEC), Charles Bevilacqua representing the Conservation Fund Advisory Board; Tim Kelly representing Nassau County Public Works; and Martin Simonson representing Defense Contract Management Agency. Members absent included community members Linda Mangano, John Venditto, Roy Tringali, and Edward Resch; John Molloy representing Bethpage Water District; Carol Stein representing U.S. EPA Region II; Bruce Mackay representing Nassau County Department of Health; Stan Farkas and Nick Acampora representing New York State Department of Environmental Conservation (NYSDEC); Bill Gilday representing the New York State Department of Health (NYSDOH); Al Taormina representing J.A. Jones, Inc; Tom Clark representing the Oyster Bay Department of Public Works.

There were also several attendees from the general public.

WELCOME AND AGENDA REVIEW

Mr. Jim Colter introduced himself and welcomed everyone to the fifth meeting of the RAB. Mr. Colter explained that Ms. Judith Hare sends her apologies for not being able to attend the meeting, however, due to the circumstances of September 11, government travel is being restricted on a case by case basis. A moment of silence for was observed for the victims of the September 11 tragedies.

REVIEW AND APPROVAL OF MINUTES

The stenographer transcripts from the March 13, 2001 RAB meeting were paraphrased and summarized into meeting minutes. The minutes were mailed out to all the RAB members for review. No comments were made on the March 13, 2001 RAB meeting minutes and the minutes were approved as written.

TAPP PRESENTATION

It had been discussed that a suitable project for the TAPP (Technical Assistance for Public Participation) would be the Plant 3 Dry Well project. Mr. Colter stated that the New York State Department of Environmental Conservation (NYSDEC) was in the process of reviewing the dry well report and the Navy was waiting for comments. Northrop Grumman had conducted a Focused Feasiblity Study evaluating different remediation alternatives. Since the property is being retained by the Navy, the Navy had agreed to accept the report and be a part of the decision making process as long as the State was satisfied with the recommendations. The dry well report would not be finalized until comments were received from the third party/independent review of it.

Mr. Colter explained the dry well project for those who might not be familiar with it. The dry wells of concern are on the southeast side of the Navy's Plant 3 property. When Northrop Grumman vacated the Navy property a couple of years ago, they conducted an overall baseline assessment of areas of potential concern. They cleaned up most of these areas, but also found some high levels of PCBs in soils in two of the dry wells. Northrop Grumman removed all of the contaminated soils at the two dry wells down to 35 feet below grade and disposed of them in an off-site location. Northrop Grumman backfilled the excavation holes and submitted a report to the EPA and Nassau County Department of Health.

Because there were PCBs left below 35 feet, NYSDEC indicated that additional remediation may be necessary, either through further excavation or another in situ technology. At this point, Northrop Grumman put together the Focused Feasibility Study evaluating the different alternatives for remediation of the dry wells. Since the depth of the PCB contamination is below 35 feet, the chances of any type of contact is very remote even if a foundation were to be dug and therefore the report recommended No Further Action.

Mr. Colter stated that the basis for the TAPP grant is that the RAB would like to get a second consultant's opinion on how Northrop Grumman conducted the risk assessment and other factors in the report.

UPCOMING FIELD ACTIVITIES

Mr. Colter stated that the Navy had been conducting some work in the southern portion of the community, installing monitoring wells and vertical profile borings. The Navy has completed installing borings in the GM 38 area off of Arthur Avenue and are currently installing another boring up gradient to the public supply wells off of Seaman's Neck Road.

At the request of the NYSDEC, the Navy has restarted the air sparging/soil vapor extraction system (AS/SVE) at the Navy's Site 1 property. The system had been running to reduce the contaminant level of VOCs in the soil so that the soils can safely be excavated from there. With the system, the Navy is also getting incidental groundwater treatment in the shallow zone due to the air sparging. The system will run to the end of December depending on weather. Another round of groundwater and soil samples will be taken and this data together with the data from the previous two years, the Navy will be able to determine whether they have reached their goals.

The other initiative that the Navy is currently engaged in is putting a permeable cover over IR Site 2, the Navy's recharge basin area. Site 2 was recently sampled and the compounds detected there were PAHs (polynuclearomatic hydrocarbons). These compounds are typically found around roadways from asphalt and rubber from tires. The levels of the PAHs weren't found to above a clean up standard but the Navy would like to place a cover just to eliminate the direct contact with people that might be walking across the site. The plan is to cover the roadways in the vicinity with a layer of gravel and to cover the sludge drying beds with six inches of soil and revegetate.

GROUNDWATER ROD

Mr. Colter stated that the Navy and Northrop Grumman are in a partnership in Operable Unit 2 ROD that addresses groundwater contamination. This document outlines several items that need to be completed for groundwater. One of those items is the protection of potential downgradient water supplies of the New York Water Service, South Farmingdale, Massapequa, and Bethpage. The Navy has installed a vertical profile boring upgradient of each of those supply wells to delineate the plume. The data obtained from these borings will be input into a groundwater model to run scenarios with groundwater flow to determine an upgradient location for the monitoring wells.

Mike Wolfert from Geraghty & Miller, Northrop Grumman's consultant began his presentation by showing the cross sections obtained from the vertical profile borings. Mr. Wolfert explained that the cross sections show the underlying geology and groundwater quality. Six borings were drilled along the southern edge of the plume and a seventh is being drilled now. Five borings were drilled in the area of the hot spot, an area of higher groundwater contaminant concentration than the surrounding plume.

The reason for drilling on the southern edge of the plume is to locate outpost monitoring wells. These wells will be sampled for volatile organic compounds on a quarterly basis. If there is a detection in VOCs, this would serve as a warning that the plume is migrating towards the production well. This warning would give time to design and set up a treatment system before the wells are impacted.

The second part of the work plan involves installing additional wells north of Hempstead Turnpike to extract contaminated groundwater to reduce the plume concentrations. Five deep borings have been drilled here already and the data collected from this will be fitted to the groundwater model to help in the design of an extraction system off site.

There is currently a groundwater pump and treat system on the Grumman site that is part of the OU2 groundwater system. It has been operating since October 1998. It extracts about 5.5 million gallons of water per day. That water is treated on-site and recharged back on the site through surface basins. The purpose of this is to provide a hydraulic barrier, both vertically and horizontally, to prevent any contaminants on site from moving off site. What is on site is prevented from getting off site. Groundwater samples and levels are taken both on and off site on a quarterly basis. Quarterly reports are sent to NYSDEC.

Mr. Colter adjourned the meeting at approximate 8:41 pm.

POSTSCRIPT NOTE

Stenographer's transcripts are prepared for RAB meetings to assist the Navy in preparation of meeting minutes. The transcripts are available in the NWIRP Bethpage Information Repository at the Bethpage Library. To assist the stenographer, RAB members and other attendees at the meeting are requested to speak one at a time for the stenographer to accurately transcribe the meeting discussions.

August 99
Revision 0

NWIRP Bethpage
Restoration Advisory Board
Workbook

Section 1: List of RAB Members

RESTORATION ADVISORY BOARD MEMBER LIST
NWIRP BETHPAGE, NEW YORK

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Name or Organization	Representing
Naval Air Systems Command Industrial Facilities/GOCO Branch NAVAIRSYSCOMHQ Building 404, Suite 200 22145 Arnold Circle, Unit 7 Patuxent River, MD 20670-1541 ATTN: Judith Hare (AIR-8.0Y2) 301-757-2152 Fax: 301-757-2178	Property Owner (TRC)
Northern Division, Naval Facilities Engineering Command (NORTHDIV) 10 Industrial Highway Mail Stop 82 Lester, PA 19113-2090 ATTN: Jim Colter (Code 1821/JLC) 601-595-0567 Ext 163	Navy's IR Program (TRC)
New York State Department of Environmental Conservation (NYSDEC) 50 Wolf Road Room 208 Albany, NY 12233-7010 ATTN: Steve Scharf/John Helmeset Work: 518-457-3395 Fax: 518-457-4198	State Regulatory Agency (TRC)
New York State Department of Environmental Conservation (NYSDEC) Region I Headquarters SUNY Campus, Building 40 Stony Brook, NY 11790-2356 ATTN: Stan Farkas/Nick Acampora	State Regulatory Agency (TRC)

RESTORATION ADVISORY BOARD MEMBER LIST
NWIRP CALVERTON, NEW YORK

Name or Organization	**Representing**
New York State Department of Health (NYSDOH) Two University Place Room 205 Albany, NY 12203-3313 ATTN: William Gilday Work: 518-458-6035 Fax: 518-458-6372	State Health Department (TRC)
Nassua County Department of Health 240 Old Country Road Mineola, NY 11501-4250 ATTN: Bruce Mackay Work: 516-571-2307	Local Health Department (TRC)
U.S. EPA Region II 290 Broadway New York, NY 10007-1866 Fax: 212-637-3966	Federal Regulatory Agency (TRC)
Nassau County Public Works 170 Cantiaque Rock Road Hicksville, NY 11801 ATTN: Tim Kelly Work: 516-571-6850	Local Government (TRC)
Bethpage Water District/H2M Inc 575 Broad Hollow Road Melville, NY 11747 ATTN: John Molloy Phone: 516-756-8000, Ext 600 Fax: 516-694-4122	TRC Member

RESTORATION ADVISORY BOARD MEMBER LIST
NWIRP CALVERTON, NEW YORK

Name or Organization	Representing
Defense Contract Management Command (DCMC) Northrop Grumman Bethpage Mail Stop: C23-003 Northrop Grumman Corporation Bethpage, NY 11714-3593 ATTN: Martin Simonson Work: 516-575-9952 Fax: 516-346-8485	TRC Member
Northrop Grumman Corporation 111 Stewart Avenue Bethpage, NY 11714-3580 ATTN: John Cofman/Norm Sealander Work: 516-575-2385 Fax: 516-575-6672	TRC Member
Hon. Edward Mangano 1 West Street, Room 131 Mineola, NY 11501 Home: 516-681-5191 Work: 516-571-6217 Fax: 516-571-6235	Local Resident/Local Legislator
Ms. Linda Mangano 7 Nicholas Court Bethpage, NY 11714 Home: 516-681-5191 Work: 516-681-0440	Local Resident
Hon. John Venditto Town of Oyster Bay, Supervisor Oyster Bay Town Hall 54 Audrey Avenue Oyster Bay, NY 11771 Work: 516-624-6350 Fax: 516-624-6362	Local Legislator

RESTORATION ADVISORY BOARD MEMBER LIST
NWIRP CALVERTON, NEW YORK

Name or Organization	Representing
Mr. Edward Resch 1158 Stewart Avenue Bethpage, NY 11714 Work: 516-395-3860	Local Resident
Mr. Charles Bevilacqua 3 Albert Avenue Syosset, NY 11791 Home: 516-921-1429 Work: 516-921-5400 Fax: 516-921-8058	Conservation Fund Advisory Board
Mr. Roy Tringali 98 Walter Avenue Hicksville, NY 11801 Home: 516-433-4784 Work: 516-346-2755 Fax: 516-575-5513	Local Resident
Mr. Thomas Clark 150 Miller Place Syosset, NY 11791 Work: 516-677-5935 Fax: 516-677-5878	Oyster Bay Department of Public Works
Ms. Rosemary Styne 15 Shubert Lane Bethpage, NY 11714 Home: 516-731-5830	Local Resident
Mr. James McBride P.O. Box 133 19 York Ave Old Bethpage, NY 11804 Home: 516-681-6920 Fax: 516-392-3559	Local Resident

Section 2: RAB Mission Statement and Operating Procedures

October 2000
Revision 1

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Name or Organization	Representing
New York State Department of Health (NYSDOH) Two University Place Room 205 Albany, NY 12203-3313 ATTN: William Gilday Work: 518-458-6035 Fax: 518-458-6372	State Health Department (TRC)
Nassua County Department of Health 240 Old Country Road Mineola, NY 11501-4250 ATTN: Bruce Mackay Work: 516-571-3402	Local Health Department (TRC)
U.S. EPA Region II 290 Broadway New York, NY 10007-1866 ATTN: Carol Stein Fax: 212-637-3966	Federal Regulatory Agency (TRC)
Nassau County Public Works 170 Cantiaque Rock Road Hicksville, NY 11801 ATTN: Tim Kelly Work: 516-571-6850	Local Government (TRC)
Bethpage Water District/H2M Inc 575 Broad Hollow Road Melville, NY 11747 ATTN: John Molloy Phone: 631-756-8000, Ext 600 Fax: 631-694-4122	TRC Member

RESTORATION ADVISORY BOARD MEMBER LIST
NWIRP BETHPAGE, NEW YORK

Name or Organization	**Representing**
Defense Contract Management Command (DCMC) Northrop Grumman Bethpage Mail Stop: C23-003 Northrop Grumman Corporation Bethpage, NY 11714-3593 ATTN: Martin Simonson Work: 516-575-9952	TRC Member
Hon. Edward Mangano 1 West Street, Room 131 Mineola, NY 11501 Home: 516-681-5191 Work: 516-571-6217 Fax: 516-571-6235	Local Resident/Local Legislator
Ms. Linda Mangano 7 Nicholas Court Bethpage, NY 11714 Home: 516-681-5191 Work: 516-681-0440	Local Resident
Hon. John Venditto Town of Oyster Bay, Supervisor Oyster Bay Town Hall 54 Audrey Avenue Oyster Bay, NY 11771 Work: 516-624-6350 Fax: 516-624-6362	Local Legislator
Mr. Edward Resch 1158 Stewart Avenue Bethpage, NY 11714 Work: 516-395-3860	Local Resident

RESTORATION ADVISORY BOARD MEMBER LIST
NWIRP BETHPAGE, NEW YORK

Name or Organization	Representing
Mr. Charles Bevilacqua 3 Albert Avenue Syosset, NY 11791 Home: 516-921-1429 Work: 516-921-5400 Fax: 516-921-8058	Conservation Fund Advisory Board
Mr. Roy Tringali 98 Walter Avenue Hicksville, NY 11801 Home: 516-433-4784 Email: CHIEFNR@AOL.COM	Local Resident
Mr. Thomas Clark 150 Miller Place Syosset, NY 11791 Work: 516-677-5935 Fax: 516-677-5878	Oyster Bay Department of Public Works
Ms. Rosemary Styne 15 Shubert Lane Bethpage, NY 11714 Home: 516-731-5830	Local Resident
Mr. James McBride P.O. Box 133 Bethpage, NY 11804 Home: 516-681-6920 Fax: 516-392-3559 Email: NF899@AOL.COM	Local Resident Community Co-Chair
Mr. John F. Lovisolo 2 Carol Drive Bethpage, NY 11714 Home: 516-433-3053 Email: LOVISOLO@HOFLINK.COM	Non-voting Alternative

October 2000
Revision 1

Mission Statement and Operating Procedures of the Naval Weapons Industrial Reserve Plant, Bethpage
RESTORATION ADVISORY BOARD

I. NAME

This organization shall be known as the Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage Restoration Advisory Board (RAB).

II. PURPOSE

The NWIRP Bethpage RAB exists to help give the community access to information about the progress of the Navy's environmental program, the Installation Restoration Program (IRP), at NWIRP Bethpage. In addition, the RAB will provide an open forum for discussion of issues and concerns related to the IRP, and will encourage public participation in this forum.

Members of the NWIRP Bethpage RAB shall work in partnership with each other and the decision-making agencies on environmental issues. The RAB will disseminate information to the community and solicit the community for comments.

The decision-making agencies are: Naval Air Systems Command (NAVAIR), Naval Facilities Engineering Command - Northern Division, (NORTHDIV), the New York State Department of Environmental Conservation (NYSDEC), the Nassau County Health Department, and the U.S. Environmental Protection Agency (EPA).

Actions taken by the NWIRP Bethpage RAB will be in accordance with all applicable federal, state, and local laws and regulations.

III. STRUCTURE OF THE RAB

A. The RAB is an expansion of the existing Technical Review Committee (TRC), and is specifically created to include more community involvement. RAB membership will be comprised of Technical Review Committee members and representatives from the community.

B. The NWIRP Bethpage RAB shall have a Co-Chairmanship, representing both the Navy and the community. The Navy's Co-chair will be appointed by the Commanding Officer, NAVAIR, and a community Co-Chair will be elected by community members of the RAB. The community Co-Chair position shall be revisited on an annual basis.

C. The RAB is not a decision-making body, but a forum for the open discussion of thoughts and ideas related to the IRP at NWIRP Bethpage. Similarly, the RAB does not vote or reach consensus on cleanup methods or technical issues.

D. Meetings will be called by joint agreement between the NWIRP Bethpage RAB chairpersons on a quarterly basis or as needed. Agenda items will be submitted 30 days in advance to the Co-Chairs. The Navy Co-Chair will then mail the agenda to board members 10 days in advance of the given meeting.

IV. OPERATING PROCEDURES

A. Meetings will be held at a location convenient to community members.

B. The Navy Co-Chair will be responsible for the minutes of each meeting and for dissemination of the meeting minutes within 60 days after each meeting, and other data requiring committee review and comments. Approval of prior meeting minutes will be an agenda item for each meeting.

C. The Navy will make available copies of technical and other documents pertinent to the environmental programs. These documents will be made available in the Information Repository located in the Bethpage Public Library in Bethpage. Members are encouraged to provide written reviews, when possible, to the chairpersons. NYSDEC, Nassau County Health Department, and EPA will review work plans and reports in accordance with their responsibilities as regulatory agencies.

D. During RAB meetings, the Navy Co-Chair will provide a progress report on environmental activities to the board. At a minimum, these reports will describe the activities since the previous RAB meeting.

E. Sub-committees may be established by joint agreement between chairpersons, and as deemed necessary to facilitate RAB operations.

V. MEMBERSHIP

A. Community RAB members, or their alternate, not attending two consecutive meetings without reasonable explanation may be subject to removal by vote of the remaining community RAB members. The RAB shall consist of 9 members from the community and 1 non-voting alternate members. The alternates will be given first consideration as openings on the RAB occur. Addition to and removal from the RAB of community RAB members must be submitted to either RAB co-chair in writing and will be approved by vote of the remaining community RAB members.

B. Members will serve without compensation. All expenses related to serving on the board will be borne by the respective member or his/her organization.

VI. EFFECTIVE DATE, AMENDMENTS, FLEXIBILITY

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B. This mission statement/operating procedures will be amended as required by changes in state, federal and local laws or regulations.

C. This mission statement/operating procedures may be amended by the mutual consent and signatures of a majority of the members.

D. The IRP activities may require the decision-making agencies to make choices among possible alternatives where all desired scientific data cannot be measured or determined. RAB members acknowledge that even if data is incomplete, the best available information will form the basis to move forward with remediation activities.

E. It is acknowledged that study findings and/or regulatory guidance can result in some sites at this facility being dropped from further investigation due to lack of evidence of a potential problem. Some sites may proceed with interim remedial action (such as removal of contamination) prior to total completion of the investigation if conditions warrant.

F. It is further acknowledged that in the event changes occur in membership or operation of the RAB, a notice of amendment to signatory parties shall occur within 90 days of the event.

VII. MISSION STATEMENT/OPERATING PROCEDURES TERMINATION

A. The RAB mission statement/operating procedures will be evaluated each year and the Board may be terminated if deemed necessary by the mutual consent of a majority of the members in writing.

VIII. SIGNATURES

It is as agreed:

By: ______________________________ ______________

Ms. Judithanne P. Hare — Date
Naval Air Systems Command
Navy Co-Chair

By: ______________________________ ______________

Mr. Jim Colter — Date
Northern Division, Naval Facilities
Engineering Command (NORTHDIV)

By: ______________________________ ______________

New York State Department of — Date
Environmental Conservation (NYSDEC)

By: ______________________________ ______________

Mr. William Gilday — Date
New York State Department of
Health (NYSDOH)

By: ______________________________ ______________

Mr. Bruce Mackay — Date
Nassau County Department of Health

By: ______________________________ ______________

U.S. EPA Region II — Date

By: ______________________________ ______________

Mr. Tim Kelly — Date
Nassau County Public Works

By: ______________________________ ______________
Mr. John Molloy Date
Bethpage Water District

By: ______________________________ ______________
Mr. Martin Simonson Date
Defense Contract Management
Command (DCMC)

By: ______________________________ ______________
Mr. John Cofman Date
Northrop Grumman

By: ______________________________ ______________
Hon. Edward Mangano Date

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By: ______________________________ ______________
Mr. Roy Tringali Date

By: ______________________________ ______________
Mr. Thomas Clark Date

By: ____ _______________
Ms. Rosemary Styne Date

By: ____ _______________
Mr. James McBride Date

By: ____ _______________
Mr. John F. Lovisolo Date

August 99
Revision 0

Mission Statement and Operating Procedures
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RESTORATION ADVISORY BOARD

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Naval Air Systems Command
Navy Co-Chair
Date

By: ______________________________ ______________

Mr. Jim Colter
Northern Division, Naval Facilities
Engineering Command (NORTHDIV)
Date

By: ______________________________ ______________

New York State Department of
Environmental Conservation (NYSDEC)
Date

By: ______________________________ ______________

Mr. William Gilday
New York State Department of
Health (NYSDOH)
Date

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Nassau County Department of Health
Date

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Date

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Mr. Tim Kelly
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Date

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Mr. John Molloy Date
Bethpage Water District

By: ______________________________ ______________
Mr. Martin Simonson Date
Defense Contract Management
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By: ______________________________ ______________
Mr. John Cofman Date
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By: ______________________________ ______________
Hon. Edward Mangano Date

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Mr. Charles Bevilacqua Date

By: ______________________________ ______________
Mr. Roy Tringali Date

By: ______________________________ ______________
Mr. Thomas Clark Date

By: ______________________________ ____________

Ms. Rosemary Styne Date

By: ______________________________ ____________

Mr. James McBride Date

Section 3: Information Repository

Information Repository

An Information Repository is a collection of documents including reports, fact sheets, and other publications relating to the environmental investigations and cleanup being conducted at NWIRP Bethpage. The information repository is maintained in the reference section of the Bethpage Public Library. Many of the technical documents that will be discussed in RAB meetings will be kept in the Information Repository for RAB member reference and public review.

Bethpage Public Library
47 Powell Avenue
Bethpage, New York 11714
(516) 931-3907

Hours of Operation:
Monday through Friday 9:30 a.m. - 9 p.m.
Saturday 9:30 a.m. - 5 p.m.
Sunday 12 p.m. - 4 p.m. (Oct.-April only)

Section 4: Fact Sheets

May 1999 INSTALLATION RESTORATION PROGRAM

FACT SHEET

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT

Bethpage, New York

INTRODUCTION

This fact sheet provides an update on the progress made at Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage under the Navy Installation Restoration (IR) Program. The purpose of the IR Program is to identify and clean up past hazardous waste sites at Navy installations.

ABOUT NWIRP BETHPAGE

NWIRP Bethpage is a 108-acre site surrounded by the 505-acre Northrop Grumman complex in the Hamlet of Bethpage. NWIRP Bethpage was established in 1943 with the primary mission of assembling military aircraft. These activities involved the use of a number of industrial chemicals and materials that resulted in contamination of several areas of the facility. Three sites and two areas of concern (AOCs) have been identified under the IR Program at NWIRP Bethpage. These sites and AOCs are described below.

SITE AND AOC DESCRIPTION

Site 1 – Former Drum Marshalling Area

Until 1982, Site 1 was used as a marshalling area for drummed waste at NWIRP Bethpage prior to off-site disposal. A sanitary leach field was present underneath the drum marshalling pads and a sludge drying bed was present northeast of the pads.

In the early 1990's, solvents, metals, and PCBs were detected in soils and metals and solvents were detected in the groundwater at Site 1. In 1995, a Record of Decision (ROD) was signed that identified remedial actions for Sites 1, 2, and 3. The ROD identified excavation and off-site disposal of metal and PCB contaminated soils and in situ treatment of solvents in soils and shallow groundwater for Site 1. Deeper and down gradient groundwater contamination from the site is being addressed by a groundwater containment system on the Northrop Grumman property. As required by the ROD, an air sparging and soil vapor extraction system to remove solvents from Site 1 soils and groundwater has been running since 1997. The metal and PCB contaminated soil will be excavated after the solvents have been removed from site soils and groundwater.

Site 2 – Recharge Basin Area

Recharge basins naturally filter surface water back into the groundwater. Storm water and non contact cooling water from the Plant No. 3 area were discharged to the recharge basins at Site 2. Sludge drying beds were located adjacent to the recharge basins. The sludge drying beds have not been active since the 1970s and were reportedly removed. The recharge basins continue to be used for storm water management.

In the early 1990's, PCBs and low levels of solvents and metals were detected in the soils and groundwater at Site 2. As required by the ROD, the PCB contaminated soils were excavated in 1996. The solvents and metals were at a low enough level that remediation was not required. Groundwater flowing from this site is contained by the Northrop Grumman groundwater containment system.

Site 3 – Salvage Storage Area

Metal parts were stored at the salvage storage area prior to recycling. In the early 1990's, low levels of solvents and metals were detected in site soils and groundwater. As provided in the ROD, soils and groundwater at Site 3 do not require remediation. Groundwater flowing from this site is contained by the Northrop Grumman containment system.

AOCs 20-08 and 34-07 – Dry Wells

Dry wells, located in and around Plant No. 3, were investigated. Most of the dry wells were either found to be clean or the well contents were excavated to remove contamination. Currently, two dry wells remain contaminated and are being investigated to determine the extent of contamination.

AOC 22 – Former Underground Storage Tanks

Until the early 1980s, three underground storage tanks were located south of Plant No. 3. Soil testing conducted in the area found low to moderate levels of fuels in the soils. Testing results were not conclusive as to whether groundwater contamination or free product at the water table was present. This area is being investigated to determine the extent of contamination.

Regional Groundwater

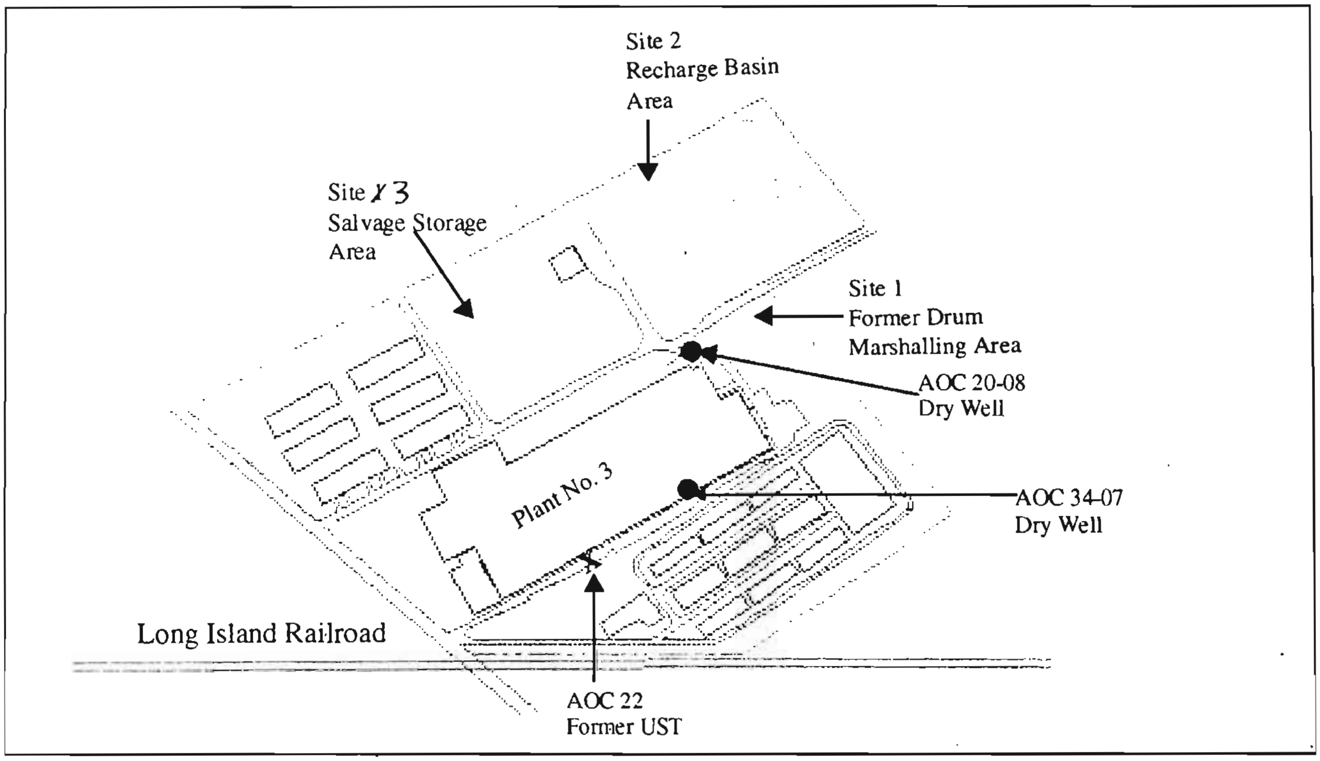
Groundwater underneath NWIRP Bethpage starts at a depth of approximately 60 feet below ground surface and extends to a depth of approximately 500 feet. The predominant groundwater flow in the area is to the southeast toward the Atlantic Ocean. Solvents have been found in the on site and off site groundwater. Options for remediating this groundwater are currently being evaluated. In the interim, a groundwater containment system has been installed on Northrop Grumman property to control the migration of solvents in groundwater. To ensure protection of the local water supply, a system for filtering the solvents from the groundwater is in place at the affected extraction wells.

INFORMATION REPOSITORY

Documents related to the environmental activities being conducted under the IR Program are available in the Information Repository for NWIRP Bethpage. The Information Repository is available for public review at:

Bethpage Public Library
47 Powell Avenue
Bethpage, New York, 11714
(516) 931-3907

Hours of Operation:
M-F: 9:30 am to 9:00 pm
Sat: 9:30 am to 5:00 pm
Sun: 12 pm to 4 pm (Oct. – April only)



NWIRP Bethpage, Site Map

April 1999

RESTORATION ADVISORY BOARD
Naval Weapons Industrial Reserve Plant
Bethpage, New York

FACT SHEET

INTRODUCTION

In 1975, The Department of Defense (DOD) took the first step to create a program to identify and clean up environmental problems at federal facilities. These problems were a result of past industrial processes and waste handling practices, which included on-site disposal of daily operational wastes such as chemicals, petroleum products, cleaning solvents, and degreasers. Although acceptable for many years, the old industrial processes and ways of handling wastes are now known to be potentially damaging to the environment.

DOD tasked the Armed Services with investigating sites where on-site disposal, spills, or storage of these materials may have occurred. This program became known as the DOD Installation Restoration (IR) Program. One policy of this program is to involve the local community throughout the IR process by: establishing communication channels with representatives of the community; making information available in a timely manner; providing opportunities for public comment on documents; and, most recently, establishing Restoration Advisory Boards (RABs).

WHAT IS A RAB?

A RAB is an advisory board designed to act as a focal point for the exchange of information between the U.S. Navy and the local community regarding environmental restoration activities. The RAB is intended to bring together community members who reflect the diverse interests within the community, enabling an early and continued "two-way" flow of information, concerns, values, and needs between the community and the decision-makers for the Navy's property. The RAB works in partnership with the decision-makers on cleanup issues and related matters.

RABs do not make decisions on environmental restoration activities, but provide information, suggestions, and community input to be used by the Navy in making decisions on actions and proposed actions involving releases or threatened releases. RABs do not replace community outreach and participation activities requried by law, regulation or policy. All community relations requirements must still be met.

WHAT ARE THE RESPONSIBILITIES OF A RAB?

The responsibilities of a RAB are to:

★ Conduct regular meetings, open to the public, at convenient times and locations.

★ Keep meeting minutes and make them available to interested parties.

★ Develop and use a mailing list of names and addresses of interested parties who wish to receive information on the environmental program.

★ Provide a forum for individual members to provide input and make recommendations on environmental restoration issues to the Navy. RABs do not vote on issues or make recommendations as a body.

★ Establish a procedure for public participation and responding to questions and comments for the public at RAB meetings.

JOIN US!

RAB meetings are held regularly, and are always open to the public. For more information about the RAB, or to find out when the next meeting will be held, plese write or call.

►►►►

Mr. James Colter (Code 1821/JLC) at
Northern Division, NAVFAC
10 Industrial Highway, Mail Stop 82
Lester, PA 19113-2090
(610) 595-0567 extension 163

You may also review information about the environmental programs underway at the facility by visiting the public Information Repository. Documents at the Repository include technical work plans, reports, and a Community Relations Plan. All documents are available to be photocopied at a small expense for personal reference.

INFORMATION REPOSITORY

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47 Powel Avenue
Bethpage, New York 11714
(516) 931-3907

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INSTALLATION RESTORATION PROGRAM:

FACT SHEET

NAVAL WEAPONS
INDUSTRIAL RESERVE PLANT

Bethpage, New York

July 1995

This fact sheet provides information about the cleanup of contaminated soils at the NWIRP Bethpage. The Navy is currently in the remedial design stage, with soil cleanup anticipated to start this fall and be completed within one year. This fact sheet summarizes these actions as well as provides an update of other environmental activities at the site.

BACKGROUND

NWIRP Bethpage is a Government-Owned and Contractor Operated (GOCO) facility which is situated on 108 acres in Nassau County in the Hamlet of Bethpage, Town of Oyster Bay, Long Island, New York. The Navy's land is bounded on the east by a residential neighborhood and on the remaining sides by Northrup Grumman Corporation (the operator of the facility).

NWIRP Bethpage was established in 1943 with the primary mission of assembling military aircraft. These activities involve the use of a number of industrial chemicals, many of which included heavy metals and solvents. Environmental restoration efforts at the NWIRP Bethpage site are coordinated by the New York State Department of Environmental Conservation (NYSDEC) with input from the county and state Department of Health and the United States Environmental Protection Agency.

INSTALLATION RESTORATION (IR) PROGRAM SUMMARY

The IR Program consists of four distinct stages: Preliminary Assessment, Site Inspection, Remedial Investigation/ Feasibility Study, and the Remedial Design/ Remedial Action. The Preliminary Assessment (known as the Initial Assessment Study at the time) was completed in the 1986. To expedite the IR Program, the Site Investigation was not conducted. The Remedial Investigation/ Feasibility Study was initiated in 1991 and completed in March 1994.

Because of concurrent activities being conducted at the adjacent Grumman Facility and the Hooker/RUCO Superfund Site and the complex interaction between the groundwater from the three sites and the need for further study of the groundwater, the remediation of the groundwater was split from the soil to allow the soil cleanup (an ongoing source of groundwater contamination) to proceed. The status of the soil and groundwater activities are discussed below.

PUBLIC MEETING

In November 1994, a public meeting was held to solicit comments on the joint Navy - NYSDEC proposed plan for addressing soil contamination. The proposed plan called for:

- Excavation of soils contaminated with PCBs at a concentration greated than 10 mg/kg, followed by off site treatment and/or land filling;
- Excavation of soils which can be classifiable as a hazardous waste because of arsenic, followed by off site treatment and disposal;
- In place stripping of solvents from soils using vapor extraction, and injection of air into the

most contaminated groundwater underlying these soils (air sparging);

- An interim remedial action of wellhead treatment at Bethpage Water Districts Plant #5; and
- Permeable cover and deed restrictions in areas of residual metal and organic contamination.

Many valuable comments were received during the public meeting and the public comment period following the meeting. Detailed responses to these comments were prepared and will be provided in the responsiveness summary of the Record of Decision for the soils.

OFFSITE SOIL SAMPLING

During the public meeting, it was announced that the Navy would conduct soil sampling in the residential neighborhood adjacent to the Navy's property to determine if contaminants found in the site soils have migrated to this area. This sampling was conducted in November 1994 and analytical results became available in early 1995. Based on these results, there is no evidence that soil contamination from the Navy property has affected the residential neighborhood.

SOIL REMEDIATION

The cleanup of contaminated soils at the NWIRP Bethpage is ongoing. The Remedial Design for the arsenic- and PCB-contaminated soils is complete. Remedial Action, consisting of excavation and off site treatment and/or disposal of these soils is expected to be completed this fall. At this time, the final areas and depths for excavation are being determined through chemical testing and treatment/disposal firms are being selected.

Remedial Design of the air sparging and vapor extraction of solvent-contaminated soils is proceeding. In support of the Remedial Design, a pilot-scale test is planned to start this summer and be completed this fall. The Remedial Design would then be completed in early 1996. The full scale Remedial Action for these soils is expected to start in mid-1996 and be completed within two years of operation.

The final action under the soil cleanup would be Deed Restrictions and the permeable cover, which would be implemented after the soil remediation is completed.

STATUS OF GROUNDWATER ACTIVITIES

The groundwater investigation and remediation is proceeding, with the Navy and Grumman having completed their investigations. Investigation is continuing at the Hooker/RUCO Superfund site to determine the potential for groundwater contamination extending to the south and west of the three sites.

DEPARTMENT OF THE NAVY
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop #82
Lester, Pennsylvania 19113-2090

NEW YORK STATE
Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7010

Langdon Marsh
Commissioner

OCTOBER 1994

INTRODUCTION

This fact sheet provides information about the Navy Installation Restoration (IR) Program. The purpose of the IR Program is to identify and clean up contamination resulting from past activities at Navy installations. The progress and proposed remedial actions for onsite soils at the Naval Weapons Industrial Reserve Plant (NWIRP) are summarized below. Additional detail on the proposed remedy for onsite soils is presented in the Proposed Remedial Action Plan (PRAP), which can be found in the information repository at the Bethpage Public Library. Remediation of contaminated groundwater associated with the NWIRP will be addressed in a future fact sheet and PRAP.

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NWIRP Bethpage was established in 1943 with the primary mission of assembling military aircraft. These activities involve the use of a number of industrial chemicals, most of which included heavy metals and solvents. Environmental restoration efforts at both Northrop Grumman and NWIRP Bethpage sites are coordinated by the New York State Department of Environmental Conservation (NYSDEC), with input from the county and state Department of Health and the United States Environmental Protection Agency.

IR PROGRAM SUMMARY

The IR Program consists of four distinct stages: Preliminary Assessment, Site Inspection, Remedial Investigation/Feasibility Study, and Remedial Design/Remedial Action. These stages are implemented sequentially with each stage determining whether the subsequent stage is necessary.

An Initial Assessment Study (IAS) was conducted at the NWIRP Bethpage in June 1986, as part of the Preliminary Assessment (PA) phase of the IR Program, The purpose of the IAS was to identify and assess sites posing a potential threat to human health or the environment because of past operations. Three areas of concern were evaluated with respect to chemical characteristics, migration pathways, and pollutant receptors. The PA concluded that while none of the three sites posed an immediate threat to human health or the environment, further investigation was warranted. To expedite the Navy's IR Program, the Site Investigation (SI) was not conducted, and the Navy proceeded directly to the Remedial Investigation/Feasibility Study (RI/FS) phase.

The RI was initiated in June 1991 and completed in October 1993. The RI was a two phase effort which identified the nature and extent of soil and groundwater contamination at the facility. The results of the RI are available in the information repository at the Bethpage Public Library and have been summarized in previous fact sheets. The Feasibility Study, which was completed in March 1994, identified options for addressing both soil and groundwater contamination.

To accelerate cleanup of the site, the Navy and NYSDEC divided the site into two parts called "Operable Units". The cleanup of onsite soils is being addressed as Operable Unit 01, which is the subject of the November 15, 1994 public meeting. Remediation of contaminated groundwater at the Northrop Grumman, Navy, and Hooker/RUCO sites will be addressed as Operable Unit 02. A proposed plan for Operable Unit 02 is expected to be issued in the Fall of 1995.

FEASIBILITY STUDY (FS)

The FS was conducted to develop and evaluate the effectiveness, implementability, and costs required to contain and/or treat soil and groundwater contamination at the site. At this time, only soil alternatives are being discussed in this fact sheet; groundwater alternatives will be considered as a future action under Operable Unit 02.

The FS developed a variety of soils alternatives. The alternatives ranged in protectiveness from no action to removal, offsite treatment, and/or disposal of all contaminated soils. Ten different alternatives were developed in the FS. The no action alternative was evaluated but was not considered to be protective of human health and the environment and would not comply with environmental regulations. Of the nine remaining alternatives, six of the alternatives were considered to be protective of human health and the environment, comply with environmental regulations, and be reasonably economical to implement. The last three alternatives evaluated were not considered to be cost effective.

The alternatives developed in the FS considered the pathway for exposure and potential exposure under both the present industrial-use of the site and a potential future residential-use of the site. At this point in time, the Navy has determined that the site will remain as an industrial area. Therefore, only the alternatives developed in the FS that consider the industrial-use scenario will be considered. In the future, if residential use of the site is considered, then the implemented remedy may have to be re-evaluated for continued protectiveness.

The alternatives developed in the FS address these risks through capping (covering); excavation of PCB-contaminated soils; offsite incineration or offsite landfilling of the excavated soils in accordance with environmental regulations; excavation of metal-contaminated soils and offsite treatment/landfilling of these soils; and in-place vapor extraction of solvent-contaminated soils in combination with air sparging to treat the shallow onsite groundwater. Vapor extraction/air sparging uses air to remove contaminants from soils and groundwater in place. In the soils, the solvents evaporate into the air stream. The air is then collected and treated. For additional details on the findings of the FS, a copy is available in the information repository at the Bethpage Public Library.

SELECTION PROCESS FOR THE PREFERRED ALTERNATIVE

The Navy and NYSDEC have proposed a preferred remedial alternative for onsite soil contamination (Operable Unit 01). Public input for the preferred remedial alternative is being requested at this time during the public comment period. The Navy and NYSDEC will select a final cleanup alternative after careful consideration of these comments. The Navy will then proceed to the Remedial Design/Remedial Action for these soils.

The selection of the preferred alternative is based on nine criteria. Two of the criteria are considered threshold criteria. A selected remedy must meet these criteria. The two threshold criteria are overall protection of human health and the environment and compliance with environmental regulations.

Five of the criteria; short-term effectiveness, long-term effectiveness and permanence, reduction of toxicity, mobility, or volume, implementability, and cost are considered balancing criteria. Relative strengths and weaknesses of alternatives are compared to each other based on these criteria.

The last two criteria; state acceptance and community acceptance are modifying criteria. These criteria are used to potentially modify a preferred alternative during the development process and during the public comment period.

SUMMARY OF THE PREFERRED ALTERNATIVE

The preferred alternative for the cleanup of the soils at the NWIRP Bethpage is based on FS alternative S6, and includes the following actions.

1. Excavation of PCB-contaminated soils, and off site landfilling or incineration of these soils in accordance with environmental regulations.

2. Excavation of metal-contaminated soils (identified as hazardous wastes), treatment of these soils in accordance with environmental regulations, and offsite landfilling.

3. In-place vapor extraction of solvent-contaminated soils and air sparging of associated shallow contaminated groundwater.

4. Install a soil and/or gravel cover in places of residual contamination. In addition, place deed restrictions on the site and implement a long-term monitoring and cover maintenance program.

5. Protect the public water supply under the guidance of the Bethpage Water District.

OPPORTUNITIES FOR PUBLIC INVOLVEMENT

This fact sheet has been prepared to notify and solicit public comment on the preferred alternative for the onsite soils. The issuance of the proposed plan starts the public comment period for the preferred alternative. A public meeting will be held during the public comment period to solicit verbal and written comments on the proposed plan. In addition to the public meeting, the public may submit written comments on the proposed plan during the public comment period.

The official public comment period for the proposed plan is November 1, 1994 to December 16, 1994. Written comments can be submitted to the address below. A public meeting is tentatively scheduled to be held at the Bethpage High School at 7:30 pm on November 15, 1994. You are invited to attend this meeting to express your concerns and comments on the preferred alternative. In the event that the public meeting is postponed, you will be notified.

Written comments must be sent to:

Mr. Jim Colter, Navy (Code 1821)
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop 82
Lester, PA 19113-2090
Phone: (610) 595-0567, ext 163

For additional information you may contact Mr. Colter at the address above, or:

Mr. John D. Barnes, P.E.,
Project Manager
NYSDEC
50 Wolf Road, Room 222
Albany, NY 12233-7010
Phone: (518) 457-3395, (800) 342-9296

Mr. Joshua Epstein, PhD
Citizen Participation Specialist
NYSDEC - Region 1 Office
Building 40 - SUNY
Stony Brook, NY 11790
Phone: (516) 444-0249

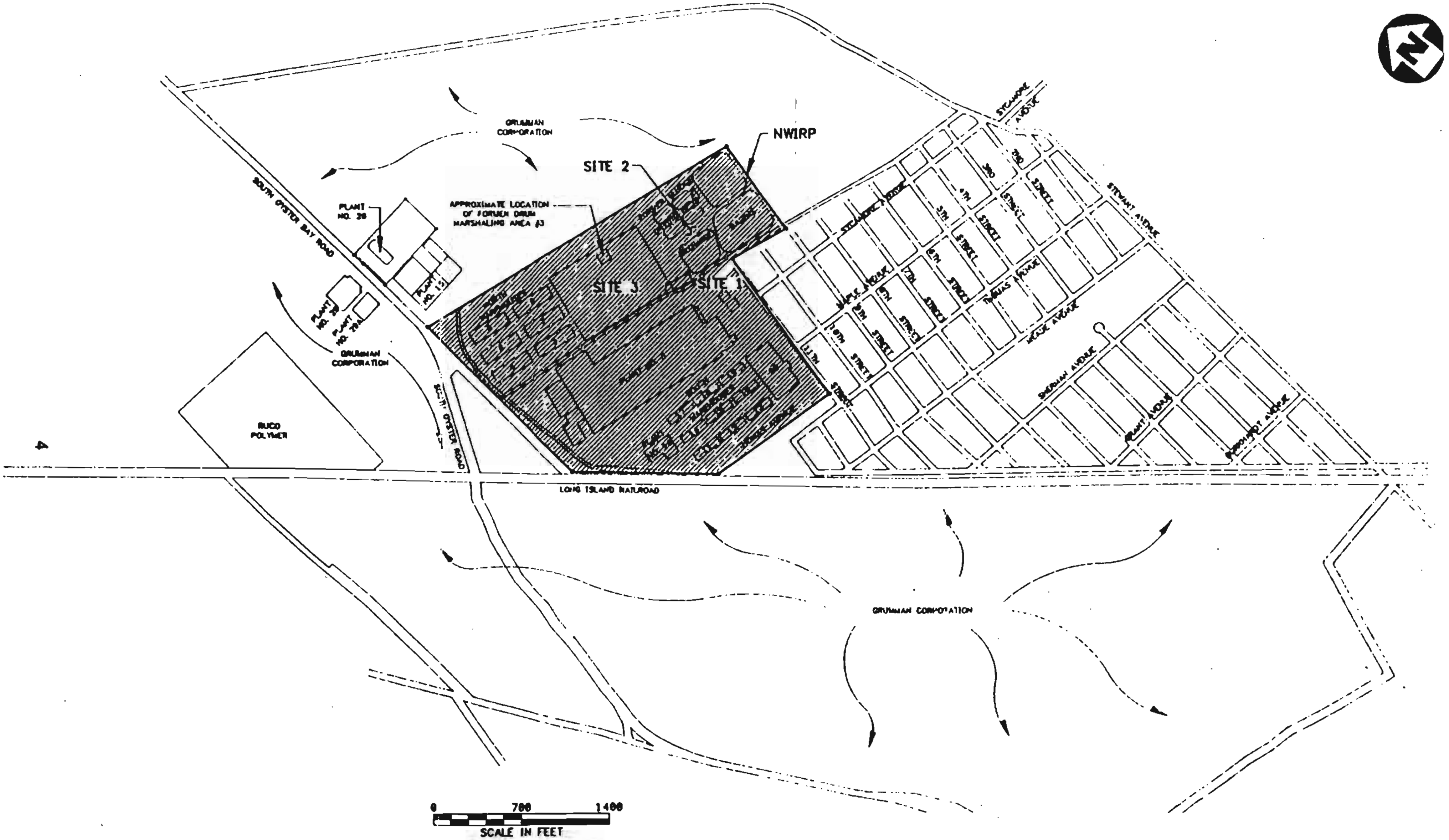
For health related concerns, contact:

Mr. Timothy Vickerson
New York State Department of Health
2 University Place
Albany, NY 12203
Phone: (518) 458-6305

Ms. Nina Knapp
Health Liaison Program - HYSDOH
2 University Place
Albany, NY 12203
Phone: (800) 458-1158, ext. 402

All documents generated from the investigation are located in the information repository, located at the Bethpage Public Library, 47 Powel Avenue. Hours of operation are:

Monday-Friday	9:30am - 9:00pm
Saturday	9:30am - 5:00pm
Sunday	Closed



SITE LAYOUT MAP
PHASE 2 – REMEDIAL INVESTIGATION/FEASIBILITY STUDY
NWIRP, BETHPAGE, NEW YORK

FIGURE 2

HALLIBURTON NUS
Environmental Corporation

INSTALLATION RESTORATION PROGRAM:

FACT SHEET

NAVAL WEAPONS
INDUSTRIAL RESERVE PLANT
Bethpage, New York

SEPTEMBER 1993

INTRODUCTION

The Navy has recently completed its Phase 2 Remedial Investigation/Feasibility Study (RI/FS) field activities at the Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage. A Phase 1 RI was completed in May 1992. This Fact Sheet summarizes the RI (Phase 1 and 2) results and discusses the on-going remedial process.

PHASE 1 RI

The Phase 1 RI focused on groundwater and soils located at the NWIRP Bethpage. The results of the Phase 1 RI indicated that the groundwater at the NWIRP Bethpage is contaminated with solvents and to a lesser extent metals. The primary contaminant (solvent) found was trichloroethylene (TCE), which was used as an industrial degreaser. In addition, the soils were found to be contaminated with metals, polychlorinated biphenyls (PCBs), and solvents. The detailed results from the Phase 1 RI are available at the Bethpage Public Library Information Repository.

PHASE 2 RI

The overall objective of the Phase 2 RI was to further characterize the nature and extent of environmental contamination and associated risks to human health and the environment at and near the NWIRP Bethpage. The data collected during the Phase 2 RI, in conjunction with the Phase 1 results, will be used to develop and evaluate potential cleanup options in the Feasibility Study (FS). The Phase 2 activities focused on supplemental sampling and analysis for PCBs in soils at the NWIRP Bethpage and volatile organics in groundwater at and near NWIRP Bethpage. Field investigations included the following activities: surface/subsurface soil sampling and analysis, groundwater sampling and analysis, soil-gas measurements, and the installation of temporary and permanent monitoring wells.

RESULTS

The soil testing program indicated low-level PCB contamination at selected areas on the Navy's property. The majority of the contaminated surface soils contained PCBs at acceptable levels; however, one location on the Navy property exceeded applicable Federal criteria for acceptable PCB concentrations. This location was covered with soil as an interim action to prevent exposure to on-site workers. Note, this location does not pose a threat to local residents. The effected soil at this location will be excavated and treated off site.

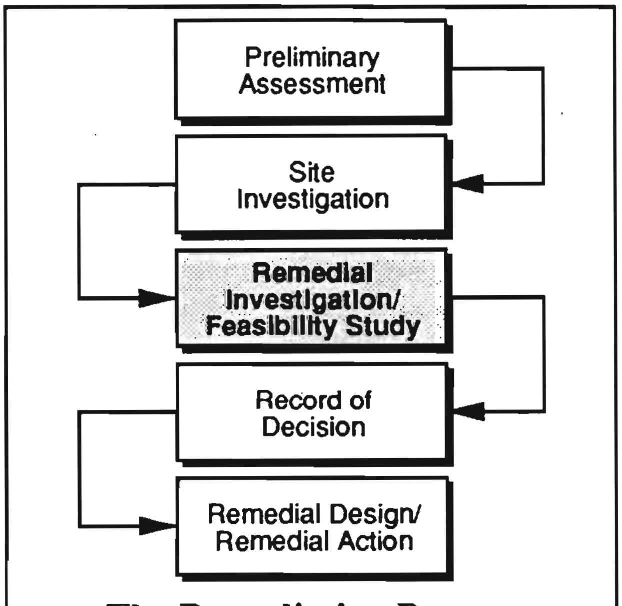
During Phase 2, permanent monitoring wells were installed offsite. These wells were sampled to determine if the chemicals found in the on-site groundwater had moved off of the Navy's property. The results showed that contamination has migrated east and south towards the Long Island Railroad and Grumman property. It should be noted that the levels of groundwater contamination found outside the Navy's property were much less than the levels measured on the Navy's property, but did exceed New York State Drinking Water Standards in some locations. As an example, the chemical 1,1,1, trichloroethane (TCA), also used as an industrial degreaser, was found at a maximum concentration of 16 parts per billion (ppb) in one of the off-site wells. The New York State standard is 5 ppb. By comparison, the levels of this same chemical found in groundwater beneath NWIRP Bethpage were about 10,000 ppb.

As stated in the previous Navy Fact Sheet, there are instances where drinking water standards have been exceeded in groundwater outside of the Navy's property. However, persons in the vicinity of the Navy and Grumman facility are not at any increased risk from groundwater contamination since an exposure pathway does not exist. Households in the vicinity of the Navy and Grumman facility do not use private, individual wells to obtain drinking water. These residents receive their drinking water from the Bethpage Water District, a municipal source that is tested on a regular basis. Residents can be assured that if the municipal water that is tested and found to exceed drinking water standards, the affected well would be shut down.

During the Phase 2 RI, a soil-gas survey was conducted in areas of the Navy's facility to identify additional sources of groundwater contamination for cleanup. This survey revealed an additional source of contamination at NWIRP Bethpage underneath one of the manufacturing plants.

GROUNDWATER COMPUTER MODELING

Groundwater flow patterns beneath the NWIRP Bethpage and adjacent areas are very complex due to the influence of numerous subsurface conditions including nearby pumping and recharge.



The Remediation Process

As part of the Phase 2 RI, a computer model of the local groundwater regime was generated to assist in the identification of potential source areas (an area which contributes to groundwater/soil contamination), to determine the impact of the known source areas, and to project the potential impact of the site-generated contamination on off-site receivers. During the FS, the computer modeling will also be used to design a groundwater extraction system and to evaluate the effectiveness of remedial alternatives.

NEXT STEP IN THE PROCESS

The Navy has finished their investigations in the Remedial Investigation/Feasibility Study (RI/FS) phase of the remediation process. The RI report will be finalized in the fall of 1993. Currently, the FS is being developed to evaluate alternatives for the most effective cleanup method of the soil and groundwater contamination. The FS is also scheduled for completion in the fall of 1993. Based on the FS, a remediation strategy will be selected and the Remedial Design/Remedial Action will be initiated.

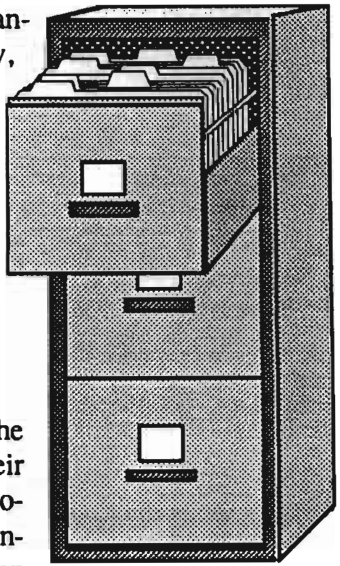
COMMUNITY RELATIONS ACTIVITIES

The Community will have an opportunity to become involved in the remedial process at the completion of the FS. At this time, the Navy will sponsor a public meeting to announce the RI/FS results and to provide the public with an opportunity to comment on the reports, including the potential cleanup methods. The public meeting is scheduled for early 1994.

Until then, if you would like to discuss the program in further detail, or want to be placed on the mailing list, please write or call Jim Colter, Navy Remedial Project Manager, or Jack Dunleavy, Technical Manager at:

Naval Facilities
Engineering Command
10 Industrial Highway
Mail Stop 82
Lester, PA 19113-2090
(215) 595-0567
ext. 163/152

The Navy strives to keep the public informed about their activities under the IR Program. For Bethpage, an Information Repository has been established at the Bethpage Public Library (Information Desk), 47 Powell Avenue, Bethpage, New York, 11714. All reports generated to date are available for your information.



INSTALLATION RESTORATION PROGRAM:

FACT SHEET

NAVAL WEAPONS
INDUSTRIAL RESERVE PLANT
Bethpage, New York

FEBRUARY 1993

Introduction

The Navy has begun their off-site monitoring well program in the residential neighborhood adjacent to the Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage. This area is known by residents as the "numbered streets". The first phase of the off-site activities, the installation and testing of temporary groundwater monitoring wells, has been completed. This Fact Sheet summarizes the temporary monitoring well results and discusses the on-going remedial process.

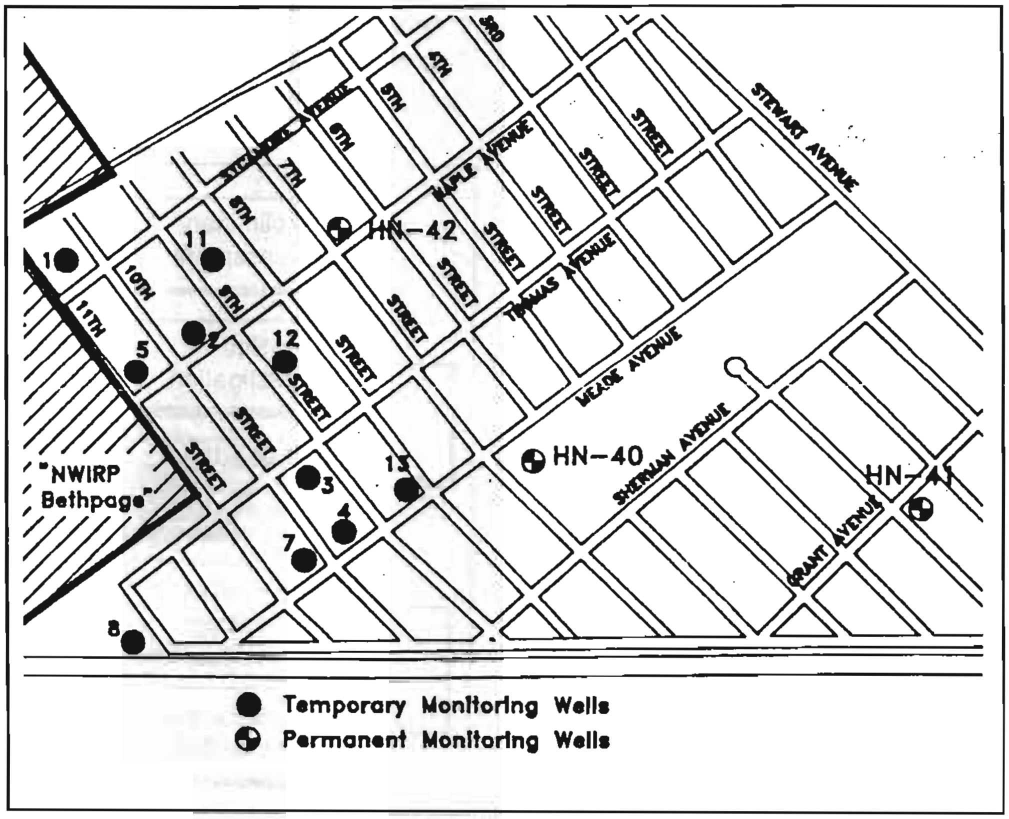
The installation of permanent monitoring wells is currently in progress. A total of three well locations have been selected based on the findings to date. Each well location will consist of one shallow depth well (60-feet) and one intermediate depth well (approximately 100 to 150 feet), totalling six permanent monitoring wells. These wells will be used to collect groundwater samples over the long-term and will be used to identify any increases in the level of contaminants. The temporary and permanent well locations are shown in the map (below).

RESULTS

The results of the temporary monitoring well program indicate that the primary groundwater contaminant

SAMPLING ACTIVITIES

Eleven off-site temporary monitoring wells were installed in the numbered streets area in late December, 1992. These wells were used to collect groundwater samples. Analysis of the groundwater samples provided data that has been used to describe the quality of the groundwater and the migration of a particular contaminant. The temporary monitoring wells consisted of shallow wells that sampled groundwater at an approximately 60-foot depth. These wells were then removed after obtaining groundwater samples.



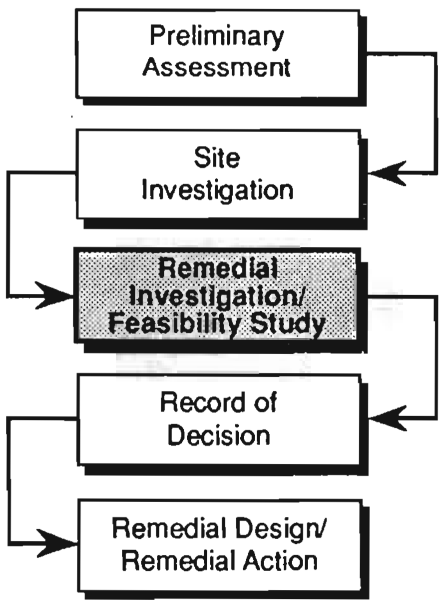
Well Locations

found was Trichloroethylene (TCE). TCE was used as an industrial degreaser at NWIRP Bethpage. Groundwater in three of the temporary wells had TCE levels that exceeded USEPA and New York State Safe Drinking Water Standards of 5 parts per billion (ppb). Wells 5, 7, and 11 had concentrations of 22, 7, and 6 ppb, respectively. TCE concentrations from wells on the NWIRP Bethpage site are on the order of one thousand times higher than off-site levels. The detailed results from the temporary monitoring well program are available at the Bethpage Library information repository. A copy of these results is also available by contacting the Navy representative listed below.

Although contamination was found to be above safe drinking levels in three of the eleven temporary wells, Bethpage residents do not use local individual wells as a source of drinking water. Residents obtain their water from the Bethpage Water District, a municipal source that is tested on a routine basis. Based on the depth to the groundwater (60 feet) and the fact that the groundwater is not used by Bethpage residents, it is unlikely that residents are being exposed to these chemicals. The Navy will continue the groundwater sampling program over the next two months. As always, the Navy's primary concern is the protection of the health and welfare of its employees, neighbors, and the environment.

NEXT STEP IN THE PROCESS

The Navy is continuing their investigations in the Remedial Investigation/Feasibility Study (RI/FS) phase of the remediation process (shown at right). The RI, scheduled for completion in the summer of 1993, involves the collection and analysis of detailed technical data to characterize the nature and extent of the contamination. The FS is being developed concurrently with the RI to evaluate alternatives for the most effective remedy of the soil and groundwater contamination. Based on the FS, a cleanup remedy will be selected and the Remedial Design/Remedial Action will be initiated.



The Remediation Process

COMMUNITY RELATIONS ACTIVITIES

In January 1993, the Navy conducted a door-to-door notification of upcoming drilling activities (installation of permanent monitoring wells). The homes that were directly adjacent to the drilling locations were contacted.

Since the drilling equipment is very large and may obstruct traffic for a short while, the Navy has informed the Bethpage School District of the off-site drilling activities. The School District has agreed to temporarily relocate the school bus stops (one block) to ensure the safety of the school children. The school district will inform parents of the new locations.

The next opportunity for public involvement in the remedial process is at the completion of the draft RI/FS (scheduled for Fall 1993). At this time, the Navy will sponsor a public meeting to announce the RI/FS results and to provide the public with an opportunity to comment on the reports, including the potential cleanup methods.

If you would like to discuss the program in further detail, or want to be placed on the mailing list, please write or call Jim Colter, Navy Remedial Project Manager, or Jack Dunleavy, Technical Manager at:

Naval Facilities
Engineering Command
10 Industrial Highway,
Mail Stop 82
Lester, PA 19113-2090
(215) 595-0567

All documents generated to date are available for public review in the information repository, located at the Bethpage Public Library, Information Desk, 47 Powell Avenue.

INSTALLATION RESTORATION PROGRAM:

FACT SHEET

NAVAL WEAPONS
INDUSTRIAL RESERVE PLANT
Bethpage, New York

NOVEMBER 1992

The Navy will hold an
informal neighborhood workshop
to discuss
off-site drilling activities
in your residential area.

•

Location: Bethpage High School
Cherry Avenue

Room: Theater

Date: November 18, 1992

Time: 6:30 pm - 8:00 pm

This fact sheet provides information about the NWIRP Bethpage off-site monitoring well program. The monitoring well program is being conducted under the Remedial Investigation (RI) phase of the Navy's Installation Restoration (IR) Program.

Below are the answers to some of the most frequently asked questions about monitoring wells. The informal meeting will give you an opportunity to ask additional questions about upcoming drill activities planned in your neighborhood.

Q What is the purpose of monitoring wells?

Monitoring wells are used to collect groundwater samples. Analysis of the groundwater provides data that can be used to describe the quality of the groundwater and/or the migration of a particular contaminant.

Q How many monitoring wells will be installed?

The Navy will install approximately 13 temporary and 6 permanent monitoring wells.

Q What are the locations of these wells?

The monitoring wells will be installed off-site the NWIRP Bethpage property in the bordering residential neighborhood which is located to the east and south of Site 1, the Former Drum Marshaling Area. Currently planned locations for the temporary wells are shown on the attached map. The exact location of permanent wells will be based on the results of the temporary monitoring well sampling. Monitoring wells will not be located on residential property, but will instead be located on highway right-of-ways.

Q When will the drilling start and how long will the off-site drilling activities continue?

The off-site monitoring well program consists of two phases: first, the installation of temporary monitoring wells and second, the installation of permanent monitoring wells. Seventeen off-site locations have been tentatively identified by the Navy, but only approximately 13 wells will be installed. Installation of the temporary monitoring wells will last for approximately two weeks, November 30 through December 11. Drilling activities will be limited to Monday through Friday and will last approximately 3 to 6 hours per location. Installation of the permanent monitoring wells is a more extensive and time-consuming procedure. Installation of the permanent wells is tentatively scheduled to begin in late December/early January and will continue for 6 to 8 weeks. No drill activities are planned between December 24, 1992 to January 3, 1993.

Q How deep will these monitoring wells be?

The temporary monitoring wells will consist of shallow wells that sample groundwater at an approximately 60-foot depth. The permanent monitoring wells will consist of both shallow depth (60-feet deep) and intermediate depth wells (approximately 100 to 150 feet deep).

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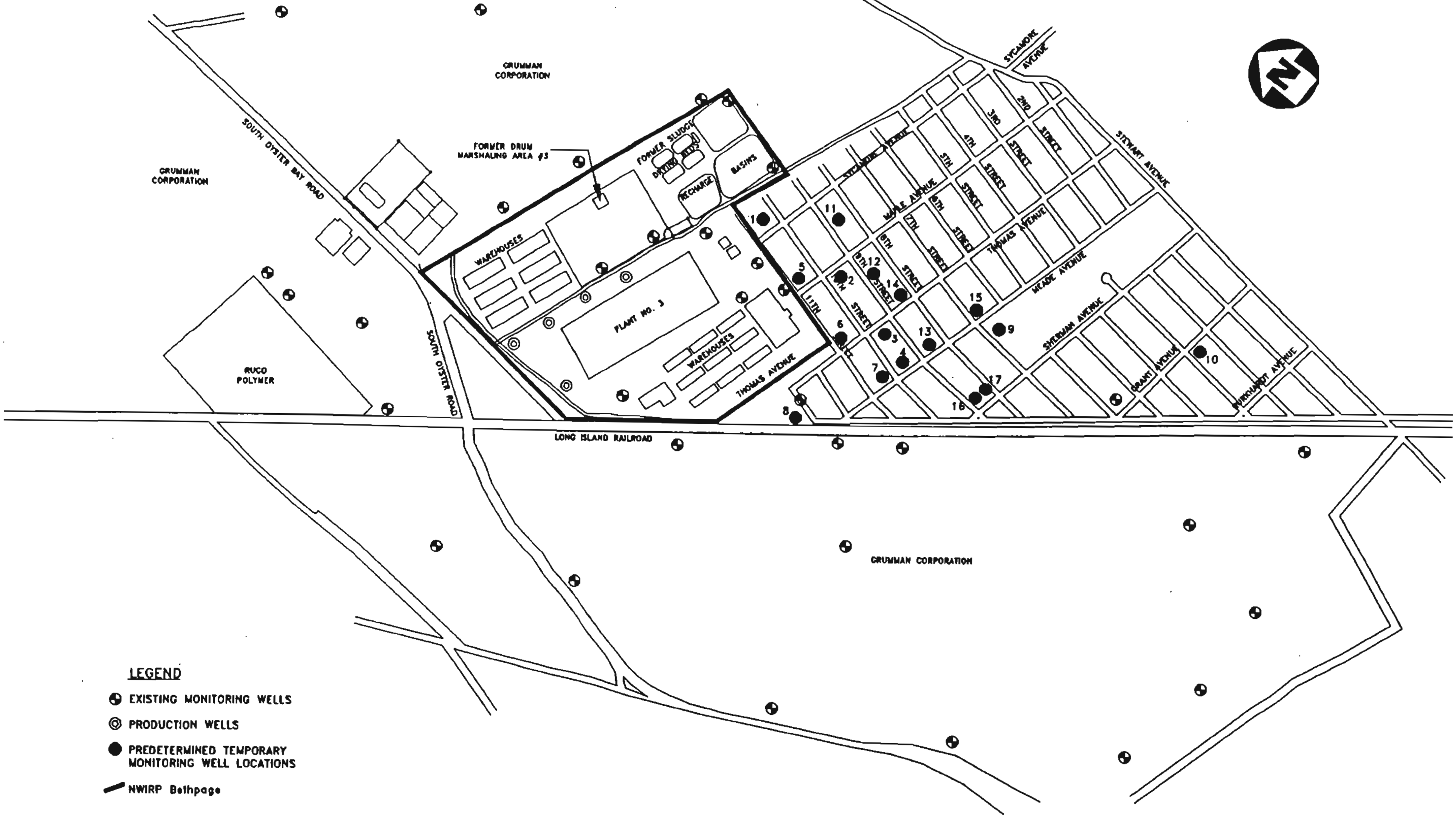


POTENTIAL LOCATIONS OF ADDITIONAL TEMPORARY AND PERMANENT MONITORING WELLS
PHASE 2 - REMEDIAL INVESTIGATION FEASIBILITY STUDY
NWIRP, BETHPAGE, NEW YORK

INSTALLATION RESTORATION PROGRAM:

FACT SHEET

NAVAL WEAPONS
INDUSTRIAL RESERVE PLANT
Bethpage, New York

OCTOBER 1992

Introduction

This fact sheet provides information about the Navy Installation Restoration (IR) Program. The purpose of the IR Program is to identify and clean up past hazardous waste sites at Navy installations. The progress made at Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage is summarized below.

ABOUT NWIRP BETHPAGE

NWIRP Bethpage is a Government-Owned and Contractor Operated (GOCO) facility, which is situated on 108 acres in Nassau County in the Hamlet of Bethpage, Town of Oyster Bay, Long Island, New York. The NWIRP Bethpage is surrounded on three sides by the Grumman Corporation (also the NWIRP operator) and on the fourth side by a residential neighborhood.

NWIRP Bethpage was established in 1943 with the primary mission of assembling military aircraft. These activities involve the use of a number of industrial chemicals and materials including heavy metals and volatile organic compounds (trichloroethene, trichloroethane, and perchloroethylene) used to clean industrial equipment. Environmental restoration efforts at both the Grumman and NWIRP Bethpage sites are coordinated by the New York State Department of Environmental Conservation (NYSDEC).

IR PROGRAM SUMMARY

The IR Program consists of four distinct phases: Preliminary Assessment, Site Inspection, Remedial Investigation/Feasibility Study, and Remedial Design/Remedial Action. These phases are implemented sequentially with each phase determining whether the subsequent phase is necessary.

As part of the Preliminary Assessment (PA) phase of the IR Program, an Initial Assessment Study (IAS) was conducted at NWIRP Bethpage in June 1986 to identify and assess sites posing a potential threat to human health or the environment due to past hazardous materials operations. The three sites of concern were evaluated with respect to chemical characteristics, migration pathways, and pollutant receptors. The PA concluded that, while none of the three sites at NWIRP Bethpage posed an immediate threat to human health or the environment, further investigation was warranted. To expedite the environmental restoration of NWIRP Bethpage, the Site Investigation (SI) was not conducted. Rather, the Navy proceeded directly to the Remediation Investigation/Feasibility Study (RI/FS) phase.

SITE DESCRIPTION

Based on information from historical records, aerial photographs, field inspections, and interviews with employees, a total of three sites of concern were identified at NWIRP Bethpage. The three sites of concern are described and shown below.

Site 1 – Former Drum Marshaling Area

Starting in 1969, hazardous waste management practice for Grumman included staging drummed waste at NWIRP Bethpage. Stored material included solvents, cadmium, and cyanide. All drums have been taken off NWIRP Bethpage by a private contractor.

Site 2 – Recharge Basins

Recharge basins naturally filter surface water back into the groundwater. Prior to 1984, rinse waters containing chemicals were discharged to the recharge basins. Chemicals or compounds of concern at this site include aluminum, neutralized acids, and chromium. Sampling performed by the Nassau County Department of Health detected levels of chromium in excess of allowable limits. Currently, the Industrial Wastewater Treatment Plant collects and treats all contact water.

Site 3 – Salvage Storage Area

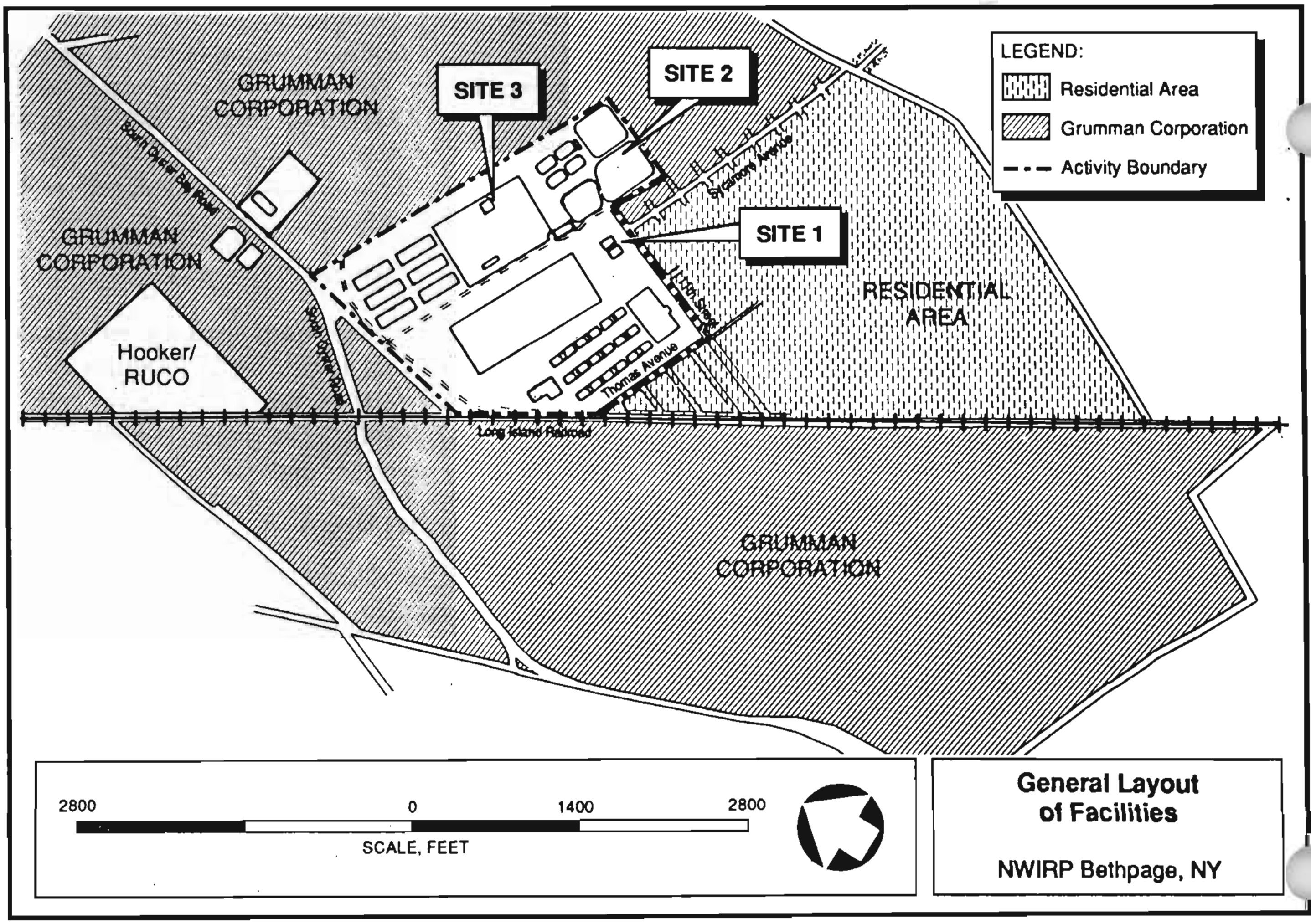
From the early 1950's through 1969, fixtures, tools, and metallic waste were stored at the salvage storage area prior to recycling. Chemicals or compounds of concern at this site include solvents, cutting oils, aluminum, and titanium.

RECENT INVESTIGATIONS

The Phase I RI investigations which examined the nature and extent of soil and groundwater contamination, was completed in May 1992. The Phase I RI field investigations included the following activities: soil-gas measurements, installation of temporary and permanent monitoring wells, soil/sediment sampling and analysis, groundwater/surface water sampling and analysis, and water-level measurements. The Phase I RI results indicate that there are low levels of Volatile Organic Compounds (VOCs), Polychlorinated Biphenyl (PCBs), and heavy metal in the soils. Groundwater testing results indicate that the primary groundwater contaminants are VOCs. In particular, Site 1 - Former Drum Marshaling Area, is a likely source of on-site and near-site groundwater contamination.

CURRENT/FUTURE ACTIVITIES

Currently, the Navy is continuing investigations in the RI/FS phase of the IR Program. The Phase II RI will further investigate soil and groundwater contami-



nation on- and off-site. The sampling will be initiated in late November/early December. Also, the FS will be conducted at this time and will evaluate alternatives for the most effective remediation of NWIRP Bethpage. The Record of Decision (ROD) will be developed following the completion of the RI/FS report. The ROD explains which cleanup alternative was chosen for the remediation of NWIRP Bethpage. The ROD is based on public comments and information and technical analyses developed during the RI/FS. Based on the FS, a cleanup remedy will be selected and the Remedial Design/Remedial Action (RD/RA) phase will be initiated. The RD/RA phase will design, construct, and implement the chosen cleanup alternative.

As always, the Navy's primary concern is the protection of the health and welfare of its employees, neighbors, and the environment. Information will be available so that the public can stay informed of the IR Program and can take an active role in the Navy's efforts to safeguard the environment.

TECHNICAL REVIEW COMMITTEE

Northern Division, Naval Facilities Engineering Command, located in Philadelphia PA, is tasked with the management and administration of the current IR Program studies at NWIRP Bethpage. In accordance with the requirements of the Superfund Amendments and Reauthorization Act (SARA) of 1986, Northern Division has established a Technical Review Committee (TRC). This committee actively participates in the development of work scopes for investigations, and provides technical review and comment during the execution of the studies and the selection of remedial technologies based on data gathered by the Navy's consultants. The overall objective of the TRC is to keep all interested parties informed and involved in the Navy's IR Program. TRC members for the IR Program at NWIRP Bethpage include representatives from the Bethpage Water District, Nassau County Health Department, New York State Department of Environmental Conservation (NYSDEC), the State Department of Health, Grumman Corporation, the Defense Logistic Agency, and the Navy.

OPPORTUNITIES FOR PUBLIC INVOLVEMENT

In an effort to inform residents of the Phase II RI fieldwork activities, the Navy will sponsor a neighborhood meeting and mail a mini-Fact Sheet in mid-November. These two activities will be geared toward residents who live immediately adjacent to the Navy's off-site sampling locations. The Navy will issue two additional Fact Sheets that will provide citizens with a status update on future Phase II RI field activities as they occur. These future Fact Sheets will be mailed to the entire mailing list. Once the draft RI/FS is completed, a formal public meeting will be held in Fall 1993 to announce the RI/FS results and to provide the public with an opportunity to comment on this information, including potential cleanup methods.

A Community Relations Plan (CRP) for the NWIRP Bethpage has been developed. The goal of the CRP is to develop an understanding of the community's perspective of the site and to present various methods of keeping the community involved and informed of the progress of the RI/FS.

For further information, or to be placed on the mailing list, please write or call: Frank Klanchar, Navy Remedial Project Manager, or Jack Dunleavy, Technical Manager.

Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop 82
Lester, PA 19113-2090
(215)595-0567

All documents generated from the investigations are located in the information repository, located at the Bethpage Public Library, 47 Powell Avenue.

Hours of operation are:

Monday-Friday	9:30am - 9:00pm
Saturday	9:30am - 5:00pm
Sunday	Closed

New York State Department of Environmental Conservation
Building 40—SUNY, Stony Brook, New York 11790-2356

Thomas C. Jorling
Commissioner

FACT SHEET

Remedial Investigation/Feasibility Studies
Grumman Aerospace Corporation (Registry Number 1-30-003A)
Naval Weapons Industrial Reserve Plant (Registry Number 1-30-003B)

June 1992

Site Background and History

The Grumman site consists of approximately 500 acres in the Village of Bethpage located in the Town of Oyster Bay, Nassau County. This site is bounded on three sides by roadways: Stewart Avenue to the north; Central Avenue to the south; and Broadway Hicksville-Massapequa Road to the southwest. The 108 acre Naval Weapons Industrial Reserve Plant (NWIRP) site is located in the north-central portion of the Grumman site adjacent to 13th Avenue. The Occidental Chemical/RUCO Polymer Corporation Federal Superfund site is located adjacent to the western boundary of the Grumman site.

Since 1937, Grumman has performed a number of activities at the site including the research, development, and the manufacture of aircraft for the U.S. Navy and Air Force, as well as the production of satellite equipment and various other spacecraft, including the Lunar Modular Module for the National Aeronautics and Space Administration (NASA). The NWIRP facility was established in 1943 with the primary mission of manufacturing military aircraft.

The aforementioned facilities used a number of industrial chemicals and materials including heavy metals (such as chromium) and volatile organic compounds (such as trichloroethylene, trichloroethane, and perchloroethlyene) for various manufacturing purposes.

In 1983, both the Grumman and NWIRP sites were listed in the New York State Department of Environmental Conservation's (NYSDEC's) Registry of Inactive hazardous Waste Sites as a single, Class 2a site. A Class 2a designation was a temporary designation which was assigned to sites that had inadequate or insufficient data for proper classification. In 1988, this classification was upgraded to Class 2, a designation assigned to sites that present a significant threat to the public health or the environment, and for which action is required. In 1992, NYSDEC split the Grumman site into two sites -- Grumman and NWIRP and has assigned the registry numbers shown in the heading of this fact sheet to these sites.

On October 25, 1990, Grumman entered into a legally enforceable agreement (consent order) with the NYSDEC in which it agreed to conduct an on-site and off-site Remedial Investigation/Feasibility Study (RI/FS) for the 500 acres it owned. An RI/FS investigates the nature and extent of any hazardous waste contamination that is associated with a site, assesses the clean-up alternatives and recommends one of the alternatives for implementation. In early 1990, a Work Plan detailing the elements of a phased RI/FS and the procedures to be used was prepared. This Work Plan was approved by the NYSDEC on November 6, 1990. A public meeting was held on December 4, 1990 to present this Work Plan and to obtain input from the public. A Data Report in which the data collected during the first phase of the RI is presented, was submitted to the NYSDEC in January 1992. A Phase II RI Work Plant was submitted to the NYSDEC in April 1992.

In July 1991, the U.S. Navy began an on-site RI/FS on the 108 acre parcel they own in Bethpage. A draft RI/FS Work Plan was submitted to the NYSDEC for comment and a final RI/FS Work Plan was prepared in August 1991. A draft Remedial Investigation (RI) Report was issued in March 1992, and a final RI Report was submitted in May 1992.

Environmental Concerns

The primary environmental concern is a plume of contaminated groundwater which exists within the study area. To date, three sources have been identified: the Grumman, NWIRP, and Occidental Chemical sites. The primary contaminants are volatile organic compounds (VOCs), however heavy metals such as chromium have also been detected in portions of this plume.

Additional concerns center around on-site locations with soil contamination which includes both VOCs and heavy metals.

Status of the Grumman RI/FS

The field work for the first phase of the Grumman RI was conducted between February 1991 and January 1992. The focus of this phase was an investigation designed to determine the on-site extent of contamination attributable to Grumman. This field work consisted of soil, soil-gas, surface water/sediment, and groundwater sampling on and off site. The results are presented in the January 1992 Data Report.

The primary focus of the second phase of the RI is to install outpost wells upgradient of potential off-site receptors, specifically, the supply wells owned by the Bethpage Water District. This will serve two purposes; act as a warning system for the supply wells and help define the limits of the contaminated groundwater plume. Additional on-site work will also be conducted to further study potential on-site source areas identified in the first phase of the RI.

A feasibility study will be conducted during which various remedial alternatives will be evaluated.

Status of the NWIRP RI/FS

The field work for the first phase of the NWIRP RI/FS was conducted between August 1991 and February 1992. The focus of this investigation was to study three potential source areas identified during previous studies at the facility. This field work consisted of the same elements as in the Grumman RI/FS, and the results are summarized in the Navy's May 1992 RI Report.

The primary focus of the second phase RI at the NWIRP facility is to further define the contamination source areas which are present on-site, and to determine if there are any off-site (east of the site) impacts resulting from activities at the NWIRP site.

The NWIRP Feasibility Study will be conducted concurrent to the second phase of the RI.

Citizen Participation

Site specific public information programs, have been developed for both the Grumman and NWIRP sites. The Grumman Citizen Participation Plan (CPP) is included in Appendix J of the March 1990 Work Plan. The NWIRP Community Relations Plan (CRP) will be finalized in July 1992. The purpose of these plans is to keep the community up to date on the findings and status of the projects and to provide an avenue for the public to contribute information including comments on the RI/FS process. Utilization of the public contact list through mass mailings, notification through the press, fact sheets, public meetings, responsiveness summaries, etc. are all activities that are included in these plans. In addition, information repositories have been established where copies of project related documents are available for public review. The locations are:

NYSDEC
Div. of Hazardous Waste Rem.
Building 40 - SUNY
Stony Brook, NY 11790
Hours: 8:30 - 4:45 M - F

Bethpage Public Library
Reference Section
47 Powell Avenue
Bethpage, NY 11714
Hours: 9:30 - 9:00 M - F; 9:30 - 5:00 Sat.

In addition, the Navy has established a Technical Review Committee (TRC) consisting of the Bethpage Water District, Nassau County Health Department, NYSDEC, New York State Department of Health, Grumman Aerospace, the Navy and Defense Logistics Agency. This committee actively participates in the development of work scopes for investigations, and provides technical review and comment during the execution of the studies and the selection of remedial technologies based on the data collected. The overall objective of the TRC is to keep all interested parties informed and involved in the Navy's Installation Restoration Program.

If, at any time, you have questions or comments regarding these projects, please feel free to contact the individuals listed below.

NYSDEC

Joshua Epstein
NYSDEC Citizen Participation Specialist
NYSDEC
Building 40 - SUNY
Stony Brook, NY 11790
(516) 751-4078

John Barnes
Project Manager
NYSDEC
50 Wolf Road, Room 222
Albany, NY 12233
(518) 457-3395

Grumman

John J. Carroll
Vice President - Community Affairs
Grumman Corporation
1111 Stewart Avenue
Bethpage, NY 11714
(516) 575-3376

FOR ADJOINING AREA SEE MAP 10

FOR ADJOINING AREA SEE MAP 17

Section 5: CERCLA Remedial Action Process Summary

August 1999
Revision 0

CERCLA REMEDIAL ACTION PROCESS: A QUICK SUMMARY

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The act created a special tax that goes into a trust fund, commonly known as Superfund, to investigate and clean up abandoned or uncontrolled hazardous waste sites. Under the program, cleanup actions are taken to deal with a release or threatened release of hazardous substances that could affect public health and/or the environment. The term "cleanup" is sometimes used interchangeably with the terms remediation, remedial action, removal action, response action, or corrective action. The cleanup process includes the following steps, as appropriate to the site:

PRELIMINARY ASSESSMENT (PA): During the first step of the remedial process, a PA is performed. This study includes collecting and reviewing available information about a known or suspected hazardous waste site or release. A PA report is prepared which describes the information collected and reports the determination of whether or not the site requires further study. If further study is needed, a site inspection is undertaken.

SITE INSPECTION (SI): An SI is the technical phase that follows a PA and is designed to collect more extensive information on a hazardous waste site. As part of the SI, water, soil, and sediment samples may be collected to help determine whether or not a release has occurred. The information is used to score the site with the Hazardous Ranking System to determine whether response action is needed.

REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS): If the SI determines that response action is necessary, generally an RI/FS is conducted to (1) gather the data necessary to determine the type and extent of contamination at a site; (2) establish criteria for cleaning up the site; (3) identify and screen cleanup alternatives for remedial action; and (4) analyze in detail the technology and costs of the alternatives. Investigation and analytical studies conducted as part of the RI/FS are usually performed at the same time in an interactive process.

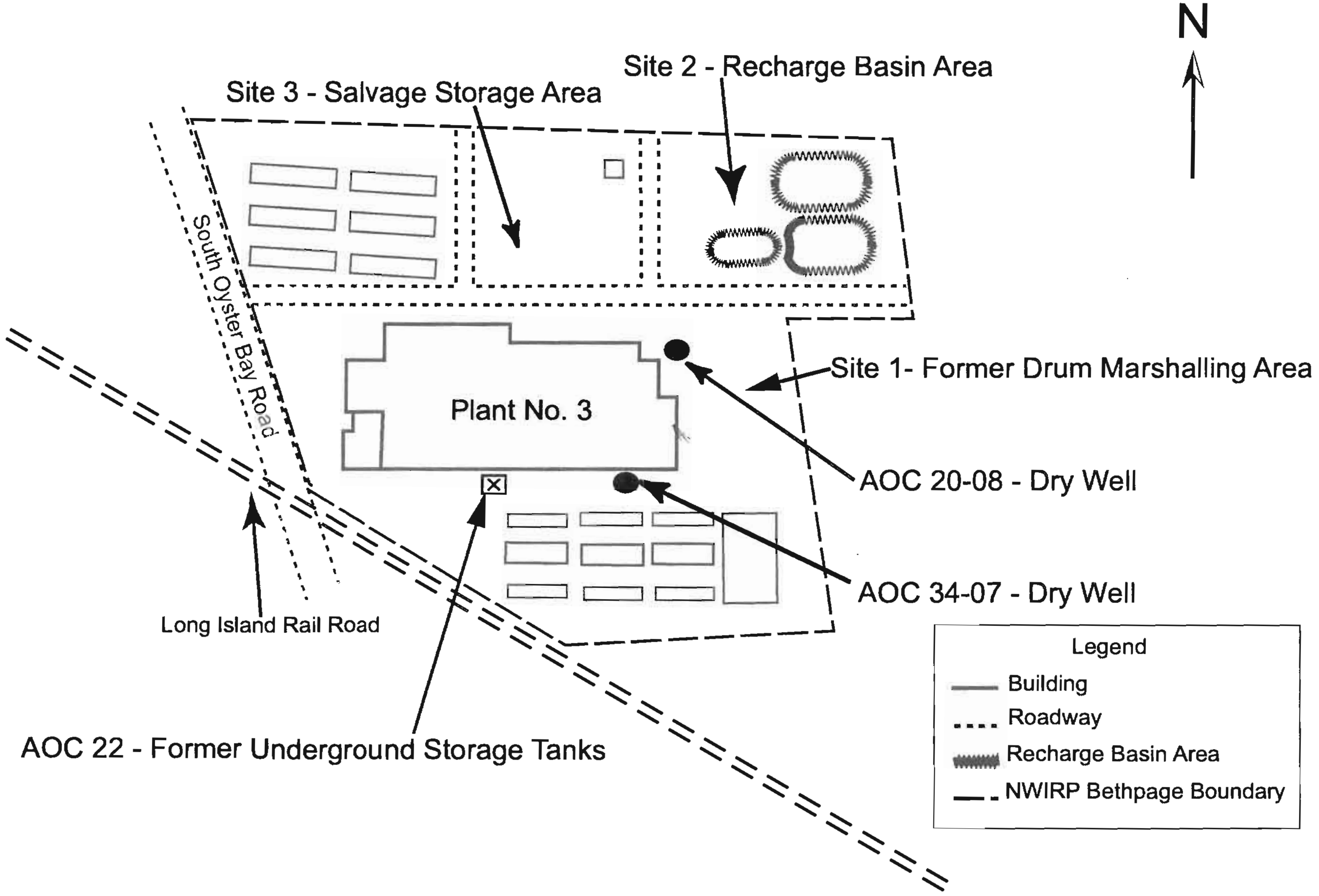
RECORD OF DECISION (ROD): Based on the RI/FS, a proposed remedial action plan (PRAP) is prepared, which describes the proposed cleanup alternative. The PRAP is made available for public comment. Once comments are received on the PRAP, a ROD is prepared which documents the selected cleanup alternative for the site and establishes enforceable performance standards for the cleanup.

REMEDIAL DESIGN (RD)/REMEDIAL ACTION (RA): Technical drawings and specifications for the selected cleanup alternative (as documented by the ROD) are developed as part of the RD. RA is the actual construction or implementation phase that follows the remedial design and the selected cleanup at a site.

Section 6: Installation Restoration Program (IRP) Site Information

- Site Map
- Site Descriptions

NWIRP BETHPAGE SITE MAP



NWIRP BETHPAGE - SITE DESCRIPTIONS

Site 1 - Former Drum Marshalling Area

The Site 1 - Former Drum Marshalling Area is located in the eastern portion of the facility. Until 1982, Site 1 was used as a marshalling area for drummed waste at NWRIP Bethpage prior to off-site disposal. A sanitary leach field was present underneath the drum marshalling pads and a sludge drying bed was present northeast of the pads.

In the early 1990's, solvents, metals, and PCBs were detected in soils and metals and solvents were detected in groundwater at Site 1. In 1995, a ROD was signed that identified remedial actions for Sites 1, 2, and 3. The ROD identified excavation and off-site disposal of metal and PCB contaminated soils and in situ treatment of solvents in soils and shallow groundwater at Site 1. Deeper and down gradient groundwater contamination from the site is being addressed by a groundwater containment system on the Northrop Grumman property. As required by the ROD, an air sparging and soil vapor extraction system to remove solvents form Site 1 soils and groundwater has been running since 1997. The metal and PCB contaminated soil will be excavated after the solvents have been removed form site soils and groundwater.

Site 2 - Recharge Basin Area

Site 2 – Recharge Basin Area is located in the northeastern portion of the facility. Recharge basins naturally filter surface water back into the groundwater. Storm water and non contact cooling water from the Plant No. 3 area were discharged to the recharge basins at Site 2. Sludge drying beds were located adjacent to the recharge basins. The sludge drying beds have not been active since the 1970s and were reportedly removed. The recharge basins continue to be used for storm water management.

In the early 1990's, PCBs and low levels of solvents and metals were detected in the soils and groundwater at Site 2. As required by the ROD, the PCB contaminated soils were excavated in 1996. The solvents and metals were at a low enough level that remediation was not required. Groundwater flowing from this site is contained by the Northrop Grumman groundwater containment system.

Site 3 - Salvage Storage Area

Site 3 – Salvage Storage Area is located in the northern portion of the facility. Metal parts were stored at the salvage storage area prior to recycling. In the early 1990's, low levels of solvents nad metals were detected in site soils and groundwater. As provided in the ROD, soils and groundwater at Site 3 do not require remediation. Groundwater flowing from this site is contained by the Northrop Grumman containment system.

AOCs 20-08 and 34-07 - Dry Wells

Dry wells, located in and around Plant No. 3, were investigated. Most of the dry wells were either found to be clean or the well contents were excavated to remove contamination. Currently, two dry wells remain contaminated and are being investigated to determine the extent of contamination. AOC 20-08 is located outside Plant No. 3 near the east corner of the building. AOC 34-07 is located in Plant No. 3, on the southern side of the building.

AOC 22 - Former Underground Storage Tanks

Until the early 1980's, three underground storage tanks (USTs) were located south of Plant No. 3. Soil testing conducted in the area found low to moderate levels of fuels in the soils. Testing results were not conclusive as to whether groundwater contamination or free product at the water table was present. This area is being investigated to determine the extent of contamination.

Regional Groundwater

Groundwater underneath NWIRP Bethpage starts at a depth of approximately 60 feet below ground surface and extends to a depth of approximately 500 feet. The predominant groundwater flow in the area is to the southeast toward the Atlantic Ocean. Solvents have been found in the on-site and off-site groundwater. Options for remediating this groundwater are currently being evaluated. In the interim, a groundwater containment system has been installed on Northrop Grumman property to control the migration of solvents in groundwater. To ensure protection of the local water supply, a system for filtering the solvents from the groundwater is in place at the affected extraction wells.

Section 7: Acronyms and Glossary

List of Acronyms and Abbreviations

AOC	Area of Concern
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (1980)
CRP	Community Relations Plan
DOD	Department of Defense
EPA	Environmental Protection Agency
FS	Feasibility Study
GOCO	Government-Owned and Contractor Operated
HRS	Hazardous Ranking System
IAS	Initial Assessment Study
IM	Interim Measures
IRP	Installation Restoration Program
NAVAIR	Naval Air Systems Command (Arlington, VA)
NORTHDIV	Northern Division, Naval Facilities Engineering Command (Philadelphia, PA)
NPL	National Priorities List
NWIRP	Naval Weapons Industrial Reserve Plant
NYSDEC	New York State Department of Environmental Conservation
PA	Preliminary Assessment
PCB	Polychlorinated Biphenyl
PRAP	Proposed Remedial Action Plan
RA	Remedial Action
RAB	Restoration Advisory Board
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
SI	Site Investigation
TCA	1,1,1-trichloroethane
TCE	Trichloroethylene
TRC	Technical Review Committee
UST	Underground Storage Tank
VOC	Volatile Organic Compound

GLOSSARY

This glossary defines terms used by Navy representatives, the New York State Department of Environmental Conservation, and the U.S. Environmental Protection Agency when describing activities at the Naval Weapons Industrial Reserve Plant, Bethpage, New York. The definitions apply specifically to the Navy's environmental program and may have other meanings when used in different circumstances.

AQUIFER: An underground formation of materials such as sand, soil, or gravel that can store and supply groundwater to wells and springs. Most aquifers used in the United States are within a thousand feet of the earth's surface

CLEANUP: Actions taken to deal with a release or threatened release of hazardous substances that could affect public health and/or the environment. The term "cleanup" is sometimes used interchangeably with the terms remediation, remedial action, removal action, response action, or corrective action.

COMMENT PERIOD: A time during which the public can review and comment on various documents and actions taken, either by the Department of Defense installation or the EPA.

COMMUNITY RELATIONS: NWIRP Bethpage's program to inform, and involve the public in the environmental cleanup process and respond to community concerns.

COMMUNITY RELATIONS PLAN (CRP): A formal plan for implementing community relations activities relating to the environmental cleanup activities at NWIRP Bethpage. The CRP outlines activities that will be conducted to provide opportunities for the community to learn about its environmental programs and provide input throughout the IRP.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA): A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The act created a special tax that goes into a trust fund, commonly known as Superfund, to investigate and clean up abandoned or uncontrolled hazardous waste sites. Under the program, the EPA can either pay for site cleanup when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work, or take legal action to force parties responsible for site contamination to clean up the site or pay back the federal government for the cost of the cleanup.

CONSTITUENT: A byproduct of a hazardous material.

DECISION-MAKING BODY: The group of individuals, representing regulatory and proprietary agencies, that determines the environmental investigation and cleanup steps taken at each site under the IRP. At NWIRP Bethpage, that group is comprised of representatives from the Navy and the New York State Department of Environmental Conservation.

FEASIBILITY STUDY: See Remedial Investigation/Feasibility Study.

GROUNDWATER: Water beneath the earth's surface that fills pores between materials such as sand, soil or gravel. In aquifers, groundwater occurs in sufficient quantities that it can be used for drinking water, irrigation, and other purposes.

HAZARDOUS SUBSTANCE/HAZARDOUS MATERIAL: Any material that poses a threat to public health and/or the environment. Typical hazardous substances are materials that are toxic, corrosive, ignitable, explosive, or chemically reactive (petroleum products, industrial cleaners and solvents, pesticides, and other chemicals).

INFORMATION REPOSITORY: A collection of documents containing information, technical reports, and reference documents regarding environmental cleanup activities at NWIRP Bethpage. The information repository for NWIRP Bethpage is located at the Bethpage Public Library. All information is public and may be photocopied for personal reference.

INSTALLATION RESTORATION PROGRAM (IRP): The Department of Defense program equivalent to EPA's environmental legislation in CERCLA. It was established in 1980 and was implemented because CERCLA did not pertain to federal facilities until amended in 1986 by SARA.

INTERIM MEASURES: These are actions taken to stabilize, control, or limit further releases. They can be implemented at any time.

NATIONAL PRIORITIES LIST (NPL): The EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial response using money from the trust fund. The list is based primarily on the score a site receives on the Hazardous Ranking System. EPA is required to update the NPL at least once a year. NWIRP Bethpage is not on the NPL.

PRELIMINARY ASSESSMENT (PA): The CERCLA process of collecting and reviewing available information about a known or suspected hazardous waste site or release. EPA or states use this information to determine if the site requires further study. If further study is needed, a site inspection is undertaken.

PROPOSED REMEDIAL ACTION PLAN (PRAP): A plan for site cleanup that is made available for public comment and describes the proposed cleanup alternative.

RECORD OF DECISION (ROD): A public document that explains which cleanup alternative was selected for a CERCLA site and establishes enforceable performance standards for the cleanup..

REMEDIAL ACTION (RA): The actual construction or implementation phase that follows the remedial design and the selected cleanup at a site.

REMEDIAL DESIGN (RD): An engineering phase that follows the Record of Decision when technical drawings and specifications are developed for the subsequent remedial action at a site.

REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS): Investigation and analytical studies usually performed at the same time in an interactive process, and together referred to as the RI/FS. They are intended to: (1) gather the data necessary to determine the type and extent of contamination at a site; (2) establish criteria for cleaning up the site; (3) identify and screen cleanup alternatives for remedial action; and (4) analyze in detail the technology and costs of the alternatives.

REMOVAL ACTION: An action performed quickly to address a release or threatened release of hazardous substances.

RESTORATION ADVISORY BOARD (RAB): A group of citizens, representatives from the State of New York, and Navy personnel who meet regularly to discuss the environmental investigations and cleanup alternatives for the Navy's property in Bethpage. This group acts as the focal point for distribution of information to and from the community about the Installation Restoration Program. All RAB meetings are open to the public.

SITE INVESTIGATION (SI): A technical phase that follows a preliminary assessment designed to collect more extensive information on a hazardous waste site. The information is used to score the site with the Hazardous Ranking System to determine whether response action is needed.

SUPERFUND: The trust fund established by CERCLA which can be drawn upon to plan and conduct cleanups of past hazardous waste disposal sites, and current releases or threats of releases of non-petroleum products. Superfund is often divided into removal, remedial, and enforcement components.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA): The public law enacted on October 17, 1986, to reauthorize the funding provisions, and to amend the authorities and requirements of CERCLA and associated laws. Section 120 of SARA requires that all federal facilities "be subject to and comply with, this act in the same manner and to the same extent as any non-government entity."

TECHNICAL REVIEW COMMITTEE (TRC): A committee of representatives of the Navy, EPA, NYSDEC, and the local community, formed to review recommendations for and monitor progress of the NWIRP Bethpage cleanup effort. In May 1999, the TRC was expanded into a Restoration Advisory Board.

VOLATILE ORGANIC COMPOUND: An organic (carbon-containing) compound that evaporates (volatilizes) readily at room temperature. VOCs are commonly found in solvents, paint thinners, and industrial cleaners. Household items containing VOCs include nail polish remover, varnish, and oven cleaners.

DEPARTMENT OF THE NAVY
UNITED STATES OF AMERICA

--X

Naval Wapons Industrial Reserve Plant
Bethpage, New York

Restoration Advisory Board
INFORMATION MEETING

--X

6:00 P.M.
May 24, 1999

Bethpage Public High School
Bethpage, New York

PRESENT:

Judithanne Hare	United States Navy Naval Air Systems Command
Jim Colter	Northern Division, NAVFAC

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Baiting Hollow, New York 11933
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E-mail flli@aol.com

P R O C E E D I N G S

MS. HARE: Good evening, ladies and gentlemen. I'm Judith P. Hare, director of government-owned contractor operated facilities for the Naval Air Systems Command, US Navy, and that includes the facility here in your community, the facility at Bethpage known as the Naval Weapons Industrial Reserve Plant.

Since the weather has sort of hampered people arriving, namely myself instead of flying in, we had to quick change plans, get a rental car out of Washington, D.C. and drive up. But we made it.

I'll give our meeting maybe another five minutes for folks to arrive, I don't know if folks are having problems getting home tonight if they are coming back in from the city, or what. We encountered heavy traffic getting through. We'll give it another five minutes and then we'll begin.

(Brief recess)

MS. HARE: I think we'll get started, ladies and gentlemen. I've already introduced myself. I'd like to thank you for coming here this evening. The purpose of the meeting this evening, is to offer to you, the community, a Restoration Advisory Board. We do this as a form of linking the Navy and what the Navy is doing, with the Installation Restoration Program, the clean-up program, if you will. We link the Navy then with the community, and this is a method of having really strong communication going back and forth on what is going on in that program. And how you can give your input to that program, which is the important thing.

So what is a RAB, or Restoration Advisory Board?

It is a forum for discussion and exchange of information, which is the real key to having a Restoration Advisory Board.

You know, EPA says that we are mandated to offer to our communities, where we are doing clean-up, a Restoration Advisory Board and the Navy is funded to hold these meetings. But even if that weren't true, I would want to do something like this, because I think it is so terribly important to bring the community and the Navy together in this process.

It is not a decision-making organization or group, and it consists obviously of community, government agencies and all members, obviously, are equal.

Why do we need one? Well, it

encourages the dialogue among the stakeholders. It fosters a partnership, if you will, between the community and the government agencies involved. It has a shared chairmanship. In other words, I would be the Navy co-chair, because I'm the overall property owner representative, and you would elect a member from the group and that person would serve as the community co-chair. There is an equal member status, and meetings are always open to the public.

What is the community involvement? It is a two-way communication, as we've stated before, between government decision makers and the community, and participation obviously in the clean-up process, which is probably your primary concern, I would think, from planning to final execution.

Who is the community? Well, actually, it can be anyone who is out there, including local residents, Northrop Grumman employees, current technical review committee members, local government, business community, school district, local environmental groups, homeowner associations, religious communities, civic organizations, and so on.

Responsibilities of the Restoration

Advisory Board, are to provide advice to the Navy and federal and state regulatory agencies, and to consider the important issues related to clean-up, such as scope of the studies, clean-up levels, waste management, and remedial actions. Reviewing and evaluating documents, is an important part of this. I can't stress that more, because the Restoration Advisory Board members must be informed when we produce documents after we've gone through our studies and are ready and pass them forward, then, to the regulatory agencies.

Responsibilities of a RAB member: Obviously, you have to attend the meetings. That is very important. If we have people on the Restoration Advisory Board who aren't there very often, we are not going to have a very effective group.

Reviewing and commenting on reports to the Restoration Advisory Board, updating community members and bringing their concerns to the board.

For instance, if you are a board member and you know people in your community who say for instance could not attend the meetings but want to know what is going on, we would want you to try to get that word to those folks and maybe get their concerns and bring them back to the meetings.

How about benefits? Well, for the Navy, it is increased credibility and the improved community acceptance and support, and more responsive clean-ups.

For the community, I think all of these things listed, I don't even have to read them, are pretty self-explanatory.

There is equal leadership. As I explained before, I am the Navy co-chair and you would elect a community co-chair. That individual then is an individual that I work closely with, in planning the meetings and putting the agendas together, and so on.

What does this mean? It actually means environmental partnership. I don't have to read all of that, but I think you would readily agree that that is a pretty good reason why we need to have a RAB. Let me say something right at this point: The Navy offers the RAB to a community. If your community decides that no, they're not interestd in having a RAB, that they would rather not, then the Navy would drop the issue right there at that point.

How do you become a member? Everyone is eligible. If you live near the facility or represent a group affected by the facility, applications -- and I believe the applications went out to everyone on our mailing list. However, if you don't happen to be on the mailing list, there are applications at the outside of the auditorium on the table. And you can pick up those applications as you leave, fill them out and mail them in to us. They have to be in to us by the 24th of June, that is our cut-off date. And then what we do, is go ahead and review the applications that have come in. If we get no applications, obviously we would not have a Restoration Advisory Board and we would send out a letter stating that to the people, at least that are on the mailing list, the current mailing list that we have.

I have a feeling that in this community, we probably will have a Restoration Advisory Board, because enthusiasm has always been pretty high with our public meetings.

So if you did not get an application, please remember to pick one up. Pick up a couple if you know somebody that you think might be interested. There is also a fact sheet out there that explains the basic things that I'm going over in this briefing. So if you need to take an application and would like to take one of those, as well, to someone you know that might be interested in serving.

What is the next step? Well, the community interest forms, as I indicated, will be reviewed. Generally speaking, we try to keep all of the restoration advisory boards down to approximately 22 to 23 members. Anything larger than that and the group becomes so large, you find that you're not able to get a lot done under those circumstances.

If we get, for instance a tremendous number of applications that come in. Say we would get 50 applications. What we do is we go through those, review those, and try to get a good cross-section of the community. In other words, we would want all interests in the community represented as -- to the degree possible, every one from say regulators, to maybe professional people, to women who work in the home, women who may work outside the home. All different areas of the community which would represent a cross-section of the community.

Letters would go out informing those people of the fact that they have been selected for the Restoration Advisory Board, and if we do have a tremendous number of applications that come in, then obviously there would be letters going out to the folks that did not make it as a board member, but we would encourage them to come, because everybody in the community is invited. The meetings are open to the public.

That is really all I have at the moment. Are there any questions on the Restoration Advisory Board at this point? How to apply and so on? The applications look like this (indicating). It is a sheet that you fill out. And this is the fact sheet that talks about the Restoration Advisory Board and basically goes over the same information I've just given you.

We have some very successful RABs in other parts of the country. At our Dallas facility and also at our McGregor, Texas, facility. Our McGregor, Texas facility, I believe is one of the oldest if not the oldest. We also have one here on Long Island that has been functioning extremely well at Calverton, they're a very active Restoration Advisory Board group.

So if you were thinking for instance that you would like to become the co-chair and maybe you wanted to know firsthand from somebody what that entails and so on, I would be more than happy to pass on to you where to contact the other co-chairs of the restoration advisory boards that we currently have ongoing. I'm sure they would be more than happy to talk to you and let you know what their experiences have been.

If there are no other questions, at this time I'm going to turn the meeting over to Jim Colter, who is going to give you a brief overview of the Installation Restoration Program.

Jim?

MR. COLTER: As Judith said, I'm Jim Colter. I'm with the Navy's Northern Division of the Naval Facility Engineering Command. We are located down in Philadelphia.

The way the Navy's Northern Division is set up, we have seven engineering field divisions around the country that are in charge of the clean-up programs at various naval installations. The Northern Division installations are basically the 10 Northeast states. I am the remedial project manager for Bethpage, as well as Calverton, and my job basically is to work with the local and state regulatory officials, come up with a plan of action for investigation, try to get those plans funded through congressional funds and get the plans implemented.

So what I'm going to do tonight is basically give you a little history of how the Navy's restoration program came about and where we are at today for Bethpage.

Just as a quick rundown of the mission of Bethpage for those of you -- you probably know better than I do -- but it was to basically assemble, test and retrofit naval aircraft, as well as support design and production. Most of the engineering and things were done at the Bethpage facility, the parts were then sent out to the Calverton facility for final assembly and flight testing.

Bethpage is owned by the Naval Air Systems Command. As Judith pointed out, it was built back in the 1940s, at which time Northrop Grumman Corporation, formerly Grumman Aerospace, entered into a long-term lease with the Navy to do its defense contracting.

Right now, the Navy is preparing to transfer the property, as you probably have read in several newspaper articles, to Nassau County.

However, the Navy's clean-up program will be ongoing through that transfer process.

Basically the reason that the Installation Restoration Program was developed was back in the war time years, I guess our national defense was a top priority, and we are now finding out that the way we handled and disposed of chemicals, and things like that, we know a lot more about them, we know a lot more about their chemistry and things like that, and we are finding out that some of the things we did, environmentally, we're kind of paying for today.

So back in 1975, the DOD took the first step to create a program to start indentifying some of these problem areas and get them cleaned up. Shortly thereafter, Congress enactd laws, and the most famous one I guess is CERCLA, which stands for Comprehensive Environmental Response Compensation & Liability Act, this was a federal program to clean up hazardous waste sites, and things like that, nationwide.

Based on that enactment, the DOD then restructured its program to comply with the new laws of CERCLA, and that is the initiation of the Installation Restoration Program.

For Bethpage specifically, the IR Program began in 1985.

We basically conducted an initial study to try to identify where problem areas may have occurred, due to handling practices, storage of chemicals, and things like that. That report was called an Initial Assessment Study. It was completed in 1986.

Based on those findings, the Navy put together what is called a Remedial Investigation and we funded that in 1991, 1992. We got a lot of environmental information from that report, and we presented it to the regulators.

Their recommendation was we did a good job but we missed a few things and there is probably some data gaps that we could fill. We took their suggestion, we put together what is called a Phase II Remedial Investigation and we tried to fill in those data gaps to the satisfaction of the New York State DEC and local health department.

Based on what we found, we then wrote a feasibility study in 1994 to try to present what we thought were several alternatives to address the problems that we had discovered, and try to collectively pick the most -- the one that made sense not only by cost but by implementibility, time, and several other factors. That led to what is called the Proposed Remedial Action Plan, that we signed. We wrote that in 1994 and it basically outlined -- I'll go through a little bit of the details in a minute. It basically outlined our plan of action to clean up the soils at Bethpage. That is what led to the Record of Decision, for what we call Operable Unit 1, which is nothing more than soils. Operable Unit 2, is groundwater, and we are dealing with that as a separate issue, with Northrop Grumman, and the New York State DEC.

Basically, after you sign the Record of Decision, then you design your preferred alternative and then you implement that, which is called the remedial action.

Back in 1994, we had a public meeting here at Bethpage, which some of you may have attended, where we proposed our preferred plan and we asked for your comments.

Basically what the RAB will do; we'll get those concerns, instead of last minute during a public meeting when we are pretty much ready to implement a design, we are going to present these alternatives up front to the Restoration Advisory

Board members. Hopefully we'll get your concerns but not at the 11th hour. We'll get them up front, and we'll be able to to work with you, we'll try to answer your concerns and try to work those concerns into our decision making process.

This is basically a site map of the Navy's property. Most of you will know that surrounding the Navy's property is Northrop Grumman's property.

And basically around here, the most affected community is over here to the east.

Basically the IR Program identified three sites, Site No. 1, is the former drum marshalling area, Site No. 2, is a recharge basin area, Site No. 3, salvage storage area.

As many of you know, Northrop Grumman is making plans to vacate the Navy's property and they have been doing an extensive environmental investigation and clean-up program. As part of this program, they, in addition to the work that they completed, identified three areas where there is probably going to be some longer term clean-up actions, more so than what Northrop Grumman was doing. There was a couple month dig and haul basically. They did a lot of that.

These areas, here, are more complex. They are a little bit deeper and they're going to take more than a couple months to figure out what to do. They requested the Navy take these extra areas into the restoration program and continue the clean-up of these into the out years.

Those sites, are Area of Concern 20-06, Area of Concern 34-07 and Area of Concern 22, which is a former site of some underground storage tanks.

So these six areas, are what comprises the Navy's Installation Restoration Program at Bethpage. We are at various stages at each of these sites.

A MAN: What was in those storage tanks on the ground.

MR. COLTER: To the best of my knowledge, they were No. 4 fuel oil.

A MAN: And they were removed when?

A MAN: Late '70s.

MR. COLTER: Late '70s.

A MAN: How big was the tank.

MR. COLTER: These were three 25 thousand gallon tanks.

A MAN: What about the rest of the storage tanks in the ground. What was in the ground.

MR. COLTER: Well, the rest of the storage tanks, we have a comprehensive list of them. I can't really remember each one right now.

A MAN: How big were those tanks.

MR. COLTER: Throughout the whole facility.

A MAN: Those wells that concerned -- you put down the great concern -- the other area, the drywells show great concern.

MR. COLTER: Yes, the drywells.

A MAN: Were you using any trichloroethylene?

MR. COLTER: Yes, on the facility. That is one of our main contaminants of concern.

A MAN: What happened to those tanks.
What were they made of.

MR. COLTER: Basically steel.

A MAN: Were they ruptured, leaking, not leaking?

MR. COLTER: I don't have any information on those. Those were removed in the late '70s, that was well before my time. What Northrop Grumman found was evidence that there was a release there and that is what we are pursuing today.

Basically, our contaminants of concern here are solvents, as you mentioned trichloroethylene, perchloroethylene, things like that. Basically degreasers, things like that. We have inorganics, metals is a better name for those, primary cadmium and chromium and PCBs, polychlorinated biphenyls, we have those here as well.

The affected media is basically soils, which we termed as Operable Unit 1. And our groundwater, which is Operable Unit 2.

The total area of our active IR sites is basically about five acres out of the 105 acre Navy property. A small component of which is being proposed for transfer to the county.

For the Operable Unit 1 soils, like I mentioned earlier, we issued a ROD back in 1995, basically called for technology known as air sparging/soil vapor extraction, for volatile organic contaminants, VOCs, contaminated soils at Site 1. That installation was completed in June of 1998. It is operational today. It continues to clean up the VOCs at that site. That site was over to the east, easterly part of the Navy's property. We are expecting to run that system through the summer of 2000.

At the end of that system, the ROD calls for us to excavate and dispose of metals that are considered to be hazardous waste and also the PCBs that are in excess of a 10 part per million threshold, which is typical for industrial settings.

That excavation as I said is to be implemented upon the completion of our air sparging system.

The ROD also called for excavation and off-site disposal of PCB contaminants that you had at Site 2. We completed that work back in June of 1996 and issued a report to the regulatory agencies, with basically successful clean-up of that site.

The third part of that Record of Decision, was an Interim Remedial Measure for groundwater that said that the Navy would fund a construction project for a treatment system for the Bethpage water district, one of their supply wells, that was also completed a year and a half or so ago.

For groundwater, we have been working since about 1994 with the New York State DEC and Northrop Grumman Corporation to come up with a three-party plan, if you will, that would address groundwater concerns in the regional area. We put together a preliminary report of what we thought were some good alternatives back in 1996. Northrop Grumman took one of those ideas, thought it was a pretty good idea, that it would do a lot of good, and actually constructed what we call an Interim Remedial Measure in 1997, basically consisting of four deep extraction wells, three new ones and one existing, connected to a water treatment plant.

Since that has been running, we have been trying to finalize that feasibility study, outlining what the alternatives are going to be, the final alternatives. We kind of think it will be the Interim Remedial Measure plus some sort of long-term monitoring to make sure the system is working properly.

That draft report was submitted to the DEC this past February. We expect that to be finalized later this month. And a Record of Decision is to be issued by the DEC sometime this fall.

The reaction to this would be the construction of some additional monitoring wells in the local community, again, to monitor the performance of the system, and we would expect those to be installed sometime during the year 2000.

So what is next for the Bethpage IR Program? Basically, we will establish a Restoration Advisory Board. That is what we are here tonight to do. We are going to continue our remedial actions for the soils and groundwater on the Navy property. And we are going to continue our transfer process to Nassau County. Again, the clean-up program will continue even after transfer occurs, during the transfer discussion, as long as it takes to meet the goals set by the DEC.

Part of the Navy's IR Program is to keep the community involved and informed of what we have been doing. The way we used to do it, is after we came to a decision period, we would hold a public meeting, announce those decisions and hope you didn't have anything bad to say about it or we would have to basically start over. We found that it is probably better to get the community involved up front to hear their concerns, again, so things don't come up at the 11th hour. As Judith mentioned before, it makes for a more responsive clean-up.

What we do in the IR Program is we put a report together called a Community Relations Plan, we did one back in 1992, basically saying who are the local community that was affected, who was on our mailing list and how are we going to get information to the public. Because of this new requirement and that we are establishing the Restoration Advisory Board, we will be revising that report to include the steps of the RAB and our community relations information.

This revised document, as well as all other IR documents that we have been writing and putting out since the early '90s, will be made available for public review for anybody that wants to take a look at them, at the local information repository that the Navy has set up.

A WOMAN: Is that reference material that cannot be checked out of the library.

MR. COLTER: That is correct.

A WOMAN: Is it possible that we could have multiple copies so that one would not have to spend such a huge amount of time in the library or have them available in the library through the Internet?

MR. COLTER: In Calverton, we made a copy of the repository contents and they reside at one of the RAB members' houses that is on the Calverton RAB. For those RAB members or local community people that don't want to go to the library or want to take something home, they have that option. I would see no reason why we couldn't set up a similar thing here for Bethpage.

A WOMAN: The library hours are a little constricting.

MR. COLTER: As far as things on the Internet, Northern Division has not gone too far down the road with putting things on the Internet but we are starting to do that at some of our facilities. It was a request made at the Calverton RAB, and I'm looking into getting that started. If it is a request of the Bethpage RAB members, we would probably look into doing that, as well.

MS. HARE: I would just say one thing about inputting on the Internet. It also depends on resources. We don't get a lot of funding to do these RABs. So we have to watch that pretty closely. We don't have documents put on the Internet at our other restoration advisory boards. Jim is looking into it where Calverton is concerned. We also try to accommodate the public as much as we possibly can to get the information to them. And certainly if it is feasible and we can keep it within the amount of resources that we get to do the restoration advisory boards here in Long Island, we will certainly do that.

MR. COLTER: Just finishing up on the information repository, it currently resides at the Bethpage Public Library. Part of our community relations process will be to go up and update that repository, make sure it is in good shape, make sure it is accessible. If for some reason the library is not willing to put our information on display, or things like that, we will look into trying to find another publicly accessible facility, maybe some type of township building or county building or something like that. We would probably look to you as a community to help us out with that. But we'll try to see how the library is working out first.

A MAN: The next time you have one of these meetings, why don't you have some out there so we can grab a copy, of the impact study, which you have on the groundwater.

MR. COLTER: Well, those documents -- they are very voluminous. That is part of getting to be a RAB member, you would get on the distribution list for those documents. Just to put them out here, they are just really too voluminous for the public to take and copy. That is the whole point of becoming a RAB member, is to get access to those and give us comments and concerns that we can incorporate into our decision making process.

There is a fact sheet out there that basically gives you the overview I've given you for the IR Program. I want to stress tonight, this is basically just to give you a flavor of the work the Navy has been doing, some of the work that we have left to do, and that your role as a RAB member, will be semi-extensive. It will be a commitment on your part, as well as ours. Just wanted to give you a flavor of what you'll be doing. Details and specifics of the IR Program, what we have done in the past, we will bring the RAB members up to speed on what we have done at the subsequent actual RAB meetings. Tonight we are trying to get that established.

My name and address is here. My phone number. I have business cards in the back. If you need to write me or give me some comments. That is basically all I have.

A MAN: I have one question. Have these sites been capped or anything like that as of yet, have they been covered.

MR. COLTER: No, basically our

contamination is subsurface. We do have some surficial contaminants at Site 1, that site has been restricted access, there is a fence around it and things like that. The other site, Site 2, our remedial action was completed back in '96. Our third site, we really didn't find anything in the surface. That was mainly a groundwater issue.

A MAN: Are you interacting in any way with the Nassau County Department of Public Works, to do test work.

MR. COLTER: Yes. They are informed and a copy of stuff is sent to them. They are a member of our Technical Review Committee, which basically those members are going to be brought into this Restoration Advisory Board. Part of the RAB is the Navy and its regulatory community, DEC, local health departments, state health department, public works department, will meet separately and make decisions. They'll tell us what we are doing wrong, they'll tell us what extra work they want us to do. Those decisions that we make collectively, between the regulatory agencies and the Navy, then become agenda items at the Restoration Advisory Board. We will announce those decisions and try to get your feedback on them.

MS. HARE: I was just going to say before we take some more questions, there are a lot of things that we do early on, for instance, with the first Restoration Advisory Board meeting. At that meeting of course the community has to elect their co-chair and we have to get our charter established. We come to you with a charter that we think fits probably most restoration advisory boards, and then it is up to you to review it and make any changes to it. It is just a guideline of rules to be followed.

One of the other things that we sometimes do very early on with RABs, is conduct a tour of the facility for the RAB members and anyone else that would like to go, and generally we get a bus, a van, whatever we need, for those people that want to go. And Jim is the tour guide and points out all of the IR sites on the property. That sometimes helps you if you have not had a chance to be on the property at all, or maybe for many years or whatever. This sort of orients you and you can then know a little bit better about where these sites are and what is being done.

In addition to that, some restoration advisory boards elect to have like a subcommittee within their restoration advisory board, and that committee meets in between meetings to review documents. So to satisfy the concerns of the gentleman back here, that is another helpful way in which some of the advisory board members can come together and plow through these documents. Because as Jim said, some of these documents are very thick documents. There is a lot in those documents.

I did neglect before to say that the restoration advisory boards meet quarterly. Once a quarter, I would like to try to coordinate maybe within the same week, the Restoration Advisory Board for Bethpage with the Restoration Advisory Board Board at Calverton. That simply saves on resources, and frankly speaking allows us to spend those resources where they really count and that is getting information to you. If Jim and I don't have to make two trips as opposed to just one, it serves better, I think all of the Restoration Advisory Board members. We have not establishd a date for the first Restoration Advisory Board at this point, because we have to have the applications from you come in, to determine, number one, that there will be a Restoration Advisory Board for this facility. And number two, to select the membership that would comprise the board.

Now, questions?

A MAN: Do any of the sites presently present a risk to the public's health.

MR. COLTER: No.

A MAN: Could you expand on that?

MR. COLTER: Basically, to -- I don't want to get into the Navy's definition of risk, but you need a chemical, you need a pathway, and you need a receptor. Right now we have the chemicals at various concentrations, but we don't have the pathways or receptors as the sites are restricted from use. The chemicals that we have in the groundwater are actually being contained on what we call the Navy/Northrop Grumman property, through the Interim Remedial Measure. Those chemicals that are south of that system, as obviously these chemicals have been here several years. The Navy and Northrop Grumman have put treatment systems on the Bethpage water supply wells. There are no private wells in the area extracting groundwater. You get your groundwater, as you know, through the Bethpage Water District. They are mandated obviously to give you safe water. They have worked closely with the Navy, to make sure that has happened.

Again most of our contamination is subsurface with no direct access. Even the occasional person walking on the site is not at risk.

A MAN: Can you give an estimate to the depth, the depth where it starts.

MR. COLTER: It varies. Over at Site 1, it is basically zero to eight feet. But at some of those Areas of Concern, those dry wells and UST sites, they extend down as deep as 50 to 55 feet.

A MAN: The surface areas were cleaned.

MR. COLTER: On the drywells and the AOCs, yes. Site 1, we still have some surficial contamination there, that is why the area is fenced off. After we get done with our subsurface system that is at Site 1, we will move into the excavation of the surface to eight feet or so depth and remove that.

A MAN: Said the area is fenced off. What is it, what is in there?

MR. COLTER: Volatile organic contaminants, basically breakdown products of your solvents, your degreasers, and things like that. Some metals, cadmium, chromium.

A MAN: Are there any cyanides.

MR. COLTER: No.

A MAN: The storage tanks, is it possible from the early '40s that they were not monitored say for 20 years, and there is no knowledge, or they just were placed there. When did they actually start detecting them, the last 15, 20 years?

MR. COLTER: Basically, they were found during the closure process that Northrop Grumman went through.

A MAN: Conceivably, they were in the ground and nobody monitored them.

MR. COLTER: Yes, that is possible.

A WOMAN: As interesting as a tour might be, I would like to know the history of the piece of property even back to the '70s. I can't believe you're telling me you don't know what is there.

That is how you become an effective RAB member.

MS. HARE: I'm sorry, I didn't hear what part of that.

A WOMAN: You have to know the history to become an effective RAB member.

MR. COLTER: Part of our first few RAB meetings, when we actually establish the membership, one or several RAB meetings will be devoted to bringing you up to speed on what the Navy has been doing since the mid '80s. It is extensive. We'll have to spend a little bit of time to bring you up to speed on what we've done before we can get into what we are currently doing, to get your input.

I agree with you, you must know what we're up to to be an effective RAB member. We will dedicate our meetings to doing that.

MS. HARE: The other thing I would like to point out, too. This is going to be your RAB once it is established. So whatever you want to see appear on the agenda for these RAB meetings, then that is what will appear. For instance, obviously we would have to do a lot of bringing you up to speed, and we can go through as much of that as possible. I mentioned the tour only as something that you might want to do. If the RAB members don't care to do it, then we won't do it. Really, this is your RAB. You can do pretty much what you want. You can have on the agenda what interests you the most. With the documents that we have already filed, those documents are sometimes hard to wade through, and that is why we have Jim and his contractors, and they can brief the RAB on those documents. And get it boiled down so that it's a little more user friendly, if you will.

A MAN: These contractors that are working on the property, are they licensed, where do they get licenses from, are they tested, how do they get their experience?

MS. HARE: These contractors are all licensed environmental contractors. Their credentials are impeccable, actually. The Navy would not be hiring any contractor that did not have the best of credentials, I'll put it that way. And of course testing. You have to remember, testing is done by independent laboratories, there is a chain of custody on testing, and so on.

A MAN: Can you explain a little bit about you're discussing the Navy's property, the 108 acres. How is the Northrop Grumman property? They have quite a bit more. How does the Navy's coordinating with Northrop Grumman's clean-up have they identified sites and are they doing it as a private sector? How are you coordinating with them.

MS. HARE: Are you talking about the clean-up of their own property now.

A MAN: Of their own. You're talking about a small portion that is the Navy portion. How are you coordinating with Grumman themselves?

MS. HARE: Grumman is responsible for their own property and the clean-up of their own property. However, because Grumman was the operator, Grumman Aerospace and then later Northrop Grumman, because they were the operator continuously, we are holding Northrop Grumman responsible to participate, if you will, in this process, which they have more than gladly volunteered to do on their own, in their own right, and have really done already a very extensive job. So we have coordinated with them and actually I would say partnered with them in this effort.

Northrop Grumman felt that it was better to go ahead and get this done now as opposed to wait until later. I know that you probably heard of other facilities in other states where the contractor who has operated the property just gets up and leaves. And whoever the owner is, if it is the Army, the Air Force, the Navy, whoever, is left holding the bag and has to proceed to clean up the property. That is not to say that the services don't do a cost recovery, but it certainly is better when a contractor cooperates and says, you know, we are interested in doing our fair share and we are going to proceed to do that.

A MAN: I just wanted to add a couple of things to that. I'm Bill Gilday, I'm with the New York State Department of Health. One of the issues as far as the laboratory, independent laboratories, they have to be approved for work that is done in New York State, that either the Department of Environmental Conservation or Health signs off on. There is a proficiency exam these laboratories have to take, and they have to pass. If they pass, then they can do environmental investigations in New York State. And a lot of the other investigations have to happen by a licensed engineer.

As far as the health and safety aspects, they have to be signed off by a certified industrial hygienist, a CIH. So there is some professionalism. There are standards that the state ,in its work on these sites, holds the people to who are doing the work, the investigations, to.

As far as a question here about coordinating the different.

A MAN: Who makes the standards?

MR. GILDAY: As far as?

A MAN: The amount the body is supposed to take, the chemicals the body is supposed to absorb. Who makes the standard.

MR. GILDAY: By and large, it is a multi-agency effort. And there's -- depending upon the chemicals, EPA has done some. New York Department of Health has done some. We have done them in conjunction with the Department of Environmental Conservation. Often times, environmental conservation has done their own where perhaps an endangered species might be more sensitive to a particular level of chemical and they are more stringent than human protection. There are a number of different agencies involved in establishing the clean-up levels.

A MAN: You work for them.

MR. GILDAY: I'm with the Department of Health. As far as the different operations between Northrop Grumman and the Navy, there is a lot of different activities that have gone on for years. In the '70s, when the agencies were becoming aware of the problems with hazardous wastes, there is two ways of attack: One was dealing with those companies that were still in operation and they establishd a program known as the RCRA program.

Those operating facilities had to become permitted, if they were using significant quantities of hazardous materials. A lot of Northrop Grumman's operations were RCRA permitted.

As far as the other issues, the things that weren't going on but there was contamination from so-called sins of the past, that was being addressed under the state Superfund Program or federal EPA Superfund Program.

More recently in areas where groundwater is a concern because of the sole source aquifer, where for people, that is their only water source, on Long Island the groundwater is precious here, we need that water for our water source. The EPA has a UIC program, Underground Injection Closure, I believe is what it stands for. Anything that goes into the ground that has leaked in the past that has contaminated groundwater, has to be properly closed-out to make sure it is not a continuing source of groundwater contamination. All three of those programs are operating at the various plants of Northrop Grumman, the Navy properties, the whole parcel, 600-plus acres in Bethpage.

In April, I believe it was, a number of the agencies involved got together the RCRA program, the UIC people, DOH, and the Superfund Program, DEC, and we wanted to make sure that there were no areas of the plant that weren't covered by one of these programs. We wanted to make sure that every part of the plant was properly closed-out, investigated and remediated. So there are a number of different programs that are addressing these different areas. There is a lot of different areas, and for someone like me, who is coming on board and learning these different areas, as that gentleman was asking, who is covering this and on which basis, that is one of the reasons we got together, to make sure that everything is being effectively addressed.

MS. HARE: Thank you, that was excellent.

A MAN: I think we need to mention that a lot of work has already been done at the Grumman Bethpage facility and Navy facility.

My name is Steve Scharf and I'm the project engineer from DEC under the state Superfund Program. A lot of work has already occurred in Plant 3. I think Jim briefly touched on it. But I think just to put it in dollars, I think Grumman spent over 10 million dollars to date in Plant 3 alone, moving contaminated soils to meet the DEC and DOH soil clean-up criteria for protection of human health. So a lot of work has occurred to date.

There is still more to be done, as Jim mentioned.

The groundwater, we are at the stage now where Northrop Grumman is assembling a feasibility study to address the groundwater plume that is underneath the Grumman Bethpage facility, as well as that has migrated off-site and has affected the Bethpage water supply wells. Keep in mind those wells are monitored routinely and Jim briefly touched on the mechanism that is used, air stripper. He didn't go into detail, but there is a technology in place that will clean that water to pristine conditions. And those are in place. And they are sampled I believe monthly,.

MR. GILDAY: That is correct, monthly.

A MAN: Where is the Bethpage wells.

MR. GILDAY: There are three wells of concern, plants number four, five and six, and they are located south of the Bethpage facility, east of the Oyster Bay Expressway and north of Hempstead Turnpike, Central Avenue, even.

A MAN: Are those wells in use.

MR. GILDAY: Yes, that is correct, they are in use today. Two of the wells show levels of contamination, Plants 4 and 6. Four, I believe has higher concentrations -- six has higher concentrations. Five, to date, has always been non-detect, it has had a detection limit of less than one part per billion, and the groundwater standard for all these examples is five parts per billion for TCE, DCE, and their breakdown products.

Those wells are routinely monitored. We are in the process now of reviewing a feasibility study that has been presented to the department to address the groundwater contamination.

A MAN: When you talk about dry cleaning, you're talking, like chemicals from dry cleaners, what type.

A MAN: Same type of solvent, degreasing vapor degreasers, presently they use TCE. Perchloroethylene is used as a coating solvent for high quality paints for finishings and coatings on aircraft.

Coming up to the history of it, as Jim has said, they used to dispose of these down drywells, and we are here now and the department has been overseeing this work for the last eight years, to clean this up. Both under the RCRA and also the state Superfund Program, which is overseeing the closure of the plant with respect to the hazardous waste disposal.

Keep in mind that some of the areas Grumman no longer owns. Plant 2, for example, has been transferred to a company called Steel-Los III, and there has been an agreement made between Grumman and Steel-Los III, as to who would be responsible for certain aspects of the clean-up there. And that is an ongoing thing. There is an ongoing developing long-term monitoring plan for the groundwater, as well as an operation and maintenance plan for the IRM, consisting of four extraction wells pumping 4,000 gallons a minute, treating water, and the recharged, clean water goes back into the ground , basically flushing the groundwater in the area.

A PERSON: How long before you think the groundwater will flush out and clean itself up naturally, or whatever.

MR. GILDAY: That is a good question, it depends. In all honestly, underneath the Grumman facility, it may take a long time, if ever.

A PERSON: How long is a long time.

MS. HARE: We don't know, that is the answer.

MR. GILDAY: We don't know, right. That is what we are looking at right now, actually.

But the important thing I think to mention here, is that what Jim mentioned as an IRM, what we call an interim, or remedial measure, is working quite well from the initial testing that we are getting back.

The groundwater wells, are shallow wells, and they are downgradient of the IRM.

A MAN: Ruptured pipe, God forbid. We have to make sure. Nobody knows what we may be drinking down the road.

MR. GILDAY: These contaminants are really deep.

A MAN: You said they were between zero and eight feet, if I'm not mistaken. If it ruptures and it gets into the pipe, we are still drinking it.

MR. GILDAY: You're talking at least 100 feet where contamination begins. Once we get off the property. It is really deep. It then extends down to 600 feet.

A MAN: What is the wells down to.

MR. GILDAY: 400-- there is one at 700 and it is clean, and I pray it stays clean.

A PERSON: Why do you pray it stays clean? It has all the filters on it.

MR. GILDAY: I still don't want it to be

contaminated. I want the contamination to be contained and addressed where it is.

MS. HARE: I might suggest that these are the kinds of issues that are going to be discussed extensively in the Restoration Advisory Board meetings. I would encourage you to fill out an application if you're interested in serving on the board. If your work schedule does not permit for you to serve on the board but you can at least come to some of the meetings, I'd encourage you to do that.

A WOMAN: How long do the meetings generally run and where do you meet.

MS. HARE: It depends on what is on the agenda.

I have some restoration advisory boards that go till 10:30 at night, because each agenda is fairly well packed. I try not to overload any agenda and try to guide that with the Restoration Advisory Board members. So you just don't get too many things on one agenda. If people end up having to stay really late consistently, depending on the group that you're working with, some people just can't do that. And so it kind of -- we kind of structure it to the group. But I do try to keep it reasonable, as far as time is concerned.

There is one Restoration Advisory Board seems to not have a problem in going that late, and of course we'll stay. We aren't opposed to that. But for other groups, it's harder to do that. So we keep the agenda to whatever the group can handle, whatever they desire, really.

A WOMAN: Where do you propose it will meet in Bethpage.

MS. HARE: I don't know that we have that information yet.

A WOMAN: Would it be local.

MS. HARE: That is something... We would like to hold it here for instance at the high school. We don't know yet. We have to work with the high school. If that is not available, then we try to go to some other civic building or meeting place. Generally we have been pretty fortunate in being able to tap into some resource like that in the other advisory boards.

MR. COLTER: We would probably ask for some input from the community members if they have a preference or a setting that they feel comfortable in. A setting like this isn't real conducive to opening books.

MS. HARE: It is a little big, for one thing.

MR. COLTER: And presenting information. You might want to look into some other type of community centers, and we would like to ask the community for some help on that, actually.

MS. HARE: The worst of all possible worlds would be if we have to rent a place somewhere. That takes resources away from what we can do with the RAB, and that is not a good thing.

A MAN: We have a community center.

MS. HARE: Yes, thank you.

A MAN: There is something I would like to add. This Restoration Advisory Board, this is something, a public relations outreach of the Department of Defense, and it is not to be confused with CP, which the New York State DEC, which I work for, runs. It is a separate process. It is a feasibility study and the proposed treatment for Operable Unit 2, or the groundwater, will be run by the department and that is totally separate from that entity. We will take comments from there -- the Navy might present us with comments that they received through the advisory board. We also will be holding a public meeting probably right here to discuss the groundwater issues at a later date, hopefully within the next three to four months is what the schedule is calling for.

MS. HARE: We also from time to time hold other public meetings on various issues. I'll just site an example. We have an active Restoration Advisory Board in McGregor, Texas. We have one constituent down there that has received a lot of nationwide attention because it does affects other parts of the country and several other states, as a matter of fact. And there is-- that constituent is called perchlorate. Perchlorate is found where you have a facility that is involved in explosive materials. That is the only facility I have where that is the case. We just recently held a very large public meeting in that area, just to talk about that constituent.

So that is something we would do outside the scope of the RAB, although obviously our RAB members participated. As a matter of fact our RAB co-chair was involved in the poster board session that we had initially. And represented the community in that manner. I think she was interviewed by the press in her capacity. So there will be from time to time probably other public meetings that will take place.

Any other questions.

MR. MANGANO: Judith, if I can just summarize it as this -- This is my understanding of the RAB:

The Navy has done an extremely thorough job indentifying the spots of contamination, the areas of contamination on this site, this 105 acres and actually with Building 5 and 20. Very thorough. There were 300 sites, or somewhere in that area, that were identified. Many of them are already cleaned up. But -- because there is so much information, just volumes of it, to participate on a RAB, you'll have the opportunity to focus on what you want to focus on. And then access the data that they have been collating and storing, and address --

MS. HARE: I think that is really what the RAB does, is give those that have an interest in really identifying those technical issues, like Ed was mentioning, how much was there, and what is there, and what is that chemical and how much of that chemical. That information to a large degree is already there.

MR. MANGANO: And they will show you, Ed, how to get to what you want.

Rosemary, if you want to focus on something else, they are more than happy to give you that information. They have that information. Then you can share it with your fellow residents.

I don't think anybody, at least from my experience, from the meetings that I went to, is looking to shirk any responsibility or not clean it up. As a matter of fact.

MS. HARE: We can't.

MR. SCHARF: They can't by law. Appears to be clean it up as quickly as possible and the best way as possible and as practically as possible. And at the same time, reuse the areas that can be reused. And there are many -- out of 105 acres, only five acres are affected. So that is 100 acres of land that can be used, that can return monies to the school district, and create jobs. That is what it really is all about. You'll find out much of the contamination isn't where it is in public harm's way. They go through great effort so that it doesn't get in harm's way. When they do a clean-up, it is very thorough. From what I've seen, it's very safe.

Then there is a check and balance systems. For New York State, there is the New York

State Department of Health, Nassau County Department of Health. The Navy, I think you have about five levels of people that check on each other.

MS. HARE: Absolutely.

MR. MANGANO: Surprised if something could go by. I wouldn't want to go on record but I'd be surprised. That is what a RAB is about, if you're a concerned resident and want to spend some time finding information out, specific information, it is there, it is there for you, to join the RAB. Put in the time, as Judith says. If you're going to do it.

MS. HARE: Thank you, very well said, Mr. Mangano. I appreciate everybody who attended this evening on this kind of stormy night. Please, again, fill out the applications. If you have them already filled out and if you want to turn in some of your applications tonight, we'll take them. Other than that, you have until the 24th of June to get them into us. Thank you.

(Time noted:)

CERTIFICATE

STATE OF NEW YORK)
) ss.
COUNTY OF SUFFOLK)

I, JENNIFER MAUE, a Registered Professional Reporter, do hereby certify that the foregoing Matter, taken at the time and place aforesaid, is a true and correct transcription of my shorthand notes.

I further certify that I am neither counsel for nor related to any party to said action, nor in any wise interested in the result or outcome thereof.

IN WITNESS WHEREOF, I have hereunto set my hand this 27th day of May, 1999.

Jennifer Maue
JENNIFER MAUE

May 22, 2001

RESTORATION ADVISORY BOARD (RAB) MEETING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE
BETHPAGE COMMUNITY CENTER, BETHPAGE, NEW YORK
March 13, 2001

The eighth meeting of the RAB began at approximately 7:10 pm. RAB members attending were: Judith Hare, Joe Kaminski, and Jim Colter from the Navy, community members John Lovisolo, Rosemary Styne, Roy Tringali, Edward Resch, and Edward Mangano; Steven Scharf representing the New York State Department of Environmental Conservation (NYSDEC); Charles Bevilacqua representing the Conservation Fund Advisory Board; Tim Kelly representing Nassau County Public Works; and Rich Pfaender for Town of Oyster Bay Supervisor John Venditto. Also in attendance were Anthony Sabino representing the Bethpage Water District and several attendees from the general public. Members absent included Community Co-chair Jim McBride, community member Linda Mangano, Town of Oyster Bay Supervisor John Venditto, Tom Clark representing the Town of Oyster Bay Department of Public Works, Stan Farkas and Nick Acampora representing the New York State Department of Environmental Conservation (NYSDEC), Gerard Burke representing the New York State Department of Environmental Conservation (NYSDEC), Bill Gilday representing the New York State Department of Health (NYSDOH), Bruce Mackay representing the Nassau County Department of Health, Carol Stein representing the U.S. EPA, Martin Simonson representing the Defense Contract Management Command (DCMC), and Thomas Clark representing the Town of Oyster Bay Department of Public Works.

WELCOME AND AGENDA REVIEW

Ms. Judith Hare, the Navy Co-chair, welcomed everyone and stated that Jim McBride, the community Co-chair, was not able to attend this meeting. Ms. Hare explained that the transcripts from the previous RAB meeting held on October 25, 2000 would not be available. However, meeting minutes were written based upon notes taken from that meeting and that approval of these minutes would be postponed until the next RAB meeting so that all members could thoroughly review them.

Jim Colter introduced himself and stated that there are currently several initiatives going on with the clean up of the Bethpage property.

DRY WELLS 20-08 AND 34-07

Mr. Colter stated that dry wells 20-08 and 34-07 were identified by Northrop Grumman during their efforts to vacate the property. During the 1998-1999 time frame, Northrop Grumman investigated all of the dry wells on the property. Most of them showed no or minor contamination and were cleaned up with the exception of two: dry well 20-08 on the northwest corner of Plant 3 and 34-07 on the south side of Plant 3. The contaminant of concern was PCBs. Northrop Grumman did an initial clean up to 35 feet below ground surface. Confirmation sampling showed that there was PCB contamination below 35 feet below grade. It was then determined that the Navy would take over the clean up if Northrop Grumman would complete the delineation of the contamination and provide an alternative that was acceptable to both the Navy and the State.

Northrop Grumman submitted a report to the DEC in October 2000 discussing their findings after three rounds of soil sampling. Several soil borings were installed around dry well 20-08 and several monitoring wells were installed downgradient to test the groundwater for possible PCB contamination. Prior to excavation PCB concentrations were 3200 parts per million. There was significant contamination directly below the dry well. Further from the dry well, levels drop significantly. Northrop Grumman excavated down to a depth of 28 feet below ground surface and filled with clean fill. Just outside the dry well there is still some significant contamination, however, this occurs at a depth of about 25 feet below grade.

Several soil boring were also installed around dry well 34-07 and several monitoring wells were installed downgradient here to also test the groundwater for possible contamination. There is a similar scenario here in that there is significant contamination immediately below the dry well. This was excavated and replaced with clean fill to a depth of 30 to 35 feet. Again, as the levels drop radially outward from the dry well.

Northrop Grumman is currently working on an exposure assessment. What are the risks associated with the PCBs at those depths? This is done by a risk assessment. In order to have risk, there needs to be a contaminant, a pathway, and a receptor. Since the PCBs are at depths over 30 feet below grade, there is no pathway and there is no receptor. Therefore, there is no risk. Additionally, it has been confirmed that there is no groundwater contamination associated with the PCBs.

The State requested that Northrop Grumman submit a Feasibility Study to evaluate and compare the different alternatives and their associated costs to the "No Action" alternative that is being proposed. The proposed date for submittal of the Feasibility Study to the State is June 15.

AS/SVE at Site 1

An air sparging/soil vapor extraction system has been running for 2 years at Site 1 located on the east end of Plant 3. The goal has been to get levels of volatile organic compounds in soils down to a level where PCBs and metals could be easily and safely excavated without having an air quality issue. The system was shut down in December 2000. A draft report summarizing whether the system should continue or be dismantled and move onto soil excavation is due to the Navy at the end of March. If the system has not met its goals, then it may be determined to run it for an additional year to see if these goals can be met. If the system has met its goals then it will be decided whether to dismantle the system and pursue excavation of the soils. Funding is available for initial excavation of the soils, however the decision to excavate is pending DEC approval.

AOC 22

Northrop Grumman identified the former underground storage tank area during their initial investigation to vacate the property. Oily sludge was discovered in the soils. The Navy agreed to take this over under their IR program. Several rounds of soil and groundwater sampling occurred during the 1998-1999 time frame. Although oily sludge was found in the soils, the results of the investigation didn't exceed clean up values for New York State guidelines. No further action was recommended. The State responded by requesting a Feasibility Study to evaluate other options to the no action alternative. Since this property is being retained by the Navy, this site is not listed as a high priority, however, the Navy still continues to work on it.

GROUNDWATER ISSUE

The groundwater issue is one of the higher priority issues with the DEC and Northrop Grumman. A public meeting was held on December 13, 2000 and the public comment period for the PRAP ended on February 5, 2001. Currently, the State is working on issuing a ROD.

The Navy has been doing much fieldwork and has completed some investigations: vertical profile borings at locations 38 and 76, south of the Hempstead Turnpike, and 77 by the Seaford Oyster Bay Expressway. Results of the borings showed groundwater contamination. That led the Navy to move further south and downgradient to see if the leading edge of the plume could be delineated. A work plan was completed in January and currently four new borings are being installed at locations 43, 44, 45, and 46. This work should delineate the southern boundary of the plume and allow the Navy to install outpost monitoring wells which is one of the requirements of the ROD.

Another requirement of the ROD is some sort of remedy for the GM38 area. High levels of solvents was found in groundwater here. The Navy awarded a contract to design a pump and treatment system. The Navy will do the pre-design work, design, and construction of the system. Currently, the Navy is just assuming that they will run and operate the system because no decisions have officially been made with Northrop Grumman in terms of cost sharing. The fieldwork will entail installing some borings to delineate the extent of the hot spot. Six borings will be installed in the GM38 area extending to the Seaford Oyster Bay Expressway and to the east. This will probably take most of a calendar year to complete. Based on the data, a pump and treatment system will likely be designed. This will take 6 to 9 months to complete. This will take us through fiscal year 2002.

TAPP PROGRAM

Mr. Colter explained the TAPP program. A TAPP, Technical Assistance for Public Participants, is funding that the DOD does provide occasionally to RABs to help them in the decision making process, to help them understand certain aspects of the clean up program. The Navy is still looking at this request, but it appears that TAPP funding is for pre-ROD activities. The purpose of it is to bring in an independent contractor to explain to the RAB what the collected data means. Mr. Colter stated that for this site, we are beyond this point. As far as soils go, we are in post-ROD. That ROD was signed in 1995. The groundwater ROD is imminent. The work that Northrop Grumman did under the Environmental Baseline Survey is a RCRA clean up and the EBS and RCRA issues are not part of the RAB. The RAB deals with the Navy's IR program. The TAPP program would apply to IR Sites 1, 2, and 3, and not to Plants 3, 12. 17, and etc. The TAPP applies to IR Sites, Environmental Restoration Program, not the EBS program and not the RCRA clean up that Northrop Grumman did. To summarize, this site will most likely be an ineligible project because decisions have already been made.

Ms. Hare explained that the TAPP grant is given very infrequently. Where it is granted, it is granted to a site where the Navy has a team spread out over so many different facilities that they might not have much time to devote to any one particular facility and any one RAB. Ms. Hare suggests that the TAPP grant be put off until the next meeting so that she can, in the meantime, investigate this further and give an opinion as to whether this facility is eligible or not.

Mr. Colter then explained that the projects that are submitted for a TAPP grant must be very specific. The grant is for $25,000. The third party cannot perform any additional sampling or analysis. It is not for verifying work that has been completed, it is to explain work that has been done. They can further explain the data or the risk assessment process if the RAB feels that the

Navy has not done a sufficient job at it. If it is determined by the RAB, that the project is suitable for submittal then the Navy will do what they can to assist in the process. Ms. Hare explained that the Navy does not make the official decision as to what projects are approved and which projects are not.

A motion was carried that the RAB would pursue an independent application for the TAPP program. The subject of the application and the study would be delineated in the application which would address specific areas concerning the dry wells.

DECEMBER 13 PUBLIC MEETING

Mr. Scharf gave an update on the public meeting held on December 13, 2000. The public meeting was held to discuss the Proposed Remedial Action Plan for Operable Unit 2. Comments were taken at that time. The plan proposes to treat the more significant areas of contamination off-site, do a long term monitoring program, and do a well head efficiency treatment program in the event that any other well might be affected.

The state reviewed all of the comments and is drafting a ROD. This should be completed by April. The PRAP is available in the Bethpage library. That document when signed will bring a close to all remedial work at the site. Some of the remedies detailed in this document are currently in place and others are being prepared.

A question was brought up about the proposed assisted living center on South Oyster Bay Road and if this would be impacted by the groundwater contamination. Mr. Scharf explained that the groundwater is 50 feet below grade and is monitored on a quarterly basis. The plume is being tracked. According to Nassau County regulations, all municipal water supply wells are checked on a monthly basis. Those wells that have been impacted have a treatment system on them and so there isn't any exposure to the public of these contaminants.

Currently the Plant 3 area is up for transfer and that is going to be the next issue after the groundwater remedy document is signed. Areas that are transferred have been certified as suitable for transfer. Approximately 75 percent of the groundwater contamination in terms of solvents still remain on the site. Off-site there are generally solvents that are insoluble in water. Because they are heavier than water, as they move along, they sink. This explains why the contamination is found deeper as they move off-site.

The Navy and Grumman have made a commitment that if there is a water supply that is impacted, they will be able to provide the treatment necessary to attain non-detect to current standards under the Nassau County Health Code. Non-detect is at .5 micrograms per liter. There are 80 water supply wells in Nassau County that have been impacted by similar solvents and they have treatment so that they provide water that is safe to drink.

The meeting was concluded and adjourned at approximately 8:40 pm.

Naval Weapons Industrial Reserve Plant
Bethpage, New York

Restoration Advisory Board
Regular Meeting
---------------------------------------X

7:00 P.M.
March 13, 2001
Bethpage Community Center
Bethpage, New York

PRESENT:

Judithanne Hare	United State Navy Naval Air Systems Command
Joe Kaminski	United States Navy Naval Air Systems Command
Dave Brayack	Tetra Tech NUS
Judy Lamey	
Jim Colter	Northern Division, NAVFAC
Steven Scharf	New York State DEC
RAB Members	

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CO-CHAIR HARE: I'd like to call the 00:00:00
meeting to order please, of the Restoration Advisory 00:00:01
Board of the Naval Weapons Industrial Reserve Plant 00:00:04
at Bethpage, New York. 00:00:08

First off, I'd like to say that my 00:00:09
co-chair, Jim McBride, was not able to be with us 00:00:13
this evening. I am Judith Hare, from the Naval Air 00:00:18
Systems Command and the Naval Air Station at 00:00:23
Patuxent River, Maryland. We have this evening, a 00:00:26
couple of issues that we've placed on the agenda and 00:00:31
then I think we have one or two items that Jim was 00:00:35
going to bring up briefly, is it one or two? 00:00:39

MR. COLTER: Just one. 00:00:42

CO-CHAIR HARE: Just one. We'll put 00:00:44
that in somewhere close to the bottom. I'd like to 00:00:46
welcome everybody here tonight. Thank you all for 00:00:49
coming out. We appreciate your attendance and your 00:00:53
dedication and I particularly would like to say that 00:00:56
I'm really pleased that Steve Scharf could join us 00:00:59
from state. Thank you for being here. 00:01:03

And let me just say one more 00:01:07
administrative remark and then we'll get into the 00:01:11
first item. The minutes of the last RAB meeting 00:01:14
unfortunately there was a glitch, I guess with the 00:01:18

minutes and the stenographer, and so the minutes 00:01:21
were not able to be published and had to be 00:01:27
rewritten, I guess. Is that correct, Jim? 00:01:30

MR. COLTER: The transcript is not 00:01:33
available, but because of the notes that everyone 00:01:34
took we were able to put out minutes of the meeting. 00:01:36
They all were attached to the invite letter. 00:01:40

CO-CHAIR HARE: What we are going to 00:01:43
do is we are going to hold on approval of those 00:01:44
minutes. This was a request actually made by my 00:01:47
co-chair that we do that. And to give people a 00:01:50
little more time to absorb the minutes. So we can 00:01:54
be sure that we don't have any omissions or 00:01:58
corrections or whatever. So we are going to hold on 00:02:01
the approval of the minutes until the next RAB 00:02:04
meeting, giving everybody a chance to really do a 00:02:08
good review of them, thorough review of them. 00:02:11

With that, I'm going to turn it over 00:02:15
to Jim Colter. 00:02:17

Jim, if you want to lead out with the 00:02:20
status of activities? 00:02:21

MR. COLTER: For those that may not 00:02:25
know me, I'm Jim Colter, I'm the Navy's remedial 00:02:27
project manager for Bethpage. I work out of the 00:02:31

Philadelphia office, Naval Facilties Engineering 00:02:34
Command, we are in charge of cleanup programs on 00:02:38
naval bases in the Northeast. We have several 00:02:41
initiatives going on at this time regarding the 00:02:47
cleanup of the Bethpage property. 00:02:50

The first thing is the dry well 00:02:54
investigation. 20-08 and 34-07. These drywells, 00:02:58
were identified by Northrop Grumman during their 00:03:09
efforts to vacate the Navy's property. And part of 00:03:13
their efforts were to investigate all the dry wells 00:03:17
on the Navy property, if contaminated, do a cleanup 00:03:19
and they did that back in 19 -- I believe 1998 time 00:03:27
frame, 1999. Most of the dry wells came up with no 00:03:32
contamination. Others came up with minor 00:03:36
contamination that Northrop Grumman cleaned up and 00:03:38
remediated, with the exception of two. Dry well 00:03:41
3407 is on the south side of Plant 3, and dry well 00:03:45
2008 is in the northwest corner of Plant 3. 00:03:51

The contaminant of concern there 00:03:57
where PCBs in the dry well. Northrop Grumman did an 00:04:00
initial cleanup down to about 35 feet. Upon 00:04:07
confirmation sampling, they found PCB contamination 00:04:11
at 35 feet below grade and met with the Navy to ask 00:04:15
if we would take over that cleanup and final 00:04:19

remediation of the drywells. The deal that was made 00:04:23
was that the Navy would take over the cleanup if 00:04:27
Northrop Grumman would finish the delineation of the 00:04:30
contamination and recommend an alternative for 00:04:34
cleanup that's accepted by both the Navy and the 00:04:36
state. And that is currently ongoing. 00:04:39

Northrop Grumman submitted a report 00:04:44
back in October of 2000, to the DEC, outlining their 00:04:46
findings. I'm going to show briefly what those 00:04:51
findings were, real quick. 00:04:55

This is a cross-section of the 20-08 00:04:57
dry well location. They did several soil borings. 00:05:02
In and around the dry well. And put a couple of 00:05:09
monitoring wells downgradient to test the 00:05:09
groundwater for possible presence of PCBs in 00:05:14
groundwater. These are the cross-sections that I'll 00:05:17
show you in a second. Basically, if you take a 00:05:21
cut-out of the earth, and you're looking straight in 00:05:24
at it, that is what we are going to see. 00:05:27

This is a cross-section AA. What 00:05:34
this represents, here, is Northrop Grumman's initial 00:05:39
excavation of PCB contaminated soil. These are the 00:05:43
numbers, this is the concentration of PCBs prior to 00:05:47
excavation, 32 hundred parts per million. For 00:05:52

reference, the industrial standard is around 10 00:05:57
parts per million. We had significant PCB 00:06:00
contamination, immediately below on the dry well. 00:06:03
Northrop Grumman came down to roughly 28 feet here, 00:06:06
and excavated all this, disposed of it, replaced it 00:06:09
with clean fill. 00:06:13
What they have been doing, and that 00:06:16
October report reflects several additional rounds of 00:06:19
sampling, and these bold numbers, you can't really 00:06:22
tell they're bold on here, you could if you saw the 00:06:26
report, are numbers that exceed the 10 part per 00:06:30
million industrial base cleanup level. 00:06:34
Just outside of the dry well, you can 00:06:36
still see some significant contamination, 45 00:06:38
thousand, 5500, but they're at a depth of roughly 25 00:06:42
feet below grade. As they radiated out from the dry 00:06:49
well, the levels drop off dramatically. We have a 00:06:53
1700 out here, and further out it is pretty much 00:06:57
below 10. 00:07:01
This is the perpendicular 00:07:08
cross-section of 20-08. And similar findings, clean 00:07:10
fill down to about 28 feet, disposed and replaced. 00:07:16
A little bit more contamination deeper but not 00:07:21
nearly at the concentrations that I showed you with 00:07:25

the AA cross-section, as they go out the levels do 00:07:27
drop off, as they radiate out futher, there is no 00:07:31
PCB contamination further out. 00:07:35
This is the two cross-sections for 00:07:42
dry well 34-07 location, south of Plant 3. Again, 00:07:44
several soil borings were installed and monitoring 00:07:50
wells, to test groundwater downgradient. You'll see 00:07:53
a similar scenario here, significant contamination 00:08:08
below the dry well that was excavated and replaced 00:08:11
with clean fill at depths of 30 to 35 feet, we have 00:08:15
12,000 parts per million compared to the 10. As we 00:08:20
radiate out, the levels drop, but they are above the 00:08:23
10 part per million cleanup level. Again, this is 00:08:26
the DD cross-section perpendicular. Similar aspects 00:08:35
of that. 00:08:43
Now, that's basically what Northrop 00:08:45
Grumman found in their three rounds of soil sampling 00:08:48
requested by the state. What they're doing now, is 00:08:51
they have done an exposure assessment: What are the 00:08:56
risks associated with the PCBs at those depths? In 00:09:03
a nutshell, you do a risk assessment. You have to 00:09:08
have a contaminant, a pathway, and you have to have 00:09:12
a receptor to have risk. What they concluded in 00:09:15
their exposure assessment initially, because these 00:09:18

PCBs are at depths at over 30 feet below grade, 00:09:21
there is no pathway and there is no receptor. Their 00:09:26
conclusion basically was there is no risk. A PCB is 00:09:29
relatively immobile. We have confirmed that there 00:09:32
is no groundwater contamination associated with 00:09:36
PCBs. 00:09:39
A MAN: I was going to ask you about 00:09:40
the monitoring well. 00:09:41
MR. COLTER: Those came up, I don't 00:09:43
have the numbers exact but my recollection was there 00:09:44
was no significant PCBs in groundwater downgradient. 00:09:48
The DEC came back with a request that 00:09:54
although they do recognize the steps of the risk 00:09:58
assessment, they still wanted Northrop Grumman to 00:10:02
evaluate different alternatives and the cost 00:10:05
associated, implementability of those alternatives 00:10:09
and compare those, in a feasibility study, to the no 00:10:12
action alternative that is being proposed. That is 00:10:16
currently being done by Northrop Grumman and that 00:10:18
report, I believe is due, a draft is due to Northrop 00:10:21
Grumman May 15th, and Northrop Grumman plans on 00:10:26
submitting that June 15th to the state for review. 00:10:30
So we are not really sure what the 00:10:34
outcome of that is, whether the state -- will, you 00:10:36

know, approve the no action alternative or will 00:10:40
require some action. That will be a discussion 00:10:45
between Northrop Grumman, myself, representing the 00:10:47
Navy and the DEC. 00:10:55
A MAN: Limit that to in situ, to 00:10:55
look at, for starters, look at in situ technologies 00:10:56
to deal with the contamination given the levels that 00:11:01
were found. You may want to state that. 00:11:04
MR. COLTER: Pretty much, futher 00:11:06
excavation is going to be very costly and very 00:11:08
difficult to implement. So as Steve mentioned, 00:11:11
they're looking at in situ type alternatives, 00:11:16
alternatives to do something in place without 00:11:19
excavating the soils. So we'll see how that works 00:11:21
out in the next month, or so. 00:11:25
That's it for the dry well 00:11:31
investigation. 00:11:32
Another item that's ongoing is the 00:11:33
air sparging soil vapor extraction system at the 00:11:35
Navy Site 1. For those that don't know Site 1, it 00:11:42
is on the east end of Plant 3. We have been running 00:11:48
an air sparging soil vapor extraction system there 00:11:52
for two years now hoping to get levels of volatile 00:11:56
organic compunds in soils down to a concentration 00:12:01

where we can safely excavate PCB and metal 00:12:03
contamination in soil without having an air quality 00:12:07
issue associated with the volatile organic compunds. 00:12:11
At the last RAB meeting, we were 00:12:13
preparing to shut down the operation. We had run it 00:12:16
over the summer. We shut it down over the winter. 00:12:20
In the last RAB meeting in October, we were 00:12:23
preparing for the 2000 shut down. That was 00:12:25
completed in December of 2000. And the contractors 00:12:27
are currently developing their annual operating 00:12:32
report, basically summarizing the actions taken, the 00:12:34
results of those actions, and making a 00:12:38
recommendation as to whether there is a need to 00:12:40
continue or could we dismantle and move on to soil 00:12:43
excavation? That draft report is due to the Navy 00:12:47
by the end of this month. 00:12:51
There's Two choices: If the air 00:13:00
sparge system has met its goals -- I'm sorry, has 00:13:01
not met its goals, then we may make a decision to 00:13:05
continue to operate the air sparge system for 00:13:08
another year and see if we can meet those goals. 00:13:11
If it is deemed that the goals have 00:13:15
been met, then we'll talk about dismantling the 00:13:17
system. And we'll have to have a meeting with the 00:13:22

DEC to talk about the soil excavation end of it. 00:13:24
The soils were -- the soil excavation and cleanup 00:13:27
levels were established in the July 1995 Record Of 00:13:31
Decision for this site. Depending on what happens 00:13:35
with the dry wells that are going to be tied into 00:13:38
that ROD, we may have to amend the ROD somewhat. 00:13:40
That is the subject of the discussions that we'll 00:13:44
have to have. 00:13:47
Funding is available right now as 00:13:51
soon as FY02, which is this October, to do some 00:13:55
initial soil excavation. There is funding 00:13:59
available. It is just a matter of whether we can 00:14:03
get the DEC approval to move on to the next step or 00:14:06
not. 00:14:10
The other item we are working on is 00:14:13
what is known as AOC 22, former UST area, that is 00:14:15
located where this dot is by the "W". Former under 00:14:22
storage tank area, Northrop Grumman identified this 00:14:27
area during their investigations to vacate the 00:14:31
property. Found a lot of oily sludge in the soils, 00:14:33
asked the Navy to take that over as part of its IR 00:14:37
Program and we agreed. 00:14:41
We did several rounds of soil and 00:14:44
groundwater investigation. Dave, what was the year 00:14:49

on that? 00:14:51
MR. BRAYACK: That was '98 or '99. 00:14:53
MR. COLTER: '98, '99 time frame. We 00:14:56
found, comparing it to New York State cleanup 00:14:59
guidelines, although there was oil in the soil, it 00:15:02
didn't trigger cleanup values and we recommended no 00:15:05
futher action. The state's comment was similar to 00:15:08
the one made to Northrop Grumman, they would like us 00:15:11
to evaluate different alternatives in a Feasibility 00:15:14
Study and compare them to the no action alternative. 00:15:17
Right now, we are not working too 00:15:21
hard on that. We have other initiatives going on. 00:15:24
Because this property is being retained, it is 00:15:27
not -- the highest on the list, but we are working 00:15:30
on it. 00:15:33
Probably the biggest thing we are 00:15:36
working on right now is the groundwater issue with 00:15:40
Northrop Grumman and New York State DEC. I'm going 00:15:43
to run down a list of actions that have taken place 00:15:46
and will be taking place. Then I'll ask if Steve 00:15:49
wants to fill in. He can more than do so. 00:15:54
At the last RAB, Bill Gilday gave a 00:16:08
real good presentation on what actions are being 00:16:13
pursued by the DEC with Northrop Grumman/Navy 00:16:15

involvement. You'll recall that there was a public 00:16:19
meeting held back in December, 13th. And the public 00:16:27
comment period for the PRAP ended February 5th of 00:16:27
this year. As of today New York State is working on 00:16:32
issuing the ROD. Steve will fill in where he's at 00:16:35
with that later on. 00:16:39
Right now what the Navy is doing is a 00:16:41
lot of field work, basically implementing portions 00:16:43
of the ROD before the ROD is actually issued. We 00:16:45
felt confident about what the decision was going to 00:16:51
be. There was some level of risk on our part, but 00:16:54
we had funding available, and we jumped right into 00:16:57
it. To date the Navy has completed some 00:17:00
investigations. We call them vertical profile 00:17:04
borings, at locations 38, 76, south of the Hempstead 00:17:08
Turnpike, and 77 over by the Seaford Oyster Bay 00:17:14
Expressway. 00:17:19
Results of those borings came up that 00:17:20
we did find contamination in the groundwater. That 00:17:22
led us to move futher south and downgradient to see 00:17:25
if we can find the leading edge of this groundwater 00:17:29
plume. 00:17:33
We developed a work plan to install 00:17:33
additional borings back in, I think, January and we 00:17:35

are out there currently installing four new borings, 00:17:41
at locations 46, 44, 45, and 43. To date, as of 00:17:45
last Friday, we completed boring 46 and probably in 00:17:54
a day or two, we'll begin installation of boring 45. 00:17:58

We are working right now on property 00:18:06
access issues, because the Navy has to gain 00:18:08
temporary and/or permanent access to these areas 00:18:12
because they are obviously not on Navy property. 00:18:15
Right now we are working with the Town of Oyster 00:18:18
Bay, on access for boring 43. And we are working 00:18:21
with the New York State Department of 00:18:26
Transportation, for access to install boring 44. 00:18:28

That basically, part of this, work, 00:18:37
will delineate the southern extent of the plume and 00:18:42
allow us to install outpost monitoring wells which 00:18:46
is one of the requirements of the ROD. Another 00:18:50
requirement of the ROD, is some type of remedy at 00:18:53
the GM 38 area, because of extraordinarily high 00:18:59
levels of solvents in groundwater, compared to lower 00:19:05
levels down here. 00:19:09

You'll hear the turn "hot spot" 00:19:13
referred to GM 31 once in awhile. The Navy awarded 00:19:16
a contract to do a design for a pump and treatment 00:19:22
system and part of that is field work. We have to 00:19:25

install borings, again, to delineate the extent of 00:19:28
the hot spot. And we haven't defined what value 00:19:31
will be associated with that hot spot. That will be 00:19:35
based on the results of the borings we put in. 00:19:38

Tomorrow morning, as a matter of 00:19:43
fact, I'm meeting with representatives from the 00:19:44
state, my contractor, H2M Company and Gerrity & 00:19:47
Miller, to go out and start locating borings and 00:19:51
start the property access issue for that field work. 00:19:55

There are six borings going to be 00:20:03
installed in the GM 38 area that extend over to the 00:20:05
Seaford Oyster Bay Expressway and to the east, to 00:20:10
probably an equidistant area. Six borings are going 00:20:14
to be in there. That is probably going to take 00:20:19
much of this calendar year to complete. Based on 00:20:22
that data, we'll start a design for a pump and treat 00:20:25
system and that typically will take six to nine 00:20:30
months to develop. And a few extra months to get 00:20:34
the state concurrence on that design. So that is 00:20:37
going to take us through pretty much fiscal year 00:20:40
2002. 00:20:44

My budget currently has funding set 00:20:45
aside or identified, it's not guaranteed that we'll 00:20:48
get it, but it has been identified in our fiscal 00:20:51

year '03 budget to construct a pump and treat 00:20:54
remedy. So we are on track with that. 00:20:58

What you're saying is the Navy is 00:21:03
going to do the predesign work. 00:21:05

MR. COLTER: Nodding. 00:21:07

MR. SCHARF: Also the design and the 00:21:08
construction of the GM 38 area remedy. 00:21:09

MR. COLTER: Yes. 00:21:13

MR. SCHARF: Then you're going to 00:21:13
turn it over to Northrop Grumman to operate. 00:21:15

MR. COLTER: We'll probably end up 00:21:17
continuing to operate that under the IR Program. 00:21:19

MR. SCHARF: I see. Okay. 00:21:23

MR. COLTER: Unless, one of the 00:21:24
issues is a cost sharing issue between the Navy and 00:21:26
Northrop Grumman and that is outside the purview of 00:21:30
this group. But there's all kinds of different 00:21:32
deals that can be made between now and then as far 00:21:35
as who runs and operates the system. Right now, the 00:21:39
Navy is assuming the worst case, that the Navy will 00:21:45
do it so we can identify funds. But there have been 00:21:47
no conclusions made nor discussions really with 00:21:54
Northrop Grumman. There have been preliminary 00:21:54
discussions but no decisions have been made yet 00:21:57

regarding cost. 00:22:01

MR. SCHARF: There is no 00:22:03
memorandum of understanding in place to do that. 00:22:05
But the Navy is making that commitment. Will you 00:22:07
put that in writing as part of the work plan. Put a 00:22:10
work plan together for that. 00:22:13

MR. COLTER: Just the appearance of 00:22:15
us awarding a contract, developing a work plan, 00:22:17
doing the work. 00:22:19

MR. SCHARF: It is great. It is 00:22:21
fantastic. I'm glad to hear it. This is before the 00:22:22
ROD gets signed, you're making that commitment. 00:22:28
That is excellent. I'm glad to see that. 00:22:30

CO-CHAIR HARE: If I could make a 00:22:34
comment, cost sharing is usually something that goes 00:22:35
on between the Navy and the former operator of the 00:22:39
facility and that either sometimes gels or it 00:22:43
doesn't gel. The Navy is still the owner of the 00:22:47
property. That is why Jim is proceeding down this 00:22:51
road. Sometimes if that doesn't occur with the 00:22:54
operator, then after the fact, we pursue what we 00:22:58
call cost recovery, which means that we send the 00:23:04
former contractor/operator a bill, and we say, gee, 00:23:09
we think your fair share is X, Y and Z. But that's 00:23:13

all done within Navy and doesn't have anything to do 00:23:18
really with us working, forging ahead to get the 00:23:23
work done. 00:23:28

MR. SCHARF: That could be a problem 00:23:29
in this case, Grumman is picking up the -- they 00:23:30
already paid for treatment. 00:23:35

CO-CHAIR HARE: This is not to imply 00:23:37
that Northrop Grumman is not going to be 00:23:38
cooperative, because they have been very cooperative 00:23:40
in wanting to move ahead with cleanup and share, and 00:23:43
all that and so on. I'm not implying that at all. 00:23:49
It is just that's how the system works. 00:23:52

MR. SCHARF: Fine. As an engineer 00:23:56
on the project, I see that is fine. I'm not a 00:23:58
lawyer for the state. To say let's enforce that. 00:24:01
That will be a question that they will ask. Once 00:24:04
we -- 00:24:07

CO-CHAIR HARE: Well, if we are 00:24:08
taking the responsibility up front, then there 00:24:10
really isn't a question, actually. What Navy does 00:24:14
to recover somehow from that financially is up to 00:24:19
the Navy. And if for instance some arrangement is 00:24:23
struck with Northrop Grumman, they may voluntarily 00:24:28
say that is impossible. The Navy will say, we will 00:24:31

be willing to share in the cost up to this point. 00:24:35
Or whatever. Or they may say, well, I think we've 00:24:37
gone as far as we can go, here. You know, if you 00:24:42
want to pursue it later, the cost recovery, that is 00:24:45
up to you. That's again, an issue that we would 00:24:48
pursue at a later date. But it doesn't have 00:24:52
anything to do with us getting on with getting it 00:24:56
done. 00:24:59

MR. SCHARF: This is the first time 00:24:59
I've heard this. But that is good news that we are 00:25:01
moving forward and you're already planning for the 00:25:03
design and construction, that's fantastic. 00:25:06

MR. COLTER: It will take sometime, 00:25:10
but we are getting started. 00:25:10

A MAN: Steve, does your ROD, your 00:25:12
ROD makes that work, that Jim just described, the 00:25:15
responsibility of Grumman, correct. 00:25:18

MR. SCHARF: No, that makes it a 00:25:20
requirement under CERCLA to be done. Then we pursue 00:25:22
the responsible parties which are both the Navy and 00:25:29
Grumman, to do the work. The Navy does not sign 00:25:32
consent orders with the State of New York. Only 00:25:35
Grumman will do that. From our perspective, we 00:25:37
don't care who does the work plan. 00:25:41

A MAN:I understand that. Your 00:25:44
consent order with Grumman gives the responsibility 00:25:45
to treat the hot spot to Northrop Grumman. 00:25:47

MR. COLTER: Let me fill that in. 00:25:52
Normally what Steve says, is correct. We don't sign 00:25:53
consent orders with states. The Navy has their own 00:25:57
authorization to do CERCLA cleanups. However, we 00:26:01
had a couple of meetings with Northrop Grumman 00:26:05
officials, with my boss, and we have decided in this 00:26:08
case, that we will sign a consent order with the 00:26:10
state. 00:26:14

MR. SCHARF: Oh, that's. 00:26:14

A MAN: That is my understanding. I 00:26:17
thought you were aware. 00:26:19

MR. SCHARF: That is not something I 00:26:20
had heard. 00:26:21

MR. COLTER: We'll sign a consent 00:26:22
order with the state for what our actions are. 00:26:25

A MAN: You and I discussed that a 00:26:27
while back. 00:26:29

MR. COLTER: That will prevent an 00:26:30
agreement being made between Navy and Northrop 00:26:32
Grumman. 00:26:42

Pretty much, that's what we are 00:26:43

working on, on the 105 acres of Navy property. Does 00:26:44
anyone else have any questions on those issues? 00:26:49

CO-CHAIR HARE: You have one other 00:26:57
issue to bring up. 00:26:59

MR. COLTER: Yeah. The RAB 00:27:00
co-chairman wanted me to address this. It's a 00:27:02
letter that we received at the last RAB meeting from 00:27:05
a RAB member, a John Lubsolo. Is John here tonight? 00:27:09

(No response)

MR. COLTER: Basically his letter and 00:27:16
I'm sure most of you I believe probably have seen 00:27:17
it, is a request for some type of funding that the 00:27:22
DOD does provide from time to time, to do 00:27:31
independent reviews of Navy work. To make sure they 00:27:31
understand what's going on, to get a third-party to 00:27:36
give a little -- shed some light possibly. It's 00:27:44
what's called a Technical Assistance for Public 00:27:51
Participants. It is called TAPP. It is similar to 00:27:54
the EPA's technical assistance grants. It is what 00:27:57
the DOD has set aside for RAB members, to help them 00:28:02
in the decision-making process, to help them 00:28:05
understand certain aspects of our cleanup program. 00:28:08

The request was basically to take a 00:28:11
look at all the cleanup that's been done on the 00:28:12

property by the Navy and Northrop Grumman. We 00:28:16
haven't really -- we have discussed it on the 00:28:23
surface. Myself and Judith. There are other 00:28:25
officials that we have to talk to this about. 00:28:29
Basically, it's up to this RAB, and the Department 00:28:31
of Defense members of this RAB, to make sure we 00:28:35
don't submit ineligible projects up the chain for 00:28:37
review. 00:28:41
We are still looking at this request 00:28:44
right now. But on the surface what it looks like is 00:28:46
that the TAPP and funding associated with that, are 00:28:49
for pre-ROD, if you will, activities. Where 00:28:56
decisions haven't been made yet. We've done 00:29:00
remedial investigations. We have data. The 00:29:03
community really doesn't understand what the data 00:29:06
means. And they want to get an independent 00:29:09
contractor to explain what the data means. 00:29:12
For this site, we are basically 00:29:16
beyond that point. We are in post-ROD as far as the 00:29:19
soils go. That ROD was signed in 1995. And as far 00:29:22
as groundwater goes, that ROD is imminent. The work 00:29:26
that Northrop Grumman has done, under the 00:29:30
Environmental Baseline Survey, is basically a RCRA 00:29:33
cleanup. And RCRA issues and the EBS Program are 00:29:36

really not part technically of the Restoration 00:29:42
Advisory Board. The RAB deals with the Navy's 00:29:48
Installation Restoration Program. It is pretty much 00:29:50
a lot of semantics on words but the gist of it is 00:29:54
looking like this is going to be an ineligible 00:29:58
project to basically try to review all the cleanup 00:30:01
that's been done to date, specially since decisions 00:30:04
have already been made. 00:30:09
CO-CHAIR HARE: Maybe I could add one 00:30:11
thing,Jim, because I want to give any request from 00:30:13
any RAB member, its full due, I want to take this up 00:30:17
to a higher level and without actually submitting 00:30:23
it, because if they think that it is a non-starter 00:30:28
they're not even going to look at it. I want to get 00:30:33
a read on it initially first and say, okay, is this 00:30:36
something that would be considered at all? 00:30:40
Generally speaking, this TAPP program 00:30:42
is also when they grant money to do this, I'll tell 00:30:45
you, I never have been associated with one yet where 00:30:50
it was granted. It is granted very infrequently. 00:30:54
And usually it is granted where the Navy's -- the 00:30:57
Navy has a team but they may be spread out over a 00:31:03
lot of different facilities and they don't have a 00:31:07
lot of time to devote to any one facility and any 00:31:10

one RAB so the Navy's ability to delineate all of 00:31:15
this work and explain it well to the RAB and so on, 00:31:21
is somewhat left wanting. And then of the times 00:31:25
they will grant money for that purpose, which brings 00:31:32
another party in, that can do essentially a study on 00:31:36
its own. 00:31:43
So what I'm suggesting is that we 00:31:45
table this until the next RAB meeting. By that time 00:31:48
I'm pretty certain that I will be able to have a 00:31:53
read on this and be able to at least give our best 00:31:56
opinions on whether this is eligible, or not. 00:32:00
A MAN: Can we get a better idea of 00:32:04
the process and criteria of that, too. 00:32:05
CO-CHAIR HARE: Yes. 00:32:10
A MAN: By which it is judged. 00:32:11
CO-CHAIR HARE: Jim has a briefing. I 00:32:14
don't know if he has it tonight. 00:32:16
MR. COLTER: I don't know if you want 00:32:19
to do it. 00:32:20
A MAN: I would prefer if Jim 00:32:21
McBride were here and several of the members. 00:32:23
CO-CHAIR HARE: We'll put that on the 00:32:27
agenda for the next RAB meeting to start out with a 00:32:28
briefing what the TAPP program is, how it is used 00:32:32

and so on and then we can give the information that 00:32:36
we've gathered on, you know, whether this would be 00:32:39
an eligible project or not. 00:32:42
A MAN: Given that, are we losing a 00:32:45
window of opportunity by waiting for the next RAB? 00:32:47
CO-CHAIR HARE: No, no. 00:32:52
MR. SCHARF: Try to get the property 00:32:54
transferred by. 00:32:55
CO-CHAIR HARE: That refers to what 00:32:57
Jim was talking about. Usually, when these projects 00:32:59
are submitted, they are submitted early on in the 00:33:04
cleanup process of a property. We are long in the 00:33:07
tooth with the cleanup process and the transfer of 00:33:12
this property. So that is another reason why it is 00:33:19
probably not an eligible, viable project. But I did 00:33:19
want to give it its full due and I did want to get a 00:33:22
readout of the office that actually does the 00:33:27
granting of these issues. 00:33:30
A MAN: In the alternative of a full 00:33:35
review, at this point if there were certain areas 00:33:37
that the RAB or members of the RAB wanted an 00:33:40
independent review, is that an alternative? Is that 00:33:43
feasible. 00:33:46
CO-CHAIR HARE: Once again, we are 00:33:47

looking at -- it depends on what you're asking to be 00:33:48
reviewed. And whether or not there's even time to 00:33:52
do this before you know we get on with the final 00:33:57
actions here on this property and the transfer of 00:34:01
the property. 00:34:04

A MAN: There are issues that 00:34:08
maybe -- not all of the property is predicted to 00:34:09
transfer within the time frame. 00:34:13

CO-CHAIR HARE: That is true. 00:34:14

A MAN: So there are other issues 00:34:16
and other environmental issues that may not be 00:34:17
resolved. 00:34:20

CO-CHAIR HARE: That is something we 00:34:22
could discuss along with the presenting of the TAPP 00:34:22
program at the next RAB meeting. By that time we'll 00:34:26
have a read also on whether or not this is even 00:34:29
going to fly, period. They could say, because they 00:34:33
have such a small pot of money in which to work as a 00:34:36
program, and you have to consider that this is being 00:34:42
utilized for Navy facility cleanup, facilities all 00:34:46
throughout the United States. They may say, you 00:34:51
know, how far along are you? No, we wouldn't 00:34:56
consider this at all at this point. But I don't 00:35:01
know that for sure. That's why I want that definite 00:35:05

readout of them before I would come back and tell 00:35:08
you that. 00:35:11

A MAN: As an example, if we had a 00:35:12
limited review. One example would be the 00:35:14
presentation you just gave on the dry wells. There 00:35:17
is obviously a determination to leave some PCBs in 00:35:20
place, and it has been determined by the Navy and 00:35:24
the state. 00:35:27

MR. SCHARF: It hasn't been 00:35:28
determined. 00:35:31

A MAN: It is in the process of 00:35:31
being determined. 00:35:33

CO-CHAIR HARE: It is being looked 00:35:34
at. 00:35:35

MR. SCHARF: This is what the Navy is 00:35:36
proposing. We are looking at that, going back to 00:35:37
look at alternative plans, for example. 00:35:41

MR. COLTER: One of the eligible 00:35:45
projects in there is like a third-party that comes 00:35:47
in and explains the Risk Assessment approach. A 00:35:49
Risk Assessment is a very convoluted program that 00:35:53
sometimes our contractors may not be the best people 00:35:57
to explain it. So at that point, that would be one 00:36:00
eligible project, to have somebody like a university 00:36:04

professor come in and educate the RAB members on 00:36:07
what is involved in a Risk Assessment. 00:36:11

CO-CHAIR HARE: It usually gets back 00:36:14
to, with the experiences that I had and that's been 00:36:16
really on the periphery, with the experiences I had, 00:36:19
it generally has been granted where the Navy did not 00:36:24
have adequate staff, or contractors, or whatever, 00:36:28
that were adequate to present materials and 00:36:32
information, and so on, to the RAB members and the 00:36:36
general public. 00:36:40

A MAN: What is on the process of 00:36:41
independent verification of decision? Using that 00:36:43
as the example. Assuming if -- those PCBs are 00:36:47
determined to stay in place. 00:36:50

CO-CHAIR HARE: To be honest with 00:36:53
you, I don't know that it would be granted for that 00:36:54
purpose. But that's why I want a readout of the 00:36:58
office that grants that funding so I can give you 00:37:02
information factually. 00:37:06

A MAN: Two things like to add, in 00:37:08
your letter that you read, Jim. 00:37:09

You said requested to review the 00:37:14
cleanup on the Navy and the Northrop Grumman sites. 00:37:18

MR. COLTER: Just Navy. Done by 00:37:23

Northrop Grumman. Northrop Grumman did all that 00:37:25
RCRA work. 00:37:28

MR. SCHARF: That's fine. The second 00:37:30
thing I'd like to add, a lot of the material, a lot 00:37:32
of work that has been done here and material has 00:37:35
been produced by a number of regulatory groups, 00:37:37
including myself, RCRA facility group and there's a 00:37:41
number of reports all culminated into the 00:37:46
Environmental Baseline Survey, which has been 00:37:50
modified and we are in the final draft stages. It 00:37:52
went on longer than we would have liked, but we are 00:37:55
at that point. Maybe it is possible that the final 00:37:58
draft of the EBS can be distributed to all the 00:38:00
members of the RAB and maybe even that might be the 00:38:04
report to look at, to have an independent review of. 00:38:08

MR. COLTER: That was my read 00:38:12
on -- that would be the report that answers that 00:38:14
letter. However that is not in the IR Program. 00:38:18
That is under a different program. 00:38:21

CO-CHAIR HARE: They won't give 00:38:23
funding for that. They will not give funding for 00:38:24
that. 00:38:27

MR. SCHARF: They're not. At a 00:38:28
minimum, why not give a copy of the EBS to all the 00:38:29

RAB members? 00:38:39
MR. COLTER: We have. They have the 00:38:39
draft. They had a chance to comment on it. And I 00:38:39
really have not received any adverse comment. 00:38:40
MR. SCHARF: John, do you have a copy 00:38:46
of the Environmental Baseline Survey. 00:38:47
MR. COLTER: Steve, I have to look at 00:38:52
that. They have the Phase I. We are holding the 00:38:53
Phase II until after your review. I have to look in 00:38:56
my letters. 00:39:00
MR. SCHARF: I don't think it has 00:39:01
been released other than distributed to me. 00:39:01
MR. COLTER: I take that back. They 00:39:04
do have the first time. The EBS is -- the EBS is 00:39:05
the, covers Plants 5, 20. Other parcels, in 00:39:13
addition to the 105 acres. 00:39:17
MR. SCHARF: Covers all the Navy 00:39:20
property. 00:39:22
MR. COLTER: The /TPO*S and EBS 00:39:22
summary about whatever parcel we are transferring. 00:39:25
In this case 105 acres. That I sent to each RAB 00:39:28
member, I know. 00:39:32
CO-CHAIR HARE: We are getting a 00:39:34
little bit off track. 00:39:34

MR. SCHARF: Maybe that might, if it 00:39:36
is not possible to get funding for review at a 00:39:38
minimum, that this document has been reviewed by the 00:39:41
regulatory agencies, Department of Health, County 00:39:46
Health, and the State DEC in terms of summarizing 00:39:49
all the remedial work that has been done on the Navy 00:39:54
property. If that would suffice and answer your 00:39:57
questions. 00:40:01
A MAN: First of all, I would like 00:40:02
to say I'm sorry, I was late. I got stuck in the 00:40:05
traffic coming from Jersey. 00:40:09
I think it is important, perhaps we 00:40:11
should take a look at the timing of this. And 00:40:13
perhaps look back when we first brought the issue up 00:40:18
about seeking independent review. And I would 00:40:22
recommend that any decisions that have been made 00:40:27
since that point, basically I think they should be 00:40:32
held in abeyance until the appeal process has been 00:40:37
completed and exhausted. 00:40:42
CO-CHAIR HARE: I guess I'm not 00:40:45
following you as far as appeal process. Because the 00:40:46
Navy, the Navy is compelled to move forward with the 00:40:49
cleanup of the property. 00:40:54
A MAN: I'm speaking of a higher 00:40:58

controlling authority than the Navy that would be 00:41:00
appealed to and request of getting funding for this. 00:41:04
CO-CHAIR HARE: The Navy has a 00:41:14
certain amount of funding to utilize in this 00:41:15
program. And what I'm trying to determine is, is 00:41:17
the request a request that is going to be a request 00:41:23
that they're even going to consider? Because they 00:41:28
have specific rules and items that determines -- 00:41:32
A MAN: Could we get a copy of these. 00:41:37
CO-CHAIR HARE: You were just walking 00:41:39
in the door but let me go back over that. We have a 00:41:40
briefing that I'm proposing that we will do at our 00:41:44
next RAB meeting, that completely delineates what 00:41:48
the TAPP program is all about and how it can be 00:41:53
used. For what purpose. 00:41:57
A MAN: Is there a reason that this 00:41:59
hasn't been explained for almost a year now. We 00:42:02
tried to get this information. 00:42:06
CO-CHAIR HARE: When we originally 00:42:07
briefed the TAPP program, we had to brief it for all 00:42:08
the RABs. 00:42:12
MR. COLTER: I'm not sure if we 00:42:13
briefed Bethpage, or not. 00:42:15
A MAN: We specifically requested 00:42:16

information with regard to that. That brings about 00:42:18
the adversarial position about why did we want it 00:42:22
and... 00:42:27
CO-CHAIR HARE: Bear in mind, bear in 00:42:29
mind, I will do my best to try to honor your 00:42:32
requests. However, they have certain guidelines and 00:42:35
rules about what projects can be funded with this 00:42:39
limited amount of money. 00:42:42
A MAN: Where can we get that 00:42:44
information. 00:42:47
CO-CHAIR HARE: That is what I 00:42:48
explained to you, at the next RAB meeting when I 00:42:48
come back with some answers. 00:42:51
A MAN: Can we get a copy of the fax 00:42:53
tomorrow, for example. 00:42:55
CO-CHAIR HARE: Jim, could you Xerox 00:42:58
or otherwise -- we could mail the information to 00:43:01
you. 00:43:05
A MAN: It can be faxed through your 00:43:06
office? 00:43:08
A MAN: We can fax. 00:43:10
A MAN: Is an explanation of the 00:43:12
procedure, right. 00:43:13
CO-CHAIR HARE: It is an explanation. 00:43:16

It is not an oversight body by any 00:43:19
means. It is not an appeal board or anything of the 00:43:22
kind. It is simply some funding that is provided. 00:43:25
Generally it is provided to Restoration Advisory 00:43:29
Boards where perhaps the Navy doesn't have adequate 00:43:34
staffing. 00:43:37

A MAN: Who would be the higher 00:43:38
controlling authority in regards to this? 00:43:39

A MAN: Who is the decision maker? 00:43:43

CO-CHAIR HARE: It is controlled by 00:43:45
the secretary of the Navy's office. That is the 00:43:46
office. 00:43:50

A MAN: Who is the higher 00:43:51
controlling authority than the secretary. 00:43:52

CO-CHAIR HARE: There isn't a higher 00:43:54
controlling authority. That is the authority. 00:43:55

MR. SCHARF: I think what he's 00:43:58
asking, whoever you spoke to, or would give this 00:43:59
application to, has said it is not applicable. 00:44:04

A MAN: For example, is Congress a 00:44:09
higher controlling authority. 00:44:10

MR. SCHARF: John is asking who do we 00:44:13
go to above that, can we appeal that decision. 00:44:15

A MAN: There has not been to my 00:44:25

knowledge a decision made that we can't get access. 00:44:25

CO-CHAIR HARE: There hasn't been. 00:44:25
That is what I'm trying to explain. 00:44:26

A MAN: We have been asking for it 00:44:29
for over a year. 00:44:30

CO-CHAIR HARE: I'm trying to get a 00:44:31
read what you asked for. 00:44:33

A MAN: Which is almost a year. 00:44:35

CO-CHAIR HARE: Say ahead of time, 00:44:36
okay, this is what this RAB member has requested. 00:44:37
Would this be even considered? 00:44:44

A MAN: This has been requested for 00:44:47
almost a year now. 00:44:48

CO-CHAIR HARE: I'm asking them. 00:44:50

A MAN: You haven't responded to that. 00:44:51

CO-CHAIR HARE: Pardon me. 00:44:53

A MAN: We requested this for almost 00:44:54
a year now and you haven't responded to that. 00:44:55

CO-CHAIR HARE: Well, I don't know 00:44:58
whether we got the letter, Jim. 00:44:59

A MAN: The initial meeting that we 00:45:02
had, it was met with a very adversarial response as 00:45:04
to why we wanted this. And basically it was kind of 00:45:07
blown away. 00:45:11

CO-CHAIR HARE: I'm not trying to 00:45:13
blow away. 00:45:14

A MAN: It was very negative. 00:45:15

A MAN: I'm saying, you didn't. I'm 00:45:17
saying the initial request was blown away. 00:45:19

CO-CHAIR HARE: I'm trying to give 00:45:22
you the -- 00:45:23

MR. COLTER: Initial request for an 00:45:24
explanation for your letter. 00:45:25

A MAN: No no. Prior to the letter, 00:45:27
the the letter was a follow-up of, which has been 00:45:29
documented in some of the correspondence there. 00:45:35

CO-CHAIR HARE: He's looking for 00:45:37
oversight, I think, and that is not the purpose of 00:45:38
the program. 00:45:41

A MAN: He wants to know how he can 00:45:42
get the money. Is there an application process. 00:45:44
That is what he wanted to know. 00:45:49

MR. COLTER: We agreed that we'll do 00:45:51
all that at the next RAB meeting. 00:45:52

A MAN: Can we get that via telex or 00:45:56
fax. 00:46:01

A MAN: Are we losing an 00:46:02
opportunity, on the record, in the process by 00:46:03

waiting until the next RAB meeting? 00:46:06

MR. COLTER: We have to get a read on 00:46:09
these actions, the TAPP and the review and the 00:46:10
explanations and the third-party reviews, are tied 00:46:13
to the decision-making process. We are only talking 00:46:17
IR cleanup. We are not talking transfer of 00:46:21
property. We are not talking EBS. That is a 00:46:25
different program than what this RAB is here for. 00:46:28
This RAB is for installation restoration in the 00:46:31
strictest sense of the word. We chose to include 00:46:36
the closure and all the work that Northrop Grumman 00:46:39
did to this board. 00:46:42

What we have to find out, because we 00:46:44
have RODs in place, decisions have been made back in 00:46:46
1995, before this RAB was established and we have a 00:46:49
groundwater ROD imminently being signed, decisions 00:46:52
have been made we have to get a read from the people 00:46:57
that control the funding to say they want to go back 00:46:59
and look at decisions that have been made, is that 00:47:02
an eligible project? We don't have that answer. 00:47:05

A MAN: That is what the application 00:47:08
project determined. 00:47:10

MR. COLTER: We as the DOD portion of 00:47:11
this RAB, are responsible for not wasting people's 00:47:13

time by submitting ineligible projects that we know 00:47:16
aren't going to fly. 00:47:20

A MAN: That should be his 00:47:22
prerogative. If he submits ineligible projects, it 00:47:24
is up to him to get an answer. 00:47:28

MR. COLTER: It is up to the RAB as 00:47:31
whole not to submit ineligible projects. 00:47:32

A MAN: The community wants to submit 00:47:36
it. 00:47:38

MR. COLTER: If it is ineligible, why 00:47:39
submit it. 00:47:41

A MAN: Let's get a 00:47:42
determination -- I have done this before with the 00:47:43
EPA program, and you have to submit an application. 00:47:45
They determine whether they're going to fund it, or 00:47:48
not. 00:47:51

MR. COLTER: Well, the DOD and the 00:47:51
presentation I have, kind of explains that. If you 00:47:53
already know it is ineligible, don't do it. When 00:47:56
you say well, that is up to the RAB, that is why we 00:48:00
want to explain what is eligible and what is 00:48:02
ineligible. 00:48:05

A MAN: First of all, what you said 00:48:07
about it being a remediation grant is absolutely 00:48:08

correct. That is what it is for. It is not for 00:48:11
this part of the program. But there should be no 00:48:13
prohibition in putting in application. This may be 00:48:17
a case where the the DOD, let them say no. If 00:48:20
you're trying to prevent them from saying no. That 00:48:23
is not the answer. 00:48:26

A MAN: That is the point that 00:48:28
a -- 00:48:29

A MAN: It is that simple. He wants 00:48:29
to put in an application. If that is what the RAB 00:48:32
board wants to do, why fight it? 00:48:35

A MAN: Where could we get this 00:48:45
information in a rather expedient amount of time. 00:48:47

CO-CHAIR HARE: We'll see you get it 00:48:50
mailed to your home, sir. Whatever it takes. 00:48:51

A MAN: Could we get it sent to each 00:48:57
member of the RAB, please. 00:48:59

MR. COLTER: We have pamphlets. I 00:49:01
don't have enough for tonight, but we have these and 00:49:04
I have copies of the presentation I'll give next 00:49:06
time. 00:49:08

A MAN: So we get an understanding 00:49:08
of the process, who is the applicant. Can anyone 00:49:09
apply or does the RAB have to apply. 00:49:12

MR. COLTER: It is RAB only. 00:49:14

A MAN: Does it have to be unanimous 00:49:17
or majority. 00:49:19

MR. COLTER: It has to be not one 00:49:20
member, it has to be the majority of the RAB. It is 00:49:29
all in the presentation that I'm starting to give 00:49:29
right now. 00:49:29

A MAN: It may be useful time 00:49:30
tonight, then, to vote on it to begin the process. 00:49:30

A MAN: Exactly. 00:49:35

A MAN: If it is a lengthy process. 00:49:35

A MAN: You're talking about return 00:49:38
mail. 00:49:39

CO-CHAIR HARE: You don't have your 00:49:40
co-chair here. 00:49:41

A MAN: Talking about a return mail 00:49:42
within perhaps the end of the week? 00:49:44

MR. SCHARF: It is my recollection 00:49:47
that Jim McBride totally supported this project to 00:49:48
have an independent review of the work that was done 00:49:53
on the Navy property. It reminded me of this issue 00:49:54
being brought up. He clearly stated that and, John, 00:49:59
and I think confirmed that, that Jim McBride 00:50:01
supported that. 00:50:04

A MAN: Jim, by telephone call to 00:50:07
myself is very supportive of having an independent 00:50:08
review of at least some of the areas that we have 00:50:11
requested or are unsure of ourselves if it makes 00:50:15
sense to leave certain contaminants in certain 00:50:17
areas. I think it is a good thing for the RAB, for 00:50:20
the Navy, I'm 100 percent supportive in areas where 00:50:23
it is being considered, to leave any contaminants in 00:50:30
the ground, or behind. 00:50:33

So now the issue was how to fund 00:50:35
that. 00:50:37

MR. COLTER: However, there is a 00:50:38
question whether you can reopen RODs. I don't 00:50:39
believe you can use this funding to reopen a ROD. 00:50:43

A MAN: Maybe I'm unclear. If we 00:50:46
are -- what was explained on your dry wells example 00:50:49
was that you're digging down to 28 feet and there 00:50:53
was some contaminants being left there. But then 00:50:57
it was stated that no one had signed off on that. 00:51:00
That may not be the case. 00:51:04

MR. SCHARF: You also stated you may 00:51:05
reopen the ROD. 00:51:07

A MAN: Right. Which is what 00:51:10
Steve's alluding to. To me that decision has not 00:51:12

been made. It happens to be exactly one of the 00:51:15
areas that we are interested in. So it seems like 00:51:17
this is the right time that we haven't missed that 00:51:21
window of opportunity. 00:51:24
MR. COLTER: These projects should be 00:51:26
very specific. You only get $25,000. If anyone 00:51:27
knows the environmental business, $25,000 doesn't 00:51:30
get you much. It has to be specific. I'm not sure, 00:51:33
think about what you want that third-party to do 00:51:37
with the data. They cannot take additional samples. 00:51:40
They cannot do sampling and analysis, that is 00:51:44
ineligible right off the get-go. Can't do it. They 00:51:46
can explain the date, explain the risk assessment 00:51:50
process. If we haven't done a good enough job to 00:51:54
begin with. 00:51:58
A MAN: I don't think it is anything 00:51:59
personal. 00:52:00
CO-CHAIR HARE: No, we don't take it. 00:52:01
A MAN: I think what you've done, 00:52:02
from what I've seen. 00:52:03
CO-CHAIR HARE: This program, bear 00:52:05
in mind this program is totally separate from what 00:52:06
I'm doing here and what Mr. Colter does here and 00:52:10
contractors, and so on. This is like a program that 00:52:14

is totally disassociated, an operation independent 00:52:17
of. In other words, if your application does go in, 00:52:21
that's it. It goes to them. They make the 00:52:24
decision. We don't have any part in that decision. 00:52:26
They might call us and ask certain questions of us, 00:52:31
but we don't play in that decision at all. 00:52:35
MR. COLTER: If it is determined by 00:52:39
the RAB, that is the DOD and the community, that it 00:52:40
is a good project, we'll do whatever we can to get 00:52:43
it run up the chain. 00:52:47
A MAN: I haven't done the math on 00:52:50
the RAB. I'm assuming. 00:52:51
MR. COLTER: It depends on the 00:52:55
request. I don't know how specific until I hear the 00:52:57
request. If you're just requesting an overall 00:53:00
cleanup of the base, that is not a specific enough 00:53:02
plan. 00:53:04
A MAN: Do you have to state on the 00:53:05
application we want to look at AOC 20-08. 00:53:06
MR. COLTER: You have to state "we 00:53:12
want thorough explanations of Risk Assessment and 00:53:12
Dry Well Investigation". That is very specific. 00:53:16
They can take the report from Northrop Grumman and 00:53:19
come here and do an education type. Whatever they 00:53:21

do. 00:53:23
CO-CHAIR HARE: It is not for going 00:53:24
out and doing another study. Where you're going 00:53:25
back and you're actually going to do a separate 00:53:31
study. It's not for that purpose. It's really an 00:53:35
education kind of thing. 00:53:40
A MAN: Technical assistance, 00:53:45
really.
CO-CHAIR HARE: Basically, yes. That 00:53:47
is why I was saying, generally money is not granted 00:53:50
for this, unless in a scenario where you have a RAB 00:53:53
where the personnel from the Navy who have to cover, 00:53:57
maybe they have to cover five or six RABs, and they 00:54:01
don't have the time to devote to that one particular 00:54:05
RAB. So then in that case, where a certain aspect 00:54:08
of the cleanup program needs to be explained in 00:54:12
greater detail, or in more depth, then they would 00:54:16
grant it in that scenario. 00:54:22
A MAN: I think that that -- I think 00:54:26
what I'm hearing from the community members is that 00:54:30
they would like to pursue getting some technical 00:54:32
assistance in some very specific areas that they 00:54:35
would like triple-checked, if you will. And to 00:54:44
pursue along those means as quickly as possible. 00:54:44

CO-CHAIR HARE: Triple. 00:54:47
A MAN: If you're checking the state 00:54:48
and the independent person to verify. 00:54:50
CO-CHAIR HARE: It is not going to be 00:54:52
granted for that purpose is what I'm telling you. 00:54:54
It is not for going back and verifying work that's 00:54:56
been done. It's for explanations. 00:55:00
A MAN: Interpreting. 00:55:05
CO-CHAIR HARE: What already has been 00:55:07
done. They're not going to grant it. 00:55:08
A MAN: Let me -- 00:55:11
MR. COLTER: It is all in here. 00:55:12
You're asking questions that we could present, but 00:55:13
you told us to wait till the next RAB. 00:55:16
A MAN: Because we didn't have 00:55:19
enough members. 00:55:20
MR. COLTER: It is all in here. What 00:55:21
is eligible and ineligible. 00:55:24
A MAN: We'd like that -- can this 00:55:26
RAB get back together in the next 30 days as opposed 00:55:30
to waiting three months. 00:55:33
A MAN: Can't you give him the 00:55:36
brochure. 00:55:37
A MAN: I'm not. 00:55:38

A MAN: What is in there is the 00:55:39
explanation of the program and basically tells you, 00:55:40
at least the ones I've seen, tell you how to apply 00:55:42
for it. Doesn't it. 00:55:45

MR. COLTER: Yeah. 00:55:47

CO-CHAIR HARE: How many do you have 00:55:48
with you. 00:55:49

MR. COLTER: This is the only one I 00:55:50
have. 00:55:52

A MAN: What I'm more interested in 00:55:53
is if we are applying for this, we need to apply as 00:55:55
a RAB, we can't do it unilaterally at all. If we 00:55:59
don't get back together in three months, it won't be 00:56:03
applied for for several months. 00:56:07

CO-CHAIR HARE: I can't tell you that 00:56:12
we can't get back together in 30 days. To be honest 00:56:13
with you, my calendar is a nightmare. Between now 00:56:16
and then it would be really hard for me to be able 00:56:20
to do that. I'm covering the waterfront with a lot 00:56:23
of properties. I will tell you this: We can give 00:56:26
you the brochure and then Jim, can mail it out to 00:56:29
other RAB members as far as that is concerned. 00:56:34
We'll give you this one. 00:56:37

A RAB MEMBER: The majority of the RAB 00:56:41

is here now. Why don't we take a vote on it despite 00:56:42
the co-chairman is not here. 00:56:46

CO-CHAIR HARE: You still need the 00:56:48
information because you're going to have to write up 00:56:49
the applications is what I'm saying. And that's the 00:56:52
hard part because you're going to have to write it 00:56:55
up in great detail. And then what we'll do is we'll 00:56:58
help you get it to the right office and get it 00:57:07
submitted if you want to submit it right away. I 00:57:11
don't have a problem with that. If you don't want 00:57:14
me to go get a read on it ahead of time, I won't do 00:57:16
that. That's up to you. Or I could work with you 00:57:20
over the phone. 00:57:25

A MAN: Right. 00:57:26

CO-CHAIR HARE: Can do whatever. I 00:57:29
can't promise we can have it in a RAB in 30-day. 00:57:32
That really can't do. 00:57:36

MR. COLTER: Review of restoration 00:57:38
documents, "Eligible Project: Review of proposed 00:57:39
remedial technologies pre-ROD. Interpreting health 00:57:44
and environmental effects. Participating in 00:57:48
relative risk evaluations. Certain types of 00:57:50
technical training". 00:57:54

"Ineligible: Generation of new 00:57:57

analytical data. Litigation or underwriting legal 00:58:00
actions. Reopening final DOD decisions. Political 00:58:04
activity or lobbying. Community outreach efforts." 00:58:09
Those are the ineligible things. 00:58:14

Part of the process is you define a 00:58:17
project in specific. Evaluate alternatives, 00:58:19
alternative sources of assistance. Which means if 00:58:24
we can get something done for free that answers your 00:58:27
question, you need to go down that road, maybe a 00:58:32
university, maybe our contractor. You know, if 00:58:35
those sources aren't available, then the money, then 00:58:39
money is sent to get a third-party. 00:58:42

MR. SCHARF: Maybe we can get a 00:58:46
professor from Stony Brook or Hofstra, or wherever, 00:58:48
that does this work, that would look at these 00:58:51
reports. That is a possibility. 00:58:53

A MAN: Maybe it is me. 00:58:56

MR. COLTER: There's a lot involved 00:58:58
before you take a vote and fill out an application. 00:59:00

A MAN: I understand that. I'm 00:59:03
confused now. You say you can't use it if the ROD 00:59:04
has been issued. 00:59:08

MR. COLTER: That is correct. 00:59:09

A MAN: If we want to use it on the 00:59:11

dry well scenario, can we still do that? I'm 00:59:13
having trouble finding out whenever it applies. 00:59:17

MR. COLTER: That is a gray area, 00:59:22
because the dry wells are included in Site 1. And 00:59:23
Site 1 has a ROD issued for PCB cleanups at 10 parts 00:59:26
per million. 00:59:33

MR. SCHARF: You would amend the ROD 00:59:39
or you assume it is part of Site 1. 00:59:40

MR. COLTER: It is part of Site 1. 00:59:42
It is part of our Site 1. 00:59:44

If the ROD says you excavate 10 parts 00:59:47
per million, that obviously shows we have to go down 00:59:56
40 feet. The Navy is saying we need to take a look 00:59:56
at this. This is new information. New information, 00:59:58
you can reopen a ROD. I don't know how that plays 01:00:00
into this definition. That never happened. Whether 01:00:03
you reopen a ROD, can you do a TAPP at that point. 01:00:06
I don't know. 01:00:10

A MAN: On the dry wells that is a 01:00:10
scenario that we are concerned with. In that 01:00:13
case -- it is not reopening. It is not reopening a 01:00:17
ROD, right? 01:00:22

MR. COLTER: Right. 01:00:23

A MAN: To get that -- when do you 01:00:25

think we'll have -- when will the decision be 01:00:28
rendered? On that? 01:00:31

MR. COLTER: Steve will get a report 01:00:34
responding to his comments on the field work and the 01:00:35
Risk Assessment, June 15th. 01:00:38

A MAN: June 15th. Now, if he's 01:00:41
agreeable to that, then that closes it and you can't 01:00:44
get the review? Or do you have to apply for the 01:00:47
review and get it started before that closes. 01:00:50

MR. COLTER: We don't know. We don't 01:00:53
know how this works. If he says, you know, in the 01:00:55
strictest sense, that you need to dig down to 10 no 01:00:59
matter how much it costs or no matter how much 01:01:03
impracticability is involved, we have to do that. 01:01:08

MR. SCHARF: Hold on, you're saying 01:01:10
if those two dry wells are not part of Site 1, I 01:01:12
don't make that decision. Construction group makes 01:01:15
that. Site 1 is with them for the cleanup already. 01:01:18
I don't make that decision. They make that 01:01:21
decision. 01:01:23

MR. COLTER: This is now -- when you 01:01:24
have new data that you didn't have previously, you 01:01:26
can reopen and amend a ROD. That is why we are 01:01:30
trying to decide whether we need to do that or not. 01:01:34

We know we have PCB contamination at the dry wells. 01:01:37

CO-CHAIR HARE: One of the things 01:01:41
they're going to come back, I know, and ask, say for 01:01:42
instance they submitted this right away, they're 01:01:46
going to say, can Navy not adequately cover this. 01:01:48
Does Navy not have a contractor that can adequately 01:01:55
explain this? Remember, this is for purposes of 01:01:59
where that is not available. I'm very sure that 01:02:03
they're not going to fund it in a case like that. 01:02:09

MR. COLTER: I'm not sure what the 01:02:12
project is. I don't know what you're asking. 01:02:13

A MAN: Based on the ambiguity, I
author this motion, that we make a motion that we 01:02:20
apply for the process, based on areas where 01:02:22
contaminants are proposed to be left that exceed the 01:02:27
environmental. 01:02:33

MR. SCHARF: Guidance number. 01:02:37

A MAN: That exceed. 01:02:38

MR. COLTER: What is your project. 01:02:39

A MAN: My project is the dry wells. 01:02:42

MR. COLTER: What do you want us to 01:02:45
do with the data. Do you want us to explain, what 01:02:46
PCBs are. 01:02:48

A MAN: I would want -- personally, 01:02:50

I would like a third-party to verify that yes, that 01:02:51
is the right thing to do, or give us a risk analysis 01:02:55
or verify your risk analysis that that is a proper 01:02:57
decision, we are going to leave contaminants that 01:03:01
exceed the guidelines. 01:03:04

MR. SCHARF: I think that is a great 01:03:05
idea -- 01:03:08

MR. COLTER: You don't have that 01:03:09
report, the exposure assessment. 01:03:10

A MAN: Why don't you go out and find 01:03:17
a university professor - 01:03:19

MR. COLTER: I want to explain 01:03:22
something first. I want to point them in -- Steve, 01:03:23
please, wait. 01:03:26

You want an explanation of the risk 01:03:28
assessment that Grumman Northrop provided in their 01:03:30
report, right? 01:03:35

A MAN: I would want it in every 01:03:37
instance. 01:03:38

MR. COLTER: You can't. You have to 01:03:39
be specific. You only have $25,000. You don't have 01:03:40
$100,000. 01:03:44

MR. SCHARF: If you go through the 01:03:45
EBS report, you, it goes through every thing that 01:03:47

was done. 01:03:51

MR. COLTER: EBS is not -- 01:03:53

MR. SCHARF: You go through the 01:03:55
report. It details, in the discussion of the text, 01:03:56
it details concentration, I guess, of areas that may 01:03:59
have exceeded New York State technical assistance -- 01:04:03

MR. COLTER: TAPP is only going for 01:04:10
IR Sites 1, 2, 3. Not for Plant3, 12, 17, or 01:04:11
whatever. IR Sites, Environmental Restoration 01:04:16
Program. Not EBS Program. Not the RCRA cleanup 01:04:20
that Grumman did. RCRA is not part of this. 01:04:24

MR. SCHARF: Limited to that, we are 01:04:27
limited to PCBs and inorganics and volatiles in 01:04:28
those three areas. 01:04:33

MR. COLTER: You want risk assessment 01:04:36
training on what Northrop Grumman did. You can get 01:04:37
that from the DOH free. 01:04:40

A MAN: He wants a third person to 01:04:42
tell him that your proposal is adequate, protective 01:04:43
of the public health and otherwise viable. 01:04:46

MR. COLTER: The DEC and DOH are not 01:04:49
qualified to make that determination. 01:04:52

A MAN: That is independent of the 01:04:54
grant. 01:04:57

MR. SCHARF: We could sit down. 01:04:57
MR. COLTER: The DOC and DOH, who are 01:04:59
the representatives, say it is a good alternative. 01:05:01
A MAN: I am with you on this. I 01:05:05
don't know what you're problem is. Let them apply 01:05:06
for the grant. 01:05:14
MR. SCHARF: You can sit down and go 01:05:14
over everything and have our own meeting with 01:05:14
members of the board. We can do that, set up a 01:05:17
time. 01:05:19
CO-CHAIR HARE: May I suggest this. 01:05:20
We keep going over the same ground. If you want to 01:05:21
make the application. 01:05:24
A MAN: Yes. 01:05:27
CO-CHAIR HARE: If you want to make 01:05:28
the application. 01:05:28
A MAN: What I really want to do, 01:05:30
because I think it has been a very cooperative body 01:05:32
and I want to stay within that vein. To effectively 01:05:35
utilize our time tonight, because it is clear that 01:05:38
we cannot meet within the next 30 days, I want to 01:05:42
get the motion out there, that we are all in 01:05:44
agreement, see if we are all in agreement, how many 01:05:46
of us are in agreement that we want to move this 01:05:48

process forward to the extent that we can access 01:05:51
dollars to help us make a decision or verify a 01:05:54
decision when we are leaving contaminants or 01:05:58
possibly leaving contaminants in the ground or 01:06:02
wherever on the property that exceed guidance level. 01:06:05
A MAN: Are you making a motion. 01:06:10
CO-CHAIR HARE: Okay, is there a 01:06:11
second. 01:06:12
A MAN: Right here. 01:06:14
Rich Pfaender, here for Supervisor 01:06:15
John Venditto of the Town of Oyster Bay. I'm 01:06:18
seconding it. 01:06:21
CO-CHAIR HARE: It has been moved and 01:06:22
seconded, that the RAB would pursue an independent 01:06:23
application for the TAPP program which would be, and 01:06:30
the subject of the application and the study would 01:06:36
be delineated in the application, which would 01:06:41
address specific areas having to do with the dry 01:06:44
wells. Hopefully. 01:06:47
A MAN: Wherein they exceed, wherein 01:06:51
it is proposed to leave the contaminants that exceed 01:06:54
the guidelines. 01:06:59
CO-CHAIR HARE: We know what the 01:07:06
motion is. Is there any further discussion. 01:07:08

A MAN: So we don't limit ourselves 01:07:11
to the dry wells. 01:07:13
MR. SCHARF: To the site. 01:07:15
CO-CHAIR HARE: Okay, are you ready 01:07:17
for the question? All those in favor, signify by 01:07:18
raising your right hand. 01:07:24
(Show of hands)
CO-CHAIR HARE: Those opposed? The 01:07:26
motion is carried. 01:07:29
Jim, give him the brochure, please. 01:07:31
A MAN: The process is there so the 01:07:40
RAB sends it in, completes the application. 01:07:42
CO-CHAIR HARE: You complete the 01:07:46
application. 01:07:47
A MAN: Who in this body is the actual 01:07:49
completer of the application. 01:07:51
CO-CHAIR HARE: I'm looking at him. 01:07:54
A MAN: Okay. 01:07:56
MR. COLTER: The DOD proponents send 01:07:57
it. 01:08:00
CO-CHAIR HARE: It has to come to us. 01:08:00
What I recommend is that you write up the proposal. 01:08:02
When you're ready, give us a call, say okay, we are 01:08:04
ready, we think this is in the right form and it's 01:08:08

ready to go. And we have to forward it and we will 01:08:13
do that. I'll make sure that it gets there as soon 01:08:16
as possible. 01:08:20
A MAN: You have had some experience 01:08:21
in this, obviously and many of the RAB members 01:08:22
haven't, myself included. To the best of our 01:08:26
ability we are going to do this. We seek your 01:08:28
guidance. We don't want to send in a defective 01:08:31
application for the sake of -- 01:08:34
MR. COLTER: Do you have a copy 01:08:37
machine here? 01:08:38
A MAN: There may be. 01:08:40
MR. SCHARF: I wanted to say for the 01:08:41
record, the program is not clear and it is not well 01:08:43
explained, and the guidance as to what it applies 01:08:46
to. You can see it in the confusion of the members 01:08:48
of the board. You, as a member of a civilian 01:08:52
project manager for the Navy, may want to give some 01:08:56
feedback to better explain this. 01:09:00
CO-CHAIR HARE: My card is here. 01:09:02
They can call me at any time. They know how to get 01:09:03
a hold of Jim. We'll be back and forth on the phone 01:09:06
with them. We'll try to help them as much as we 01:09:11
can. That is why we are here. Absolutely. 01:09:14

Absolutely. We'd be more than happy to do that. 01:09:17

MR. SCHARF: Part of the frustration 01:09:20
exhibited here, as John had mentioned -- years ago, 01:09:21
last May. 01:09:24

A MAN: I don't think it is 01:09:26
frustration. I think it is confusion. 01:09:27

CO-CHAIR HARE: Think it is 01:09:30
confusion. 01:09:30

MR. SCHARF: Okay. 01:09:32

CO-CHAIR HARE: Here's my card. Call 01:09:34
me. I think you know how to get a hold of Jim. 01:09:36
We'll try to answer any questions you have. And 01:09:39
we'll get it up to the right office as soon as it is 01:09:42
ready to go, okay? 01:09:47

Okay. I think that pretty much 01:09:51
concluded all the action items, right? That we 01:09:54
had? 01:09:58

There is one other item that I did 01:10:11
want to bring up. The Department of the Navy, and 01:10:13
specifically the Chief of Naval Operations, is 01:10:17
sponsoring a workshop on Restoration Advisory Board 01:10:22
and Technical Review Committee installation and 01:10:27
community co-chairs instruction and information. 01:10:31
This event is going to take place on the 18th of May 01:10:37

through the 20th of May at the Denver Marriott Tech 01:10:43
Center in Denver, Colorado. This is an invitation 01:10:49
type workshop that is sent out to community 01:11:02
co-chairs and obviously Navy co-chairs. I will be 01:11:02
in attendance at this. 01:11:05

Since Jim McBride is not here, we 01:11:09
will try to fax this to him right away, get this to 01:11:12
him. If he is unable to attend he can have a 01:11:16
substitute that could attend for him. This type of 01:11:21
workshop is very informative, it is really a good 01:11:28
thing to attend. 01:11:32

MR. SCHARF: I assume the Navy is 01:11:37
paying the cost for that. 01:11:38

CO-CHAIR HARE: For one person only. 01:11:41

So if for whatever reason he can't 01:11:43
attend, he might ask one of you if you would want to 01:11:45
go in his stead. And I think that is all we need to 01:11:49
say on it then in that case. 01:11:53

Is there anything else this evening? 01:12:25

MR. SCHARF: Jim, is there anything 01:12:30
else you wanted to add. You asked me to make a few 01:12:30
quick statements to update. 01:12:34

DEC held a public meeting the 13th of 01:12:37
December, on the Proposed Remedial Action Plan for 01:12:41

Operable Unit 2, the Northrop Grumman and Navy 01:12:45
Weapons Industrial Reserve Plants for the upgradient 01:12:48
to groundwater issues. Comments were taken at that 01:12:53
time. On the proposed plan, which was to contain 01:12:56
the groundwater on the Navy and the plant and then 01:13:00
the Grumman plant sites, treat the elevated areas of 01:13:03
contamination off-site, do a long-term monitoring 01:13:08
program, also do a well head treatment efficiency 01:13:12
program in the event that any other well, municipal 01:13:17
well party supplies, might be affected. 01:13:21

We reviewed all the comments on our 01:13:23
proposed plan. We are drafting what is called a 01:13:26
Record Of Decision. And we are hoping to execute 01:13:30
that Record Of Decision within the next few weeks. 01:13:32
I don't know if there's any questions on that 01:13:38
document that was issued. It is available in the 01:13:41
library, Bethpage Library, if anybody wants to look 01:13:43
at it. I think a lot of good questions came up, not 01:13:47
just from the general public, but from water 01:13:52
districts downgradient from the Grumman Plant, that 01:13:56
might potentially at some point in time become 01:13:58
affected by the off-site migration of groundwater 01:14:01
contamination. 01:14:07

That's where we are at right now. 01:14:09

That document, once it is signed, will bring a 01:14:13
closure to all the remedial work for this site. And 01:14:16
it will detail work -- part of which I'm finding out 01:14:20
tonight the Navy is making a commitment to 01:14:24
implement. Part of the remedies that are detailed 01:14:27
in that document are already in place. Others are 01:14:29
being prepared now. That's it. Any questions that 01:14:32
anyone might have on the groundwater issues. 01:14:38

A MAN: I have a question. On that 01:14:41
assisted living, proposed center, is that right 01:14:43
across from it. Right here on South Oyster Bay 01:14:50
Road? 01:14:54

A MAN: That is not assisted. That 01:14:55
is senior citizen. 01:14:58

A MAN: It is in the same area. 01:15:00

A MAN: Old South Oyster Bay Road, 01:15:04
South Oyster Bay Road. Where the soccer field. 01:15:07

MR. SCHARF: We are talking about 01:15:13
contamination. 01:15:14

A MAN: People are going to be 01:15:15
asking questions, isn't it close to that site? We 01:15:16
are going to have the question. 01:15:20

MR. SCHARF: Yeah. Put the map up 01:15:22
real quick. You wouldn't happen to have a map of 01:15:24

the groundwater plume, would you, Jim. 01:15:31
Roy, would you show me on the map. 01:15:43
A MAN: It's where the old guard 01:15:46
shack used to be, up Plant 28? 01:15:48
CO-CHAIR HARE: The main one? The 01:15:52
brick building? Third shack. 01:15:55
A MAN: Where we had the meetings. 01:15:59
There is a triangle there. Just north of the 01:16:01
railroad. Right there. 01:16:04
MR. SCHARF: They are putting a 01:16:08
senior assist -- 01:16:09
A MAN: Assisted living 125 feet -- 01:16:12
MR. SCHARF: Contamination in the 01:16:16
groundwater is, the source water is back here, back 01:16:17
behind here from Plant 2, and over here from an old 01:16:21
recharge area that has been cleaned out. The 01:16:24
containment system is down here, where it operates 01:16:27
in the groundwater. All these buildings have been 01:16:30
cleaned out from all their former chemical 01:16:34
manufacturing processes that Grumman conducted over 01:16:37
the last 50 years. This area is not impacted. 01:16:40
A MAN: I realize. The public is 01:16:44
going to be concerned. 01:16:46
MR. SCHARF: Sure, as they come up, 01:16:48

they'll have to be addressed. 01:16:49
A MAN: Anyway, it is right here. 01:16:51
MR. SCHARF: Okay, yeah, that's 01:16:53
fine. That was the same questions that were brought 01:16:55
up. The end of the runway is now Sunny Lane 01:16:56
Townhouses Condominium Community. Monitoring wells 01:17:01
in the groundwater, we have containment system 01:17:06
nearby. Rightfully so, the people are concerned. 01:17:10
The groundwater is 50 feet below grade, and it is 01:17:19
monitored on a quarterly basis. We are tracking the 01:17:19
plume. According to Nassau County regulations, all 01:17:20
municipal water supply wells are checked on a 01:17:25
monthly basis. Those wells that have been partially 01:17:28
impacted all have treatment on them and there is no 01:17:31
route of, exposure to the public to these 01:17:34
contaminants. 01:17:37
But it is definitely an area to be 01:17:38
concerned about to make sure, you know, they have 01:17:41
been addressed or will be, or will be addressed. 01:17:43
CO-CHAIR HARE: If you know some 01:17:49
folks who have questions, who haven't attended other 01:17:52
meetings. 01:17:56
A MAN: That is the first question 01:17:59
they ask. 01:18:01

CO-CHAIR HARE: Invite them to come 01:18:03
to the RAB. 01:18:04
MR. SCHARF: In our discussions about 01:18:06
contamination in different areas of the Navy 01:18:08
property, there's a lot of information, a lot of 01:18:11
acts over 10 years, starting with the closure of the 01:18:15
property. It was a major facility, a lot of 01:18:17
manufacturing processes there were ongoing, a lot of 01:18:21
effort on the part of Grumman and the Navy to take 01:18:24
the facility apart to -- and closure. A lot of work 01:18:28
has been done on their part, and a lot of reports 01:18:33
have been generated. I've looked at a lot of them. 01:18:36
My comments are in to the Navy. We are working on 01:18:39
resolving those comments and the closure documents 01:18:42
for the plants and plant sites themselves. 01:18:45
Currently the Plant 3 area is up for 01:18:48
transfer of the property, and that's going to be the 01:18:51
next issue we work on after we get the groundwater 01:18:54
remedy document signed. 01:18:58
A MAN: It looks like another year 01:19:01
before it is signed off. 01:19:03
MR. SCHARF: Within the next two 01:19:05
weeks, it will be done. It's within the final draft 01:19:06
stage. We've looked at all the comments from the 01:19:09

water district, from the public at large. Some of 01:19:12
the major comments were from the water district's 01:19:16
standpoint. They want to have the prerogative to 01:19:19
make their own decisions on what they do with their 01:19:23
water supply, that is understandable. So we have 01:19:26
modified our document to address those concerns. 01:19:29
Also there was some other concerns that we 01:19:32
identified one area, that Mr. Colter was making, 01:19:34
about GM 30 area, where deep groundwater 01:19:38
contamination at higher levels are addressed by this 01:19:42
program. 01:19:47
The question came up are there other 01:19:48
areas like that. The way we looked at that, we are 01:19:50
going to have an independent report put together 01:19:52
after the RCRA decision is signed. Part of the work 01:19:55
plan that goes along with that, to verify that, 01:19:57
based on all the information that is available now 01:20:00
and the additional information the Navy is gathering 01:20:03
under vertical profile boring. It's no small task 01:20:06
the Navy undertaking. Each boring is going down to 01:20:10
Raritan clay, 850 feet. Each boring costs over a 01:20:14
quarter million dollars. 01:20:21
MR. COLTER: 170. 01:20:25
MR. SCHARF: Does that include 01:20:25

analyses. It is a large area. You know, so that's 01:20:26
just to make that clear. 01:20:30

A MAN: So we could be clear, so we 01:20:32
don't cloud issues. The areas that have the 01:20:34
contamination are being retained in title by the 01:20:36
Navy, so when you talk. 01:20:39

MR. COLTER: Soil. Not groundwater. 01:20:43
When we talk transfer, those areas that are being 01:20:46
transferred.

CO-CHAIR HARE: Are clean. 01:20:50

A MAN: Are clean. So not to -- I 01:20:51
just have the concern that if the community starts 01:20:53
feeling that we are transferring -- the part. 01:20:57

CO-CHAIR HARE: We can only transfer 01:21:00
what has already been given a clean bill of health 01:21:03
by the state. 01:21:06

A MAN: Right. 01:21:08

CO-CHAIR HARE: That is the only 01:21:09
part. 01:21:10

A MAN: My understanding, some 01:21:12
misinformation circulated in the community. This 01:21:14
addressed this. 01:21:18

MR. SCHARF: Areas that are being 01:21:19
transferred have been certified okay to transfer. 01:21:20

Approximately 75 percent of the groundwater 01:21:24
contamination in terms of solvents still remains on 01:21:27
the site mainly because of the pumping by Northrop 01:21:31
Grumman, kept draining it down and bringing it back 01:21:36
up.

Off-site in a dilute phase, are 01:21:39
generally solvents that are insoluble in water, but 01:21:42
certain degree of the insoluble, as they move along, 01:21:46
because they are heavier than water, they sink. 01:21:49
That is why we are finding them down deeper as they 01:21:51
move off-site. 01:21:55

Unfortunately, this is a problem in 01:21:56
Nassau County, in a number of distinct locations, 01:21:59
and so the county health department is aware of 01:22:04
these problems. They have a number of monitoring 01:22:07
wells around. It's not something that is just idly 01:22:10
going by. This is a very serious issue and so 01:22:14
everybody is aware of that, tracking these plumes, 01:22:18
and we are monitoring them as they attenuate to make 01:22:21
sure they don't impact anybody. 01:22:25

If the water supply does get 01:22:27
impacted, we have to look at a choice of 01:22:29
alternatives of what they're going to have to be 01:22:31
able to do to make sure their supply, they always 01:22:35

provide water that is safe to drink. 01:22:46

Along those lines, the Navy and 01:22:46
Grumman have made a commitment that if there is a 01:22:46
water supply that is affected or impacted, they will 01:22:47
be able to provide treatment that is non-detect to 01:22:54
current standards under the Nassau County Health 01:22:57
Code. I'm not sure of the code regulation number. 01:23:00
It is in that book. Also under Part Five, Drinking 01:23:06
Water Standards of New York State Department of 01:23:10
Health. Non-detect is at .5 micrograms per liter. 01:23:13

A MAN: In the event that those 01:23:19
standards change within a reasonable amount of time, 01:23:20
will they also be reflected to. 01:23:24

MR. SCHARF: This number is well 01:23:27
below standard. The standard has not changed. 01:23:29

A MAN: I understand. With all the 01:23:33
new studies that are being conducted, if there are 01:23:35
changes, will these be reflected in the treatment. 01:23:37

MR. SCHARF: The water supplies will 01:23:43
always have to produce water that is potable water. 01:23:45
The water supplies by law must meet that. And if 01:23:50
the standards change and -- the treatment will have 01:23:55
to be modified to make sure that standards are 01:24:01
always met. However in this case, given the current 01:24:04

standard and the foreseeable future, that will 01:24:11
remain that way. The two responsible parties have 01:24:14
agreed to provide water that is non-detect. That 01:24:18
was a big point to water districts downgradient, now 01:24:21
becoming aware that they may be potentially 01:24:25
impacted. 01:24:29

Also for the public to keep in mind, 01:24:32
there is right now 80 water supply wells in Nassau 01:24:34
County that have been impacted by similar solvents 01:24:39
and they have been -- they have treatment and they 01:24:42
provided water that is safe to drink. It is a 01:24:45
problem that is ongoing in other water supplies 01:24:48
around the state and around the country, for that 01:24:52
matter, unfortunately. We work to clean up the 01:24:54
sources, to protect the water supply with programs 01:24:57
to clean up the entire plume, not monitor. 01:25:02

CO-CHAIR HARE: Thank you. Are there 01:25:07
any other issues? 01:25:11

Yes, sir. 01:25:11

A MAN: I have a request. If we 01:25:12
can, can we have a two week notification prior to 01:25:15
the next and other RABs? In other words, what 01:25:18
happens is, for example we got this on Thursday. 01:25:23
Rather short. One time before, I had it on a 01:25:29

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Wednesday, the thing was to have a tour on a Friday 01:25:31 or a Saturday. I think a minimum of two weeks. 01:25:35

CO-CHAIR HARE: When are we sending 01:25:40 out these notification. 01:25:42

MR. COLTER: What happened, we tried 01:25:44 to contact your RAB co-chairman about four weeks 01:25:45 prior to when you got your notice. We weren't able 01:25:48 to get a hold of him to find out when it was a good 01:25:52 night for him and for the community members at 01:25:56 large. We -- he didn't return our phone calls or 01:26:00 anything. We weren't sure if we were going to have 01:26:04 a Bethpage RAB. We amongst ourselves decided we 01:26:07 because we can't get a hold of RAB co-chair, we are 01:26:11 going to do it without him. That is why we sent the 01:26:13 emails out. 01:26:17

CO-CHAIR HARE: We'll take the hit. 01:26:18

A MAN: Don't worry -- that 01:26:20 address -- 01:26:22

CO-CHAIR HARE: I will take the hit. 01:26:23 Let me explain because of that problem, it looked 01:26:24 like we weren't going to have a RAB up here at this 01:26:28 time. I had to come up here because I have a 01:26:32 meeting with Nassau County on Thursday. I have a 01:26:35 RAB to do out on the East End of Long Island and I 01:26:40

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said, wait a minute, I'm not going to shortchange 01:26:43 the people in Bethpage. And even if my co-chair 01:26:47 can't attend or whatever, I feel that we have enough 01:26:54 to talk about that we can have this RAB. So that is 01:26:56 probably why at least this time around you didn't 01:27:01 get the notice with a lot of time. 01:27:04

A MAN: The RAB meets on a quarter 01:27:09 basis. You can probably peg it for the next five 01:27:10 meetings with your office right now, right? 01:27:13

CO-CHAIR HARE: Will assure you that 01:27:17 I, this is something that's personal with me. I 01:27:18 want those notices to go out well in advance. This 01:27:22 time we did have an unusual set of circumstances we 01:27:25 were working with. 01:27:29

MR. COLTER: If you recall, there was 01:27:31 an agreement that we would call the co-chair about 01:27:32 30 days prior, talk to him about agenda items and 01:27:35 hopefully he has been talking to you within the 01:27:38 three month period to say what do you want to 01:27:41 discuss, that gives us four weeks to prepare a 01:27:43 presentation. 01:27:46

A MAN: The answer is yes. 01:27:47

MR. COLTER: We couldn't get a hold 01:27:49 of him to set an agenda. 01:27:50

Proceedings

A MAN: One meeting Mr. Scharf and I 01:27:54 were in the Bethpage Public High School, waiting for 01:27:56 the meeting, only to find out that everybody else 01:27:59 was notified and we weren't notified, it was 01:28:03 canceled. 01:28:05

A MAN: We are going to have a 01:28:08 meeting. We are going to have a notice. Everybody 01:28:09 is going to work towards that goal. Before we go, I 01:28:12 want to say that regarding this application process, 01:28:15 what the several members are going to attempt to do 01:28:19 is get as many people that can attend everybody is 01:28:22 invited, including everyone from the Navy, over the 01:28:28 next week or so, to start looking at the 01:28:29 application. Steve Scharf has offered to assist and 01:28:34 to what extent anyone wants to assist, we will be 01:28:38 setting up the meeting. We'll get in touch with Jim 01:28:42 McBride, who I understand, who has everyone's name 01:28:46 and number. We'll do it be email. 01:28:49

CO-CHAIR HARE: All the members 01:28:52 should have a complete list. In your RAB book, your 01:28:53 original RAB book, you should have. 01:28:57

I don't know if everybody had email 01:29:01 addresses on there. 01:29:02

A MAN: Every effort will be made 01:29:04

Proceedings

with the abbreviated resources that we all have, to 01:29:05 have the subcommittee meetings to move ahead. 01:29:08

CO-CHAIR HARE: Anything else come 01:29:12 before the RAB at this time? If not the meeting is 01:29:13 adjourned. 01:29:17

(Time noted: 8:40 p.m.) 01:29:19

-o0o-

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

October 25, 2000
NWIRP Bethpage - Security Building - Bethpage, NY
7:00 p.m.

Welcome and Agenda Review
Judithanne Hare
Naval Air Systems Command

Review and Approval of Minutes
All Members

Update on Activities at NWIRP Bethpage (IR Site 1 and FOST)
Jim Colter
Naval Facilities Engineering Command - Northern Division

Summary of Recent Groundwater Monitoring Well Installation Program
David Brayack
Tetra Tech NUS

Dates and Discussion Topics for Future Meetings
All Members

Closing Remarks
Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

February 17, 2000
Bethpage Community Center – Bethpage, NY
7:00 p.m.

Welcome and Agenda Review
Judithanne Hare
Naval Air Systems Command

Review and Approval of Minutes
All Members

Navy's Groundwater Investigation
Dave Brayack
Tetra Tech NUS, Inc.

AS/SVE Operation at Site 1
Marlene Lindhardt
Foster Wheeler Environmental Corporation

Update on Activities at NWIRP Bethpage and February 7 Technical Meeting
Jim Colter
Naval Facilities Engineering Command - Northern Division

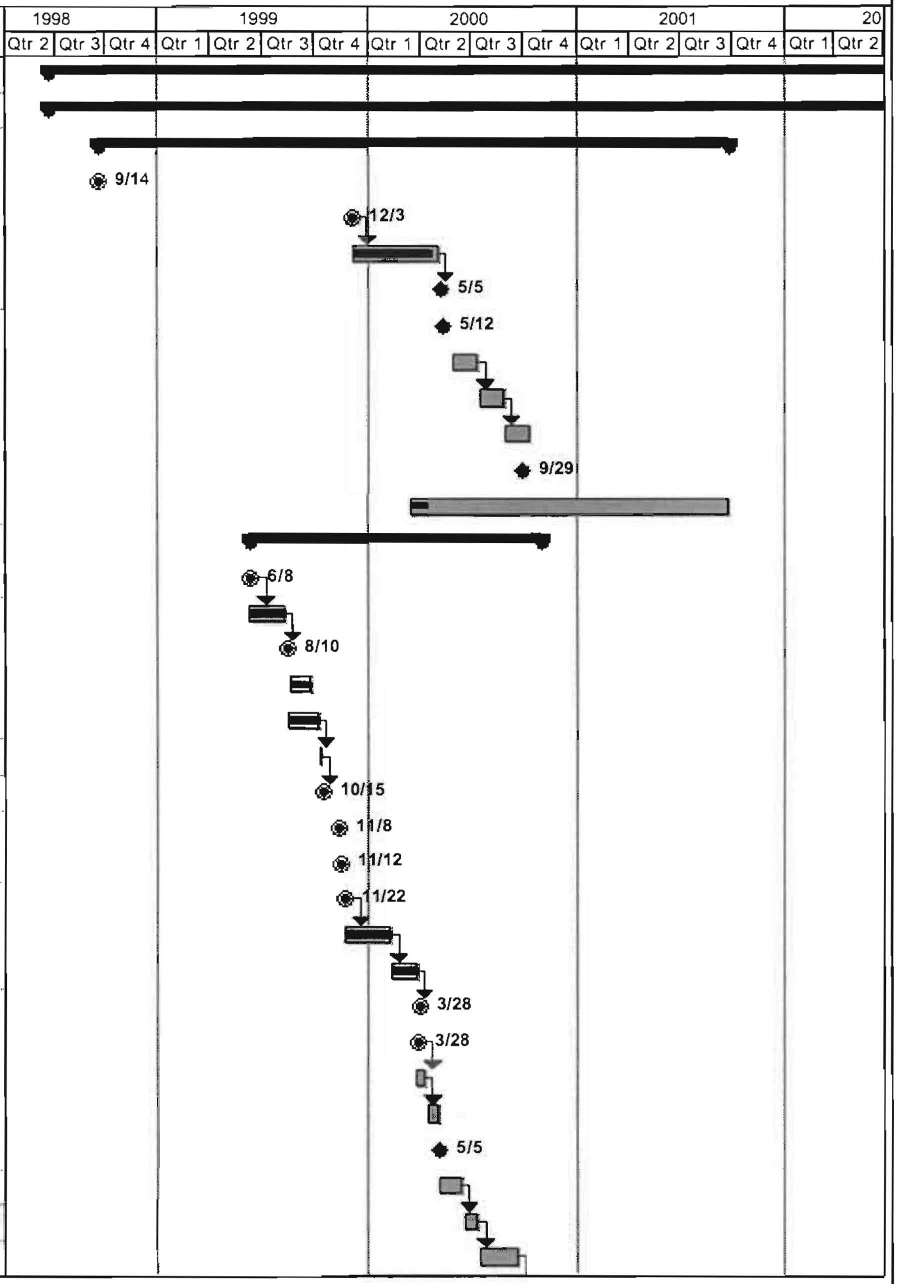
Dates and Discussion Topics for Future Meetings
All Members

Closing Remarks
Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.

ENVIRONMENTAL DOCUMENTATION FOR NWIRP BETHPAGE CONVEYANCE

ID	Task Name	Duration	Start	Finish
1	**ENVIRONMENTAL DOCUMENTATION TIMELINE**	**1117 days**	**Fri 6/19/98**	**Tue 10/1/02**
2	**INSTALLATION RESTORATION PROGRAM**	**1117 days**	**Fri 6/19/98**	**Tue 10/1/02**
3	**Regional Groundwater**	**795 days**	**Mon 9/14/98**	**Fri 9/28/01**
4	Startup of Pump & Treat Containment System (IRM)	0 days	Mon 9/14/98	Mon 9/14/98
5	Draft Groundwater FS Submitted for Comment	0 days	Fri 12/3/99	Fri 12/3/99
6	Review Period for Draft FS	110 days	Mon 12/6/99	Fri 5/5/00
7	Submit Final Groundwater FS	0 days	Fri 5/5/00	Fri 5/5/00
8	NYSDEC Issues Preferred Remedial Action Plan (PRAP)	0 days	Fri 5/12/00	Fri 5/12/00
9	Public Comment Period	32 days	Thu 6/1/00	Fri 7/14/00
10	NYSDEC Prepares Responsiveness Summary	34 days	Mon 7/17/00	Thu 8/31/00
11	PRPs Review NYSDEC Groundwater ROD	30 days	Fri 9/1/00	Thu 10/12/00
12	NYSDEC Signs Groundwater ROD	0 days	Fri 9/29/00	Fri 9/29/00
13	Navy Installs GW Monitoring Wells	400 days	Mon 3/20/00	Fri 9/28/01
14	**Drywells 20-08 & 34-07**	**369 days**	**Tue 6/8/99**	**Fri 11/3/00**
15	NGC Awards Subcontract for Fieldwork	0 days	Tue 6/8/99	Tue 6/8/99
16	Draft Workplan Prepared for Initial Fieldwork	45 days	Tue 6/8/99	Mon 8/9/99
17	Draft Workplan for Initial Fieldwork Submitted to NYSDEC	0 days	Tue 8/10/99	Tue 8/10/99
18	NYSDEC & NYSDOH Submit Comments on Workplan	27 days	Thu 8/19/99	Fri 9/24/99
19	Initial Fieldwork Conducted	37 days	Tue 8/17/99	Wed 10/6/99
20	NGC Prepares Report of Results for Initial Fieldwork	6 days	Thu 10/7/99	Thu 10/14/99
21	NGC Submits Report of Results to NYSDEC	0 days	Fri 10/15/99	Fri 10/15/99
22	Draft Phase 2 Workplan to NYSDEC	0 days	Mon 11/8/99	Mon 11/8/99
23	NYSDEC Issues Comments to NGC on Draft Phase 2 Workp	0 days	Fri 11/12/99	Fri 11/12/99
24	NGC Issues Final Phase 2 Workplan to NYSDEC	0 days	Mon 11/22/99	Mon 11/22/99
25	Phase 2 Fieldwork Conducted	60 days	Mon 11/22/99	Fri 2/11/00
26	NGC Prepares Letter Report of Results	32 days	Mon 2/14/00	Tue 3/28/00
27	Letter Report of Results submitted to NYSDEC	0 days	Tue 3/28/00	Tue 3/28/00
28	Draft Phase 3 Workplan to NYSDEC (Same Report as Above	0 days	Tue 3/28/00	Tue 3/28/00
29	NYSDEC Review	14 days	Tue 3/28/00	Fri 4/14/00
30	Conduct Phase 3 Fieldwork	15 days	Mon 4/17/00	Fri 5/5/00
31	Proceed w/ IR Boundary Survey (see Real Estate Timeline)	0 days	Fri 5/5/00	Fri 5/5/00
32	Prepare Phase 3 Report of Results	30 days	Mon 5/8/00	Fri 6/16/00
33	NYSDEC Review of Phase 3 Report	20 days	Mon 6/19/00	Fri 7/14/00
34	Prepare Draft CMS (Including Exposure Assessment)	50 days	Mon 7/17/00	Fri 9/22/00



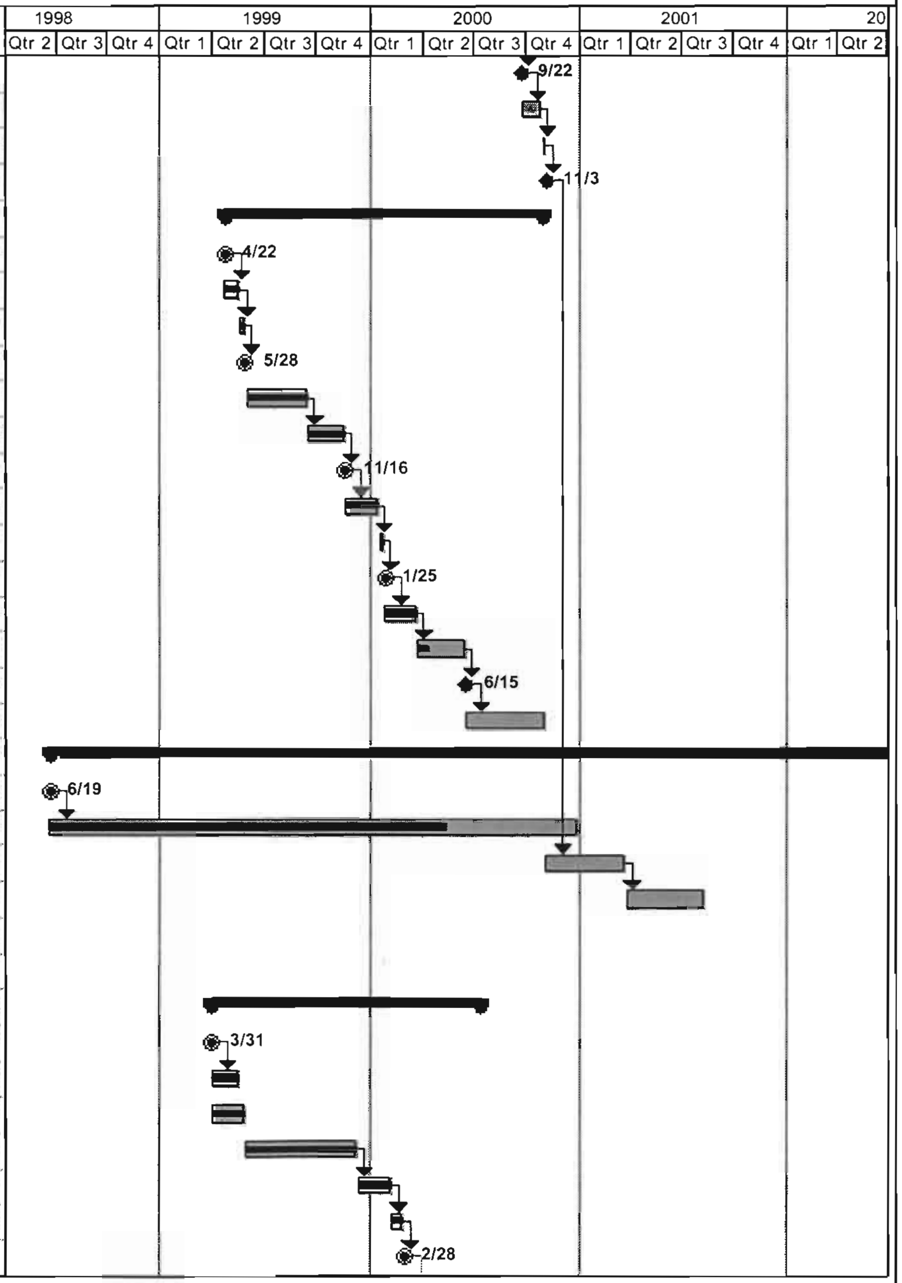
Northern Division Environmental
POC: Jim Colter (Code 1821/JLC)
Phone: (610) 595-0567, x163

Summary	▬	Progress	▬	Milestone Complete ◉
Task	▭	Milestone	◆	

Date Revised: 9 May 2000

ENVIRONMENTAL DOCUMENTATION FOR NWIRP BETHPAGE CONVEYANCE

ID	Task Name	Duration	Start	Finish
35	Submit Draft CMS to NYSDEC	0 days	Fri 9/22/00	Fri 9/22/00
36	Regulatory Review of Draft CMS	25 days	Mon 9/25/00	Fri 10/27/00
37	Submit Final CMS	5 days	Mon 10/30/00	Fri 11/3/00
38	Drywells Turned over to Navy's IR Program for Remediation	0 days	Fri 11/3/00	Fri 11/3/00
39	**AOC 22 - Former Underground Storage Tank Site**	**401 days**	**Thu 4/22/99**	**Thu 11/2/00**
40	Draft Workplan Submitted to NYSDEC	0 days	Thu 4/22/99	Thu 4/22/99
41	Regulatory Review of Draft Workplan	19 days	Thu 4/22/99	Tue 5/18/99
42	Incorporate Regulator Comments	8 days	Wed 5/19/99	Fri 5/28/99
43	Submit Final Workplan to NYSDEC	0 days	Fri 5/28/99	Fri 5/28/99
44	Conduct Fieldwork	75 days	Thu 6/3/99	Wed 9/15/99
45	Prepare Internal Draft Report of Results	44 days	Thu 9/16/99	Tue 11/16/99
46	Submit Internal Draft Report to Navy	0 days	Tue 11/16/99	Tue 11/16/99
47	Navy Review Period	43 days	Wed 11/17/99	Fri 1/14/00
48	Navy Comments Incoroporated	7 days	Mon 1/17/00	Tue 1/25/00
49	Draft Report of Results Submitted to Regulators/RAB	0 days	Tue 1/25/00	Tue 1/25/00
50	Regulatory Review Period	42 days	Wed 1/26/00	Thu 3/23/00
51	***Regulatory Comments Incorporated***	60 days	Fri 3/24/00	Thu 6/15/00
52	Final Report of Results Submitted	0 days	Thu 6/15/00	Thu 6/15/00
53	Prepare CMS for Remedial Alternatives	100 days	Fri 6/16/00	Thu 11/2/00
54	**IR Site 1 - Former Drum Marshaling Area**	**1117 days**	**Fri 6/19/98**	**Tue 10/1/02**
55	Construction of Air Sparging/Soil Vapor Extraction System	0 days	Fri 6/19/98	Fri 6/19/98
56	Operation of AS/SVE System	661 days	Fri 6/19/98	Fri 12/29/00
57	Soil Excavation Discussions with NYSDEC	100 days	Mon 11/6/00	Fri 3/23/01
58	Re-Issue ROD for Operable Unit (OU) 1- Soils	100 days	Mon 3/26/01	Fri 8/10/01
59	Funding Budgeted for Amended Soils Removal	0 days	Tue 10/1/02	Tue 10/1/02
60				
61	**ENVIRONMENTAL BASELINE SURVEY**	**338 days**	**Wed 3/31/99**	**Fri 7/14/00**
62	Submit Draft Phase 2 EBS Report (includes Plant 05)	0 days	Wed 3/31/99	Wed 3/31/99
63	Regulatory Review (U.S. EPA/No Response from NYSDEC)	34 days	Thu 4/1/99	Tue 5/18/99
64	Navy Review (NorthDiv/Northrop Grumman/J.A. Jones)	41 days	Thu 4/1/99	Thu 5/27/99
65	Prepare Pre-Final Phase 2 EBS	141 days	Fri 5/28/99	Fri 12/10/99
66	NYSDEC Reviews Pre-Final & Submits Comments	44 days	Mon 12/13/99	Thu 2/10/00
67	TtNUS Prepares Draft Responses to NYSDEC Comments	12 days	Fri 2/11/00	Mon 2/28/00
68	*TtNUS Submits Draft Responses to NorthDiv & JA Jones*	0 days	Mon 2/28/00	Mon 2/28/00



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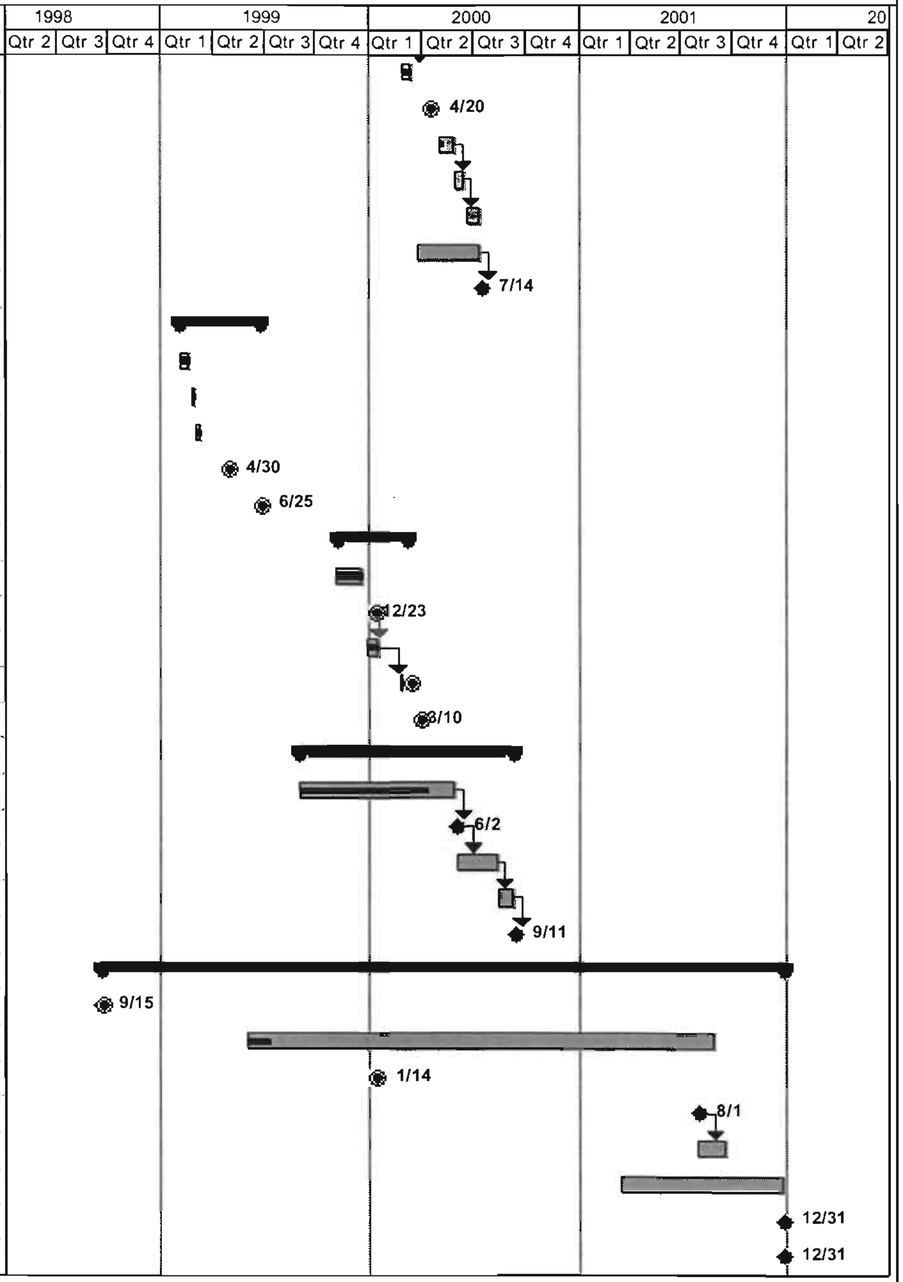
Summary	▬	Progress	▬	Milestone Complete	◉
Task	▭	Milestone	◆		

Date Revised: 9 May 2000

ENVIRONMENTAL DOCUMENTATION F NWIRP BETHPAGE CONVEYANCE

ID	Task Name	Duration	Start	Finish
69	*JA Jones Review Period*	14 days	Tue 2/29/00	Fri 3/17/00
70	*Navy Submits Draft Responses to Northrop Grumman*	0 days	Thu 4/20/00	Thu 4/20/00
71	*Northrop Grumman Review*	21 days	Wed 5/3/00	Wed 5/31/00
72	Navy Submits Pre-Final Comment Responses to NYSDEC	12 days	Thu 6/1/00	Fri 6/16/00
73	Comment Resolution with NYSDEC	20 days	Mon 6/19/00	Fri 7/14/00
74	Prepare Final Phase 2 EBS Report	80 days	Mon 3/27/00	Fri 7/14/00
75	**Submit Final Phase 2 EBS Report**	**0 days**	**Fri 7/14/00**	**Fri 7/14/00**
76	**FINDING OF SUITABILITY FOR EARLY TRANSFER (FOSET)**	**104 days**	**Mon 2/1/99**	**Fri 6/25/99**
77	Develop Draft Point Paper	15 days	Mon 2/1/99	Fri 2/19/99
78	NAVAIR review of Draft	6 days	Mon 2/22/99	Mon 3/1/99
79	Incorporate NAVAIR Comments	7 days	Mon 3/1/99	Tue 3/9/99
80	Receive NAVAIR Letter of Intent to Divest Bethpage	0 days	Fri 4/30/99	Fri 4/30/99
81	Receive County Ltr Stating their Desire not to use CDR	0 days	Fri 6/25/99	Fri 6/25/99
82	**FINDING OF SUITABILITY TO LEASE FOR PLANTS 5 & 20**	**90 days**	**Fri 11/5/99**	**Fri 3/10/00**
83	Development of Draft FOSL	35 days	Fri 11/5/99	Thu 12/23/99
84	Submit Draft FOSL to Regulators	0 days	Thu 12/23/99	Thu 12/23/99
85	Regulatory Review of Draft FOSL	20 days	Mon 12/27/99	Mon 1/24/00
86	Incorporate Comments into Final FOSL	5 days	Fri 2/25/00	Thu 3/2/00
87	**Final FOSL Signed by CO NorthDiv (FOSL Complete)**	**0 days**	**Fri 3/10/00**	**Fri 3/10/00**
88	**FINDING OF SUITABILITY TO TRANSFER FOR 105-ACRES**	**269 days**	**Wed 9/1/99**	**Mon 9/11/00**
89	Development of Draft FOST/EBST Excluding IR Parcel	198 days	Wed 9/1/99	Fri 6/2/00
90	Submit Draft FOST/EBST to Regulators	0 days	Fri 6/2/00	Fri 6/2/00
91	Regulatory Review of Draft FOST/EBST	50 days	Mon 6/5/00	Fri 8/11/00
92	Incorporate Comments into Final FOST/EBST	21 days	Mon 8/14/00	Mon 9/11/00
93	**Final FOST Signed by CO NorthDiv (FOST Complete)**	**0 days**	**Mon 9/11/00**	**Mon 9/11/00**
94	**FINDING OF SUITABILITY TO TRANSFER FOR PLANT 20**	**860 days**	**Tue 9/15/98**	**Mon 12/31/01**
95	NGC Remediation of Plant 20 Completed	0 days	Tue 9/15/98	Tue 9/15/98
96	Completion of Deactivation Requirements by NGC	589 days	Tue 6/1/99	Fri 8/31/01
97	Termination of NGC's Facilities Use Contract for Plant 20	0 days	Fri 1/14/00	Fri 1/14/00
98	Northrop Grumman Operationally Vacates Plant 20	0 days	Wed 8/1/01	Wed 8/1/01
99	Supplemental Inspection by Navy	35 days	Wed 8/1/01	Tue 9/18/01
100	FOST Process for Plant 20	206 days	Mon 3/19/01	Mon 12/31/01
101	Northrop Grumman Turns Plant 20 over to Navy	0 days	Mon 12/31/01	Mon 12/31/01
102	**Final FOST Signed by CO NorthDiv (FOST Complete)**	**0 days**	**Mon 12/31/01**	**Mon 12/31/01**



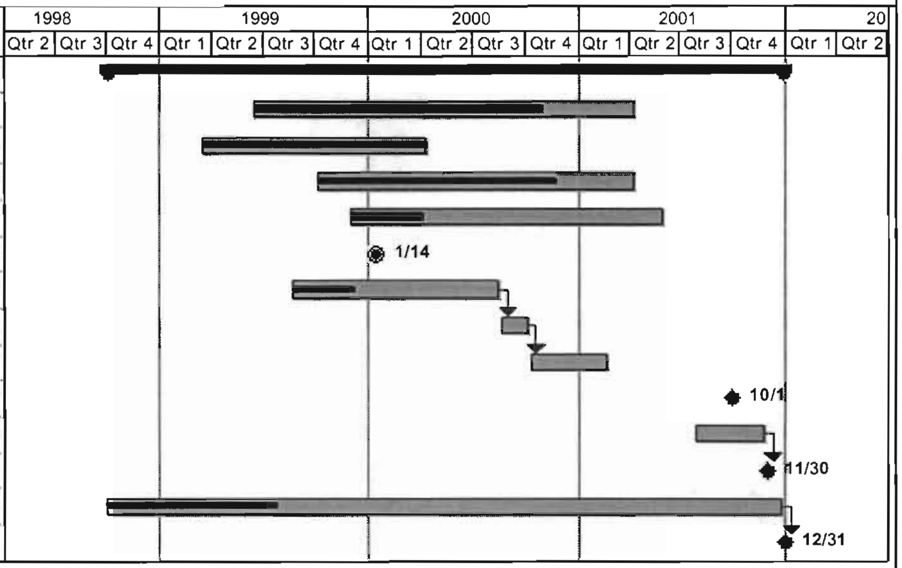
Northern Division Environmental
POC: Jim Colter (Code 1821/JLC)
Phone: (610) 595-0567, x163

Summary	▬	Progress	▬	Milestone Complete ●
Task	▨	Milestone	◆	

Date Revised: 9 May 2000

ENVIRONMENTAL DOCUMENTATION FOR NWIRP BETHPAGE CONVEYANCE

ID	Task Name	Duration	Start	Finish
103	**REQUIREMENTS FOR TRANSFER OF PLANT 5 (No FOST Required**	**848 days**	**Thu 10/1/98**	**Mon 12/31/01**
104	Redirect Illicit Drains	479 days	Tue 6/15/99	Fri 4/13/01
105	Decon Duct Work & Paint Tunnels	285 days	Mon 3/15/99	Fri 4/14/00
106	Remediation of Class I Real Property (Land) by NGC	400 days	Mon 10/4/99	Fri 4/13/01
107	Minor Lead-Based Paint Repairs	392 days	Wed 12/1/99	Thu 5/31/01
108	Termination of NGC's Facilities Use Contract for Plant 5	0 days	Fri 1/14/00	Fri 1/14/00
109	Removal of Structural Test Area Equipment	260 days	Mon 8/23/99	Fri 8/18/00
110	Supplemental Inspection by Navy	35 days	Mon 8/21/00	Fri 10/6/00
111	Prepare & Complete "FOST-Like" Report for 05	100 days	Mon 10/9/00	Fri 2/23/01
112	Northrop Grumman Operationally Vacates Plant 5	0 days	Mon 10/1/01	Mon 10/1/01
113	Asbestos Abatement to be Conducted by NGC	88 days	Wed 8/1/01	Fri 11/30/01
114	Completion of Navy's Environmental Obligations for Transfer	0 days	Fri 11/30/01	Fri 11/30/01
115	Completion of Deactivation Requirements by NGC	848 days	Thu 10/1/98	Mon 12/31/01
116	**Northrop Grumman Turns Plant 5 over to Navy**	**0 days**	**Mon 12/31/01**	**Mon 12/31/01**



Northern Division Environmental
POC: Jim Colter (Code 1821/JLC)
Phone: (610) 595-0567, x163

Summary	▬	Progress	▬	Milestone Complete	●
Task	▭	Milestone	◆		

Date Revised: 9 May 2000

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

September 30, 1999
Bethpage Community Center – Bethpage, NY
7:00 p.m.

Welcome and Agenda Review
Judithanne Hare
Naval Air Systems Command

Introduction of Members
All Members

Selection of Community Co-chairperson
Community Members

Board Responsibilities/Operating Procedures/Administrative Issues
Judithanne Hare
Naval Air Systems Command

Overview of the Environmental Program at NWIRP
Jim Colter
Naval Facilities Engineering Command - Northern Division

Dates and Discussion Topics for Future Meetings
All Members

Closing Remarks
Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.

DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
1421 JEFFERSON DAVIS HWY
ARLINGTON, VA 22243

IN REPLY REFER TO

AIR-80Y2A/2009
3 September 1999

RECEIVED
SEP 07 1999
Bureau of Eastern
Remedial Action

New York State DEC
50 Wolf Road, Room 208
Albany, NY 12233-7010
Attn: Steve Scharf

Dear Mr. Scharf;

On behalf of the Navy, I am requesting that your agency designate one (1) representative to participate on the Restoration Advisory Board (RAB) for the Naval Weapons Industrial Reserve Plant, Bethpage, New York. The RAB consists of representatives from the Navy, state and Federal environmental agencies, other groups, and the community. RAB members will be asked to serve a two (2) year term, meet at least quarterly, review and comment on technical environmental documents and plans, and be expected to serve as a liaison within the community. Please remember that the RAB is strictly voluntary and that all RAB meetings are open to the public.

The first meeting of the RAB will be held on Thursday, September 30, 1999 at 7:00 p.m., at the Bethpage Community Center, 103 Grumman Road West, Bethpage, New York. The meeting will feature an introduction of RAB members, selection of a community co-chair, and a presentation of RAB responsibilities, operating procedures, and administrative issues. The agenda for the meeting is attached. I have also attached a flier for the meeting that you may distribute. Meeting minutes will be mailed to all RAB members after the meeting.

Please contact Mr. James Colter at (610) 595-0567 extension 163 to inform him of who will be representing your agency on the RAB and whether that person will be able to attend the first RAB meeting. Please reply by **September 15, 1999**.

We look forward to continuing the working relationship you have with the Navy through your participation on the RAB.

Sincerely,

JUDITHANNE P. HARE
by Direction

Encl:
(1) September 30, 1999 Meeting Agenda
(2) Flier for September 30, 1999 Meeting

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

September 30, 1999
Bethpage Community Center – Bethpage, NY
7:00 p.m.

Welcome and Agenda Review
Judithanne Hare
Naval Air Systems Command

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All Members

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Community Members

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Judithanne Hare
Naval Air Systems Command

Overview of the Environmental Program at NWIRP
Jim Colter
Naval Facilities Engineering Command - Northern Division

Dates and Discussion Topics for Future Meetings
All Members

Closing Remarks
Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.

OVERVIEW OF NAVY'S INSTALLATION RESTORATION (IR) PROGRAM AT NWIRP BETHPAGE

prepared by
Northern Division, Naval Facilities
Engineering Command

September 30, 1999

CREATION OF THE NAVY'S IR PROGRAM

- Although acceptable for many years, the old industrial processes and ways of handling wastes are now known to be potentially damaging to the environment
- In 1975, the Department of Defense (DOD) took the first step to create a program to identify and clean up environmental problems at federal facilities

CREATION OF THE NAVY'S IR PROGRAM (Continued)

- In 1980, Congress enacted the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to address historic hazardous waste disposal and spill sites
- CERCLA consists of the following stages:
  - Preliminary Assessment (PA)
  - Site Investigation (SI)
  - Remedial Investigation (RI)
  - Feasibility Study (FS)
  - Record of Decision (ROD)
  - Remedial Design (RD)
  - Remedial Action (RA)

NAVY'S IR PROGRAM AT NWIRP BETHPAGE

- Navy's IR Program Commences - 1985
- Initial Assessment Study -1986
- Phase I Remedial Investigation -1992
- Federal & State Operating Permits Issued - 1992
- Phase II Remedial Investigation - 1993
- Feasibility Study - 1994
- Proposed Remedial Action Plan - 1994
- Record of Decision for Operable Unit 1 - 1995
- Remedial Design
- Remedial Action

NWIRP Bethpage IR PROGRAM
(Historic)

- INITIAL ASSESSMENT STUDY (IAS) - 1986
  - Identified 3 Areas of Concern:
    - Site 1 – Former Drum Marshaling Area
    - Site 2 – Recharge Basin Area
    - Site 3 – Salvage Storage Area
  - Chemicals detected in Soil and Groundwater at all 3 sites
  - Remedial Investigation Recommended

NWIRP Bethpage IR PROGRAM
(Historic)

- FEDERAL & STATE RCRA PERMITS ISSUED - 1992 CLEAN UP AUTHORITY REMAINED UNDER CERCLA

- REMEDIAL INVESTIGATION (RI) WORKPLAN APPROVED IN AUGUST 1991
  - Delineates the nature and extent of an area where contamination has been confirmed in any media (i.e. soil, groundwater, surface water, sediment)

NWIRP Bethpage IR PROGRAM
(Historic)

- CONDUCTED RI FIELDWORK IN 1992 AT:
  - Site 1: Former Drum Marshaling Area
  - Site 2: Recharge Basin Area
  - Site 3: Salvage Storage Area
- MAY 1992 - RI Report Finalized
  - Based on regulatory comments, concluded that enough data gaps existed to warrant a Phase II RI

NWIRP Bethpage IR PROGRAM
(Historic)

- NOVMEBER 1992 - Finalized Workplan for Phase 2 RI
- CALENDAR YEAR 1993
  - Conducted Phase 2 RI Fieldwork
  - Finalized Phase 2 RI Report in October
- CALENDAR YEAR 1994
  - Finalized Feasibility Study (FS) in March
  - Finalized Preferred Remedial Action Plan (PRAP) for Soils in October

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SOILS
OPERABLE UNIT 1
NWIRP BETHPAGE

- JULY 1995 - Navy & NYSDEC Sign Record of Decision (ROD) for Soils
  - Navy will Excavate PCB-contaminated Soils > 10 ppm at Site 2
    - » Completed in June 1996
  - Navy will Remediate VOC-contaminated Soils at Site 1 using Air Sparging/Soil Vapor Extraction (AS/SVE)
    - » System Start Up in June 1998
    - » Operations to continue through 2000
  - Navy will Excavate Metals considered hazardous and PCB-contaminated soils > 10 ppm at Site 1
    - » To be implemented upon completion of AS/SVE System

SOILS
OPERABLE UNIT 1
NWIRP BETHPAGE

- CONTENTS OF JULY 1995 ROD for Soils - Continued
  - Navy will fund construction of a treatment system for Bethpage Water District (BWD) Plant 5 as a Groundwater IRM
    - » Navy Reimbursement forwarded in August 1996
    - » Construction Completed in late 1997/early 1998

GROUNDWATER
OPERABLE UNIT 2
NWIRP BETHPAGE

- 3-party Groundwater Approach between Navy, Northrop Grumman & New York State DEC
  - Began in 1994
  - Northrop Grumman Pays for Treatment System on BWD Plant 6 prior to 1994 & for BWD Plant 4 in 1995
  - Navy Pays for Treatment System on BWD Plant 5 in 1996
  - Preliminary Feasibility Study (FS) in 1996
  - Northrop Grumman constructs and begins operation of an IRM in 1997 (Pump & Treat)
  - Northrop Grumman began a revised version of FS in 1998
  - Draft FS submitted to NYSDEC in February 1999
  - Final FS due in Winter 1999
  - ROD to be Issued in March 2000

GROUNDWATER
OPERABLE UNIT 2
NWIRP BETHPAGE

- Contents of Groundwater ROD anticipated to be:
  - The IRM constructed in 1997 will become the final groundwater remedy plus long-term groundwater monitoring
    - » Groundwater Remedy
      - 4 Deep Extraction Wells connected to single Air Stripping Treatment System
      - All Groundwater contamination will be contained within Navy/Northrop Grumman property boundaries
      - Contaminated Groundwater to the south of Northrop Grumman property to be treated by Navy & Northrop Grumman Treatment Systems on Bethpage Water District Plants 4, 5 & 6
      - Long-Term Monitoring of Groundwater deeper and to the south of BWD Plants

GROUNDWATER OPERABLE UNIT 2 NWIRP BETHPAGE

- Contents of Groundwater ROD (Continued):
  - Long-Term Monitoring
    - Navy to Construct 20 new monitoring wells within local community right-of-ways during 2000/2001
    - Quarterly Sampling & Analysis for several years by Northrop Grumman Corporation

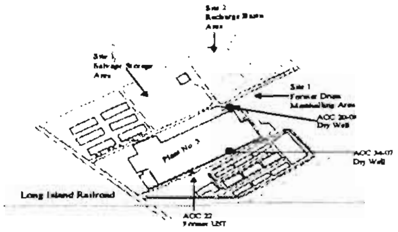
NEWLY DISCOVERED CONTAMINAITON ADDED TO NAVY IR PROGRAM

- **Areas Discovered During Closure of NWIRP Bethpage:**
  - **Area of Concern (AOC) 22: Former Underground Storage Tank (UST) Location (Navy)**
  - **Drywell 20-08 (Northrop Grumman)**
  - **Drywell 34-07 (Northrop Grumman)**
- **Remedial Investigations currently underway at all three Locations**
- **Navy will implement any remedial actions determined to be necessary at all three locations under IR Program**

ENVIRONMENTAL CLEAN UP ISSUE NOT RELATED TO NAVY IR PROGRAM

- The following work was completed by Northrop Grumman As part of their efforts to vacate the Navy's 105-acres:
  - Over 3,200 Soil Samples Taken
  - Over 13,000 Tons of Contaminated Soil Removed

NWIRP BETHPAGE SITE MAP



QUESTIONS

AND

ANSWERS

September 30, 1999

Naval Weapons Industrial Reserve Plant (NWIRP), Bethpage Restoration Advisory Board

RAB Meeting

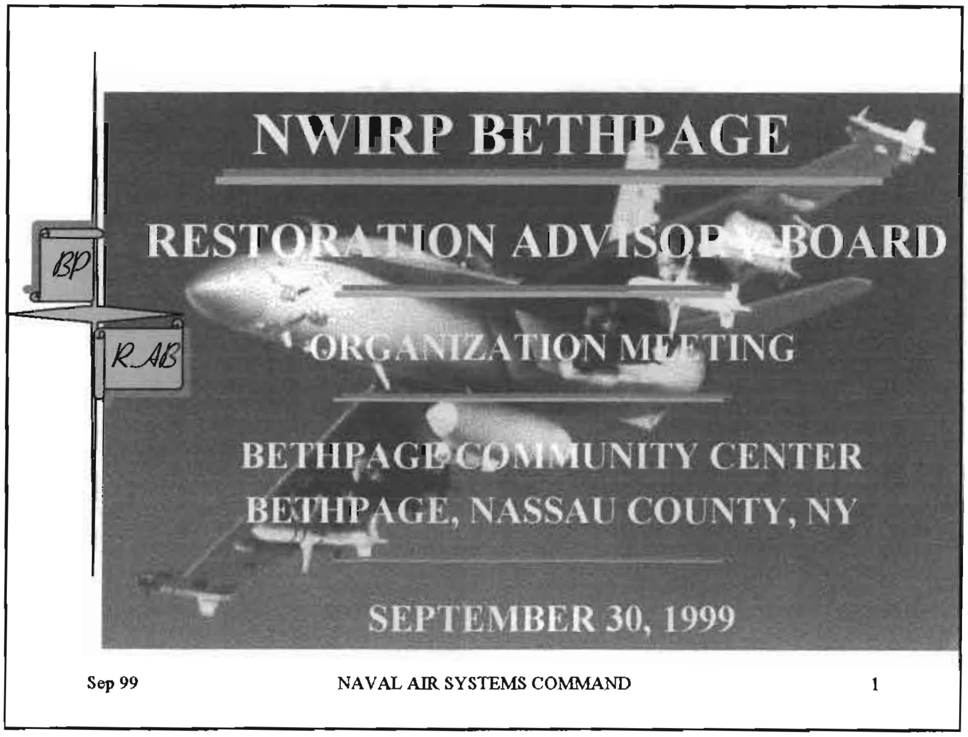
Date ....Thursday, September 30, 1999
Time .... 7:00 p.m.
Location......Bethpage Community Center
103 Grumman Road, Bethpage

Feature Topic: Introduction of RAB members and presentation of RAB responsibilities, operating procedures, and administrative issues.

The RAB is a forum where community members meet with representatives from the Navy, State and Federal environmental agencies, and other groups to discuss the environmental programs underway at NWIRP Bethpage. **All meetings are open to the public and everyone is encouraged to attend.**

For More Information

Call **Judithanne Hare** at Naval Air Systems Command: **(301) 757-2152**



NWIRP BETHPAGE

RESTORATION ADVISORY BOARD

ORGANIZATION MEETING

BETHPAGE COMMUNITY CENTER
BETHPAGE, NASSAU COUNTY, NY

SEPTEMBER 30, 1999

OPENING REMARKS

- **Welcome** - Joe Kaminski, NAVAIR
- **Agenda Review**
  - Introductions
  - RAB Responsibilities/Operation
  - Election of Community Co-Chair
  - Overview of On-going Remediation
  - Set Next Meeting
- **RAB Concept**
  - Origination
  - National Scope
- **RAB Workbook**

RAB PURPOSE

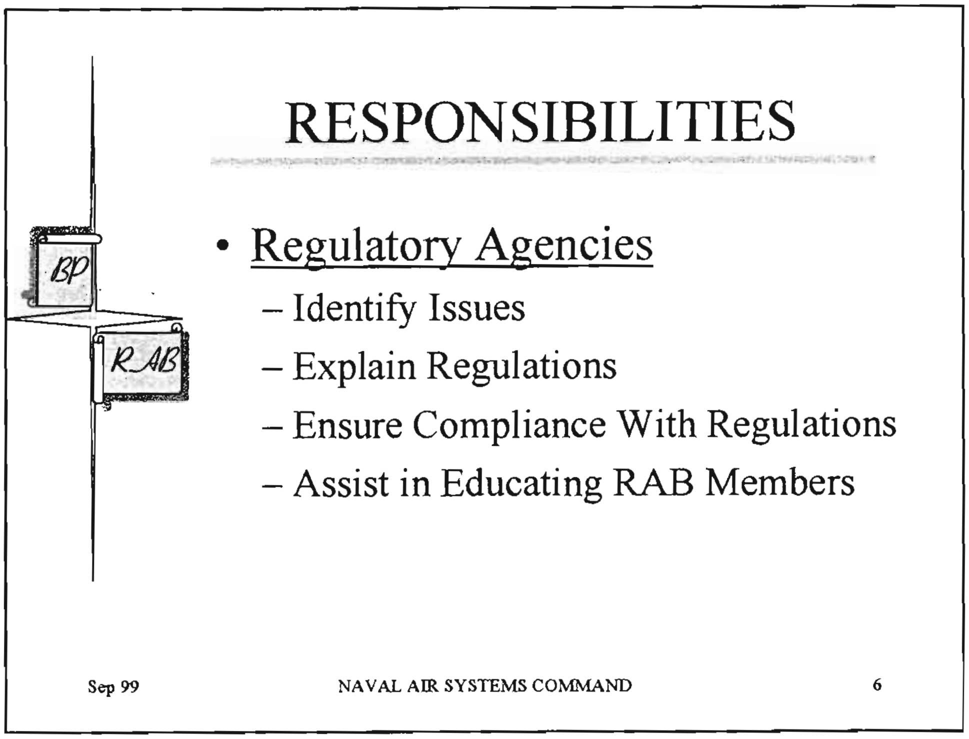
- Forum for Discussion
  - Navy, Regulatory Agencies, Community
- <u>Advisory</u> Not Decision-Making
  - Decisions by Navy/Regulators in Accordance With NY and Federal Laws
- Consider Environmental Cleanup Issues
  - Priorities
  - Cleanup Levels
  - Remedial Action Alternatives
- Partnership

RAB STRUCTURE

- Existing TRC
- Community
- Navy/Community Co-Chair
- Jointly Operated
- All Members Are Equal

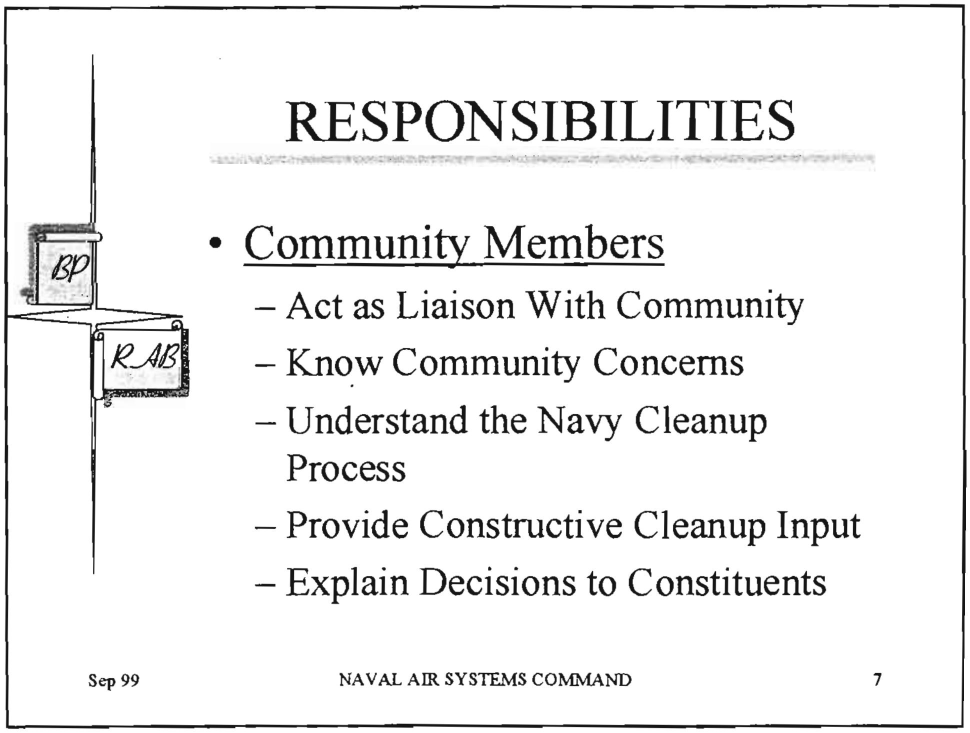
RESPONSIBILITIES

- <u>Navy</u>
  - Explain Cleanup Actions
  - Incorporate Community Input
  - Provide Admin/Logistics Support
  - Distribute Discussion Material
  - Put Documents in Public Repository



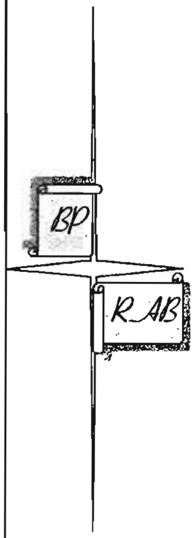
RESPONSIBILITIES

- Regulatory Agencies
  - – Identify Issues
  - – Explain Regulations
  - – Ensure Compliance With Regulations
  - – Assist in Educating RAB Members



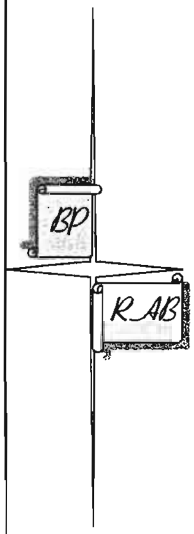
RESPONSIBILITIES

- Community Members
  - – Act as Liaison With Community
  - – Know Community Concerns
  - – Understand the Navy Cleanup Process
  - – Provide Constructive Cleanup Input
  - – Explain Decisions to Constituents



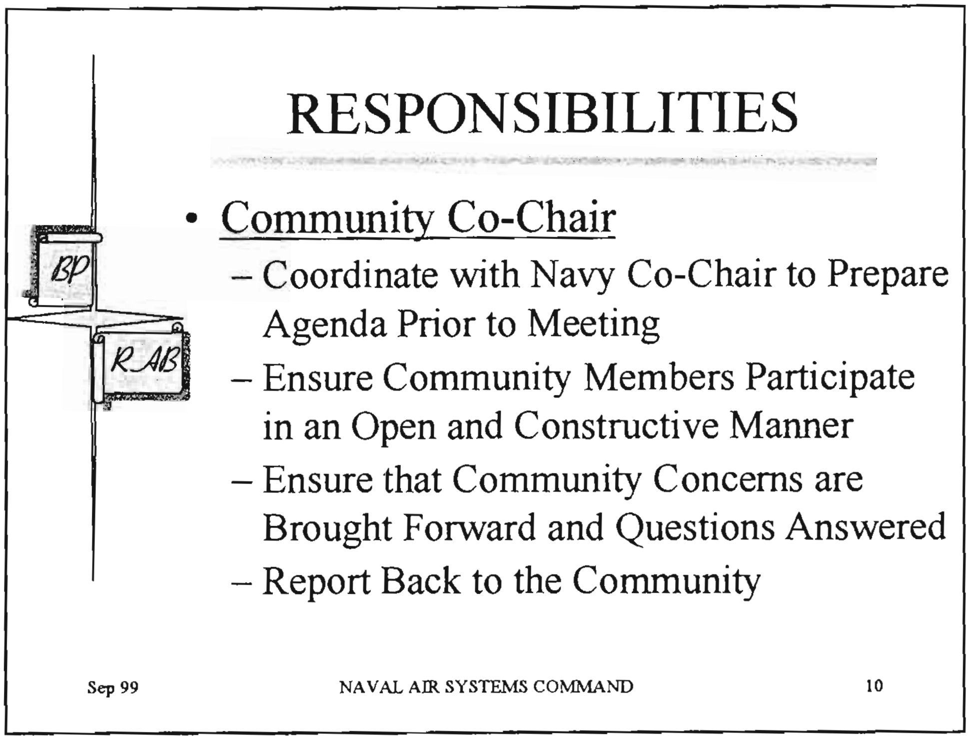
RESPONSIBILITIES

- <u>All Members</u>
  - Prepare for All Meetings
  - Attend All Meetings
  - Ensure issues are brought forward
  - Review and Comment on Reports and Issues
  - Report back to the Group You Represent



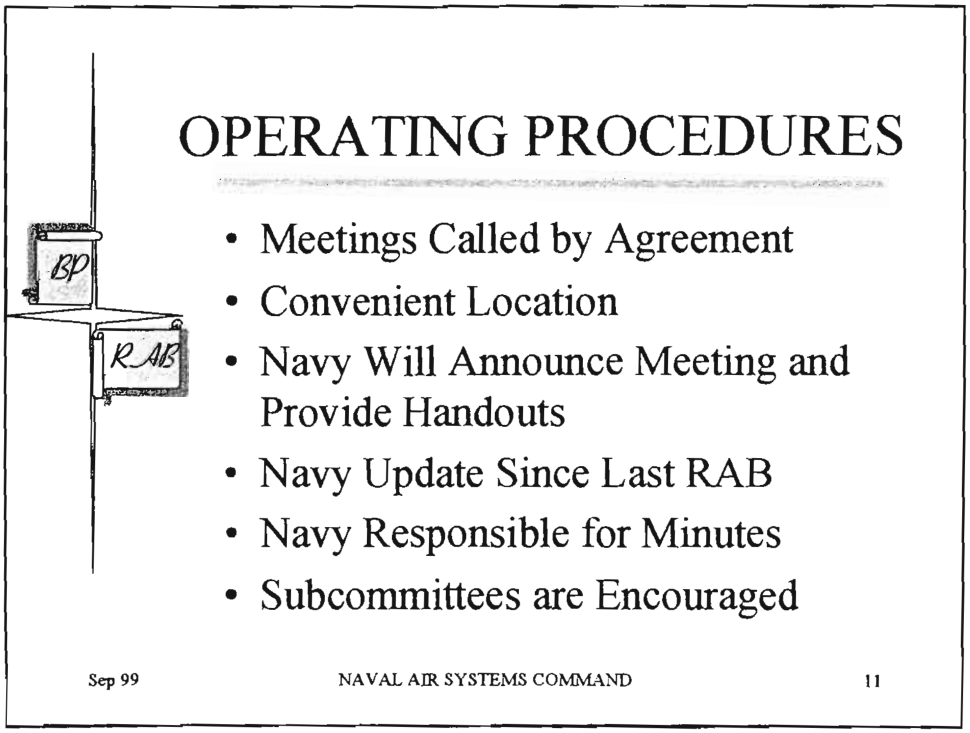
RESPONSIBILITIES

- <u>Navy Co-Chair</u>
  - Coordinate with Community Co-Chair to Prepare Agenda
  - Ensure Navy Participates in an Open and Constructive Manner
  - Ensure RAB Members Have an Opportunity to Provide Input
  - Refer Non-Cleanup Issues to Appropriate Officials



RESPONSIBILITIES

- Community Co-Chair
  - Coordinate with Navy Co-Chair to Prepare Agenda Prior to Meeting
  - Ensure Community Members Participate in an Open and Constructive Manner
  - Ensure that Community Concerns are Brought Forward and Questions Answered
  - Report Back to the Community



OPERATING PROCEDURES

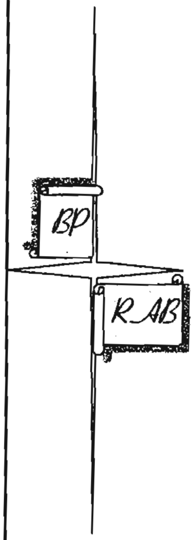
- Meetings Called by Agreement
- Convenient Location
- Navy Will Announce Meeting and Provide Handouts
- Navy Update Since Last RAB
- Navy Responsible for Minutes
- Subcommittees are Encouraged

COMMITTMENT

- ___ Members
- ___ Alternates
- Voluntary
- Submit Add/Delete to a Co-Chair
- Removal for Non-attendance
- Participation

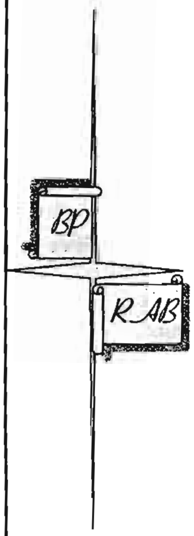
FLEXIBILITY

- Amendments as necessary
- Cleanup Decisions are Based on Best Available Information
- Interim Actions and Completion
- Conformance with Regulations
- Effective Date of Mission Statement and Operating Procedures



FUTURE MEETINGS

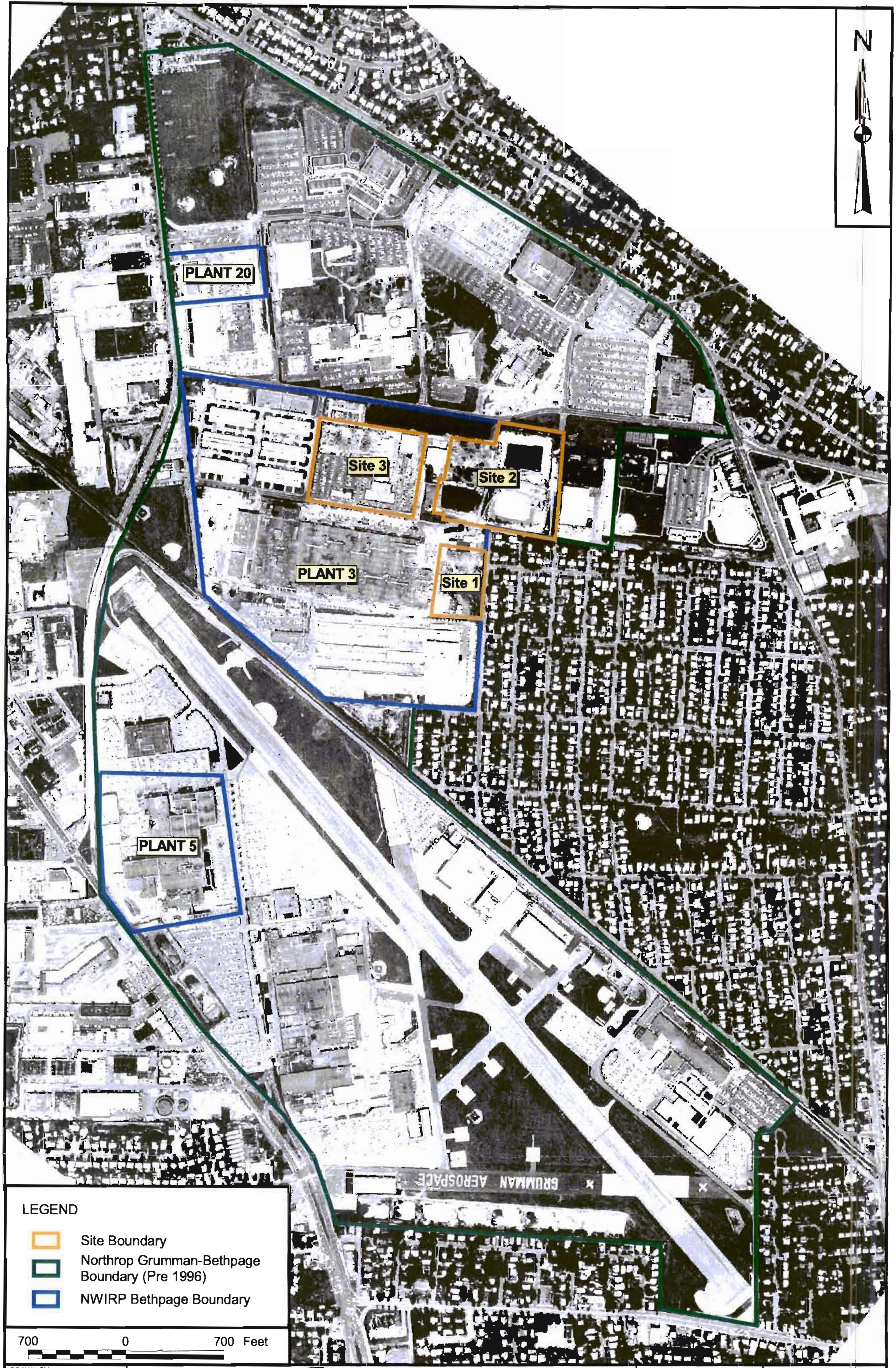
- Frequency
  - Next Meeting
- Topics
  - ?
- Site Visit
  - Meet on Site



CLOSING

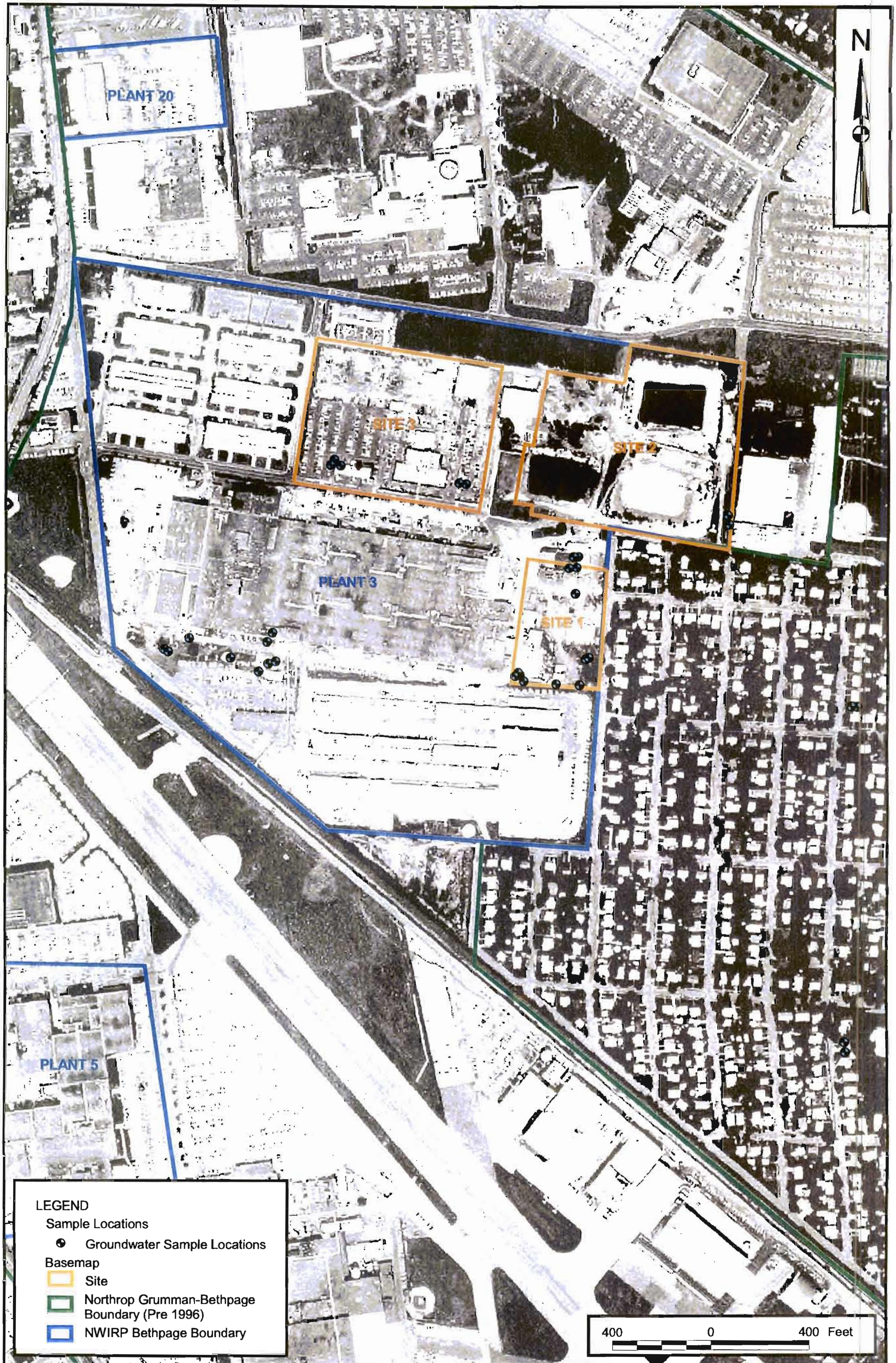
- Serious Commitment
- Civic Hard Work
- Participation
- Dedication
- Energy
- Time
- Care
- Thanks on behalf of the Navy

P:\GIS\NWIRP_BETHPAGE\APR\BETHPAGE_RAB_21700 SITE MAP-1985 AERIAL 2/15/00 JAL



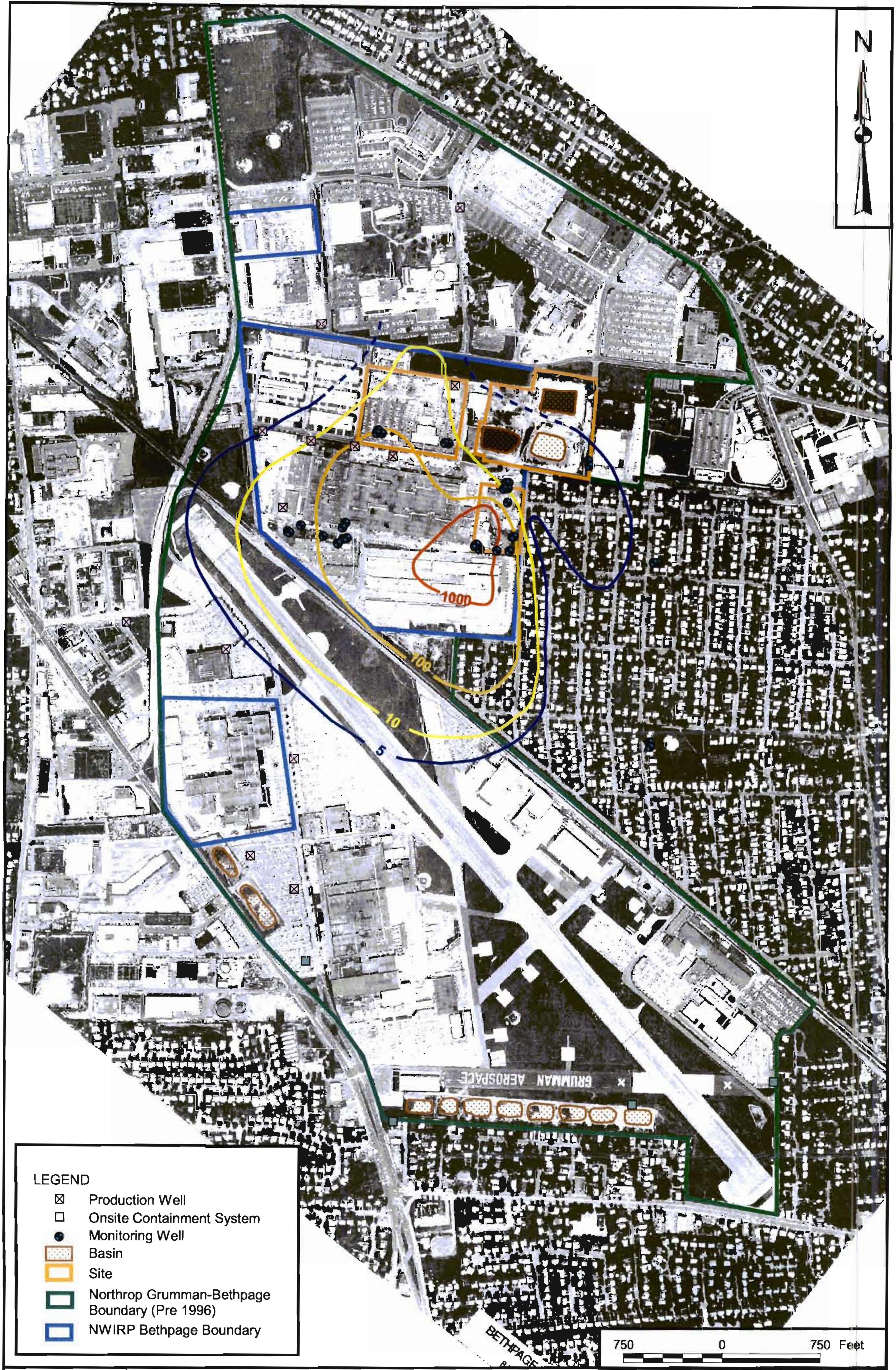
DRAWN BY J. LAMEY	DATE 2/8/00	Tetra Tech NUS, Inc.	CONTRACT NUMBER N5174	OWNER NUMBER CTO 208
CHECKED BY	DATE	SITE MAP NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK	APPROVED BY —	DATE —
COST/SCHEDULE-AREA			APPROVED BY —	DATE —
SCALE AS NOTED			DRAWING NO. FIGURE 1	REV 0

P:\GIS\NWIRP_BETHPAGE\APR\BETHPAGE_RAB_21700.APR SOIL AND GROUNDWATER SAMPLE LOCATIONS 2/9/00 JAL



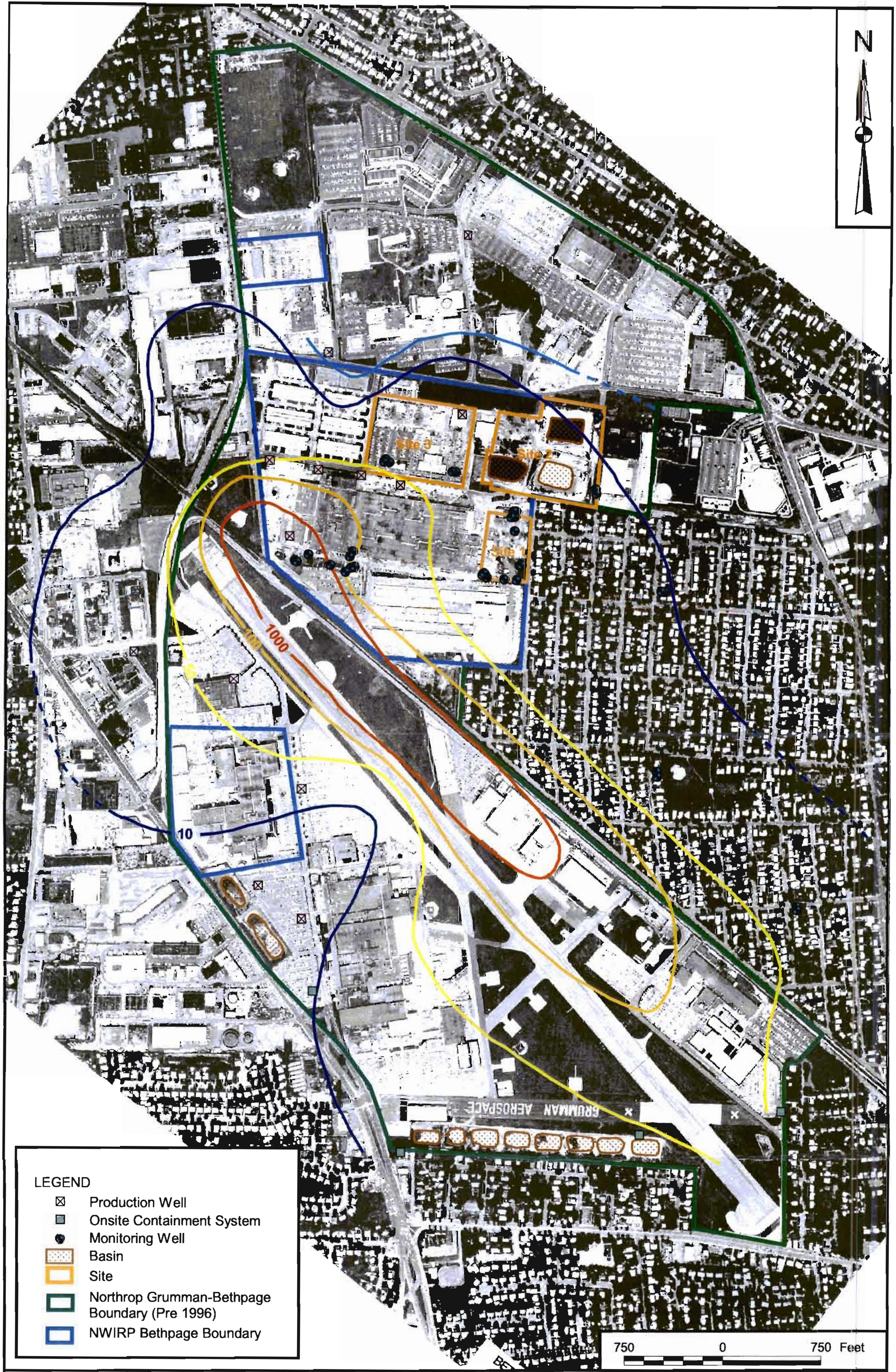
DRAWN BY J. LAMEY	DATE 2/8/00	Tetra Tech NUS, Inc.	CONTRACT NUMBER N5174	OWNER NUMBER CTO 208
CHECKED BY —	DATE —	GROUNDWATER SAMPLE LOCATIONS NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK	APPROVED BY —	DATE —
COST/SCHEDULE-AREA			APPROVED BY —	DATE —
SCALE AS NOTED			DRAWING NO. FIGURE 2	REV 0

P:\GIS\NWIRP_BETHPAGE\APR\BETHPAGE_RAB_21700.APR VOLATILE ORGANICS ISOCONCENTRATION 2/15/00 JAL



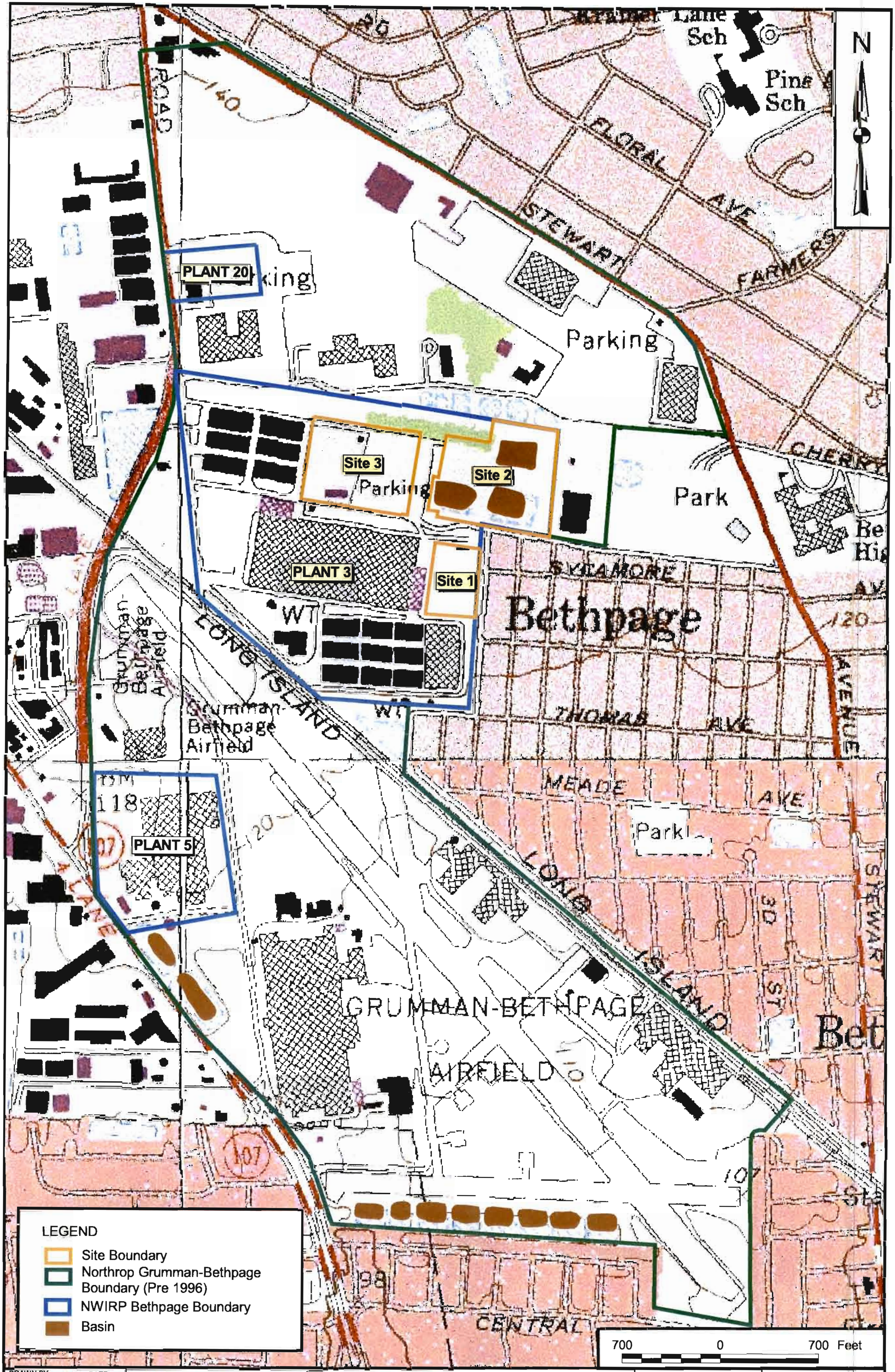
DRAWN BY J. LAMEY DATE 2/9/00	Tetra Tech NUS, Inc.	CONTRACT NUMBER N5174	OWNER NUMBER CTO 208
CHECKED BY — DATE —	VOLATILE ORGANICS ISOCONCENTRATION CONTOURS (1991-1994) SHALLOW GROUNDWATER NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK	APPROVED BY — DATE —	
COST/SCHEDULE-AREA		APPROVED BY — DATE —	
SCALE AS NOTED		DRAWING NO. FIGURE 3	REV 0

P:\GIS\NWIRP_BETHPAGE\APR\BETHPAGE_RAB_21700.APR INTERMEDIATE GW-VOLATILE ORGANICS ISOCONCENTRATION 2/15/00 JAL



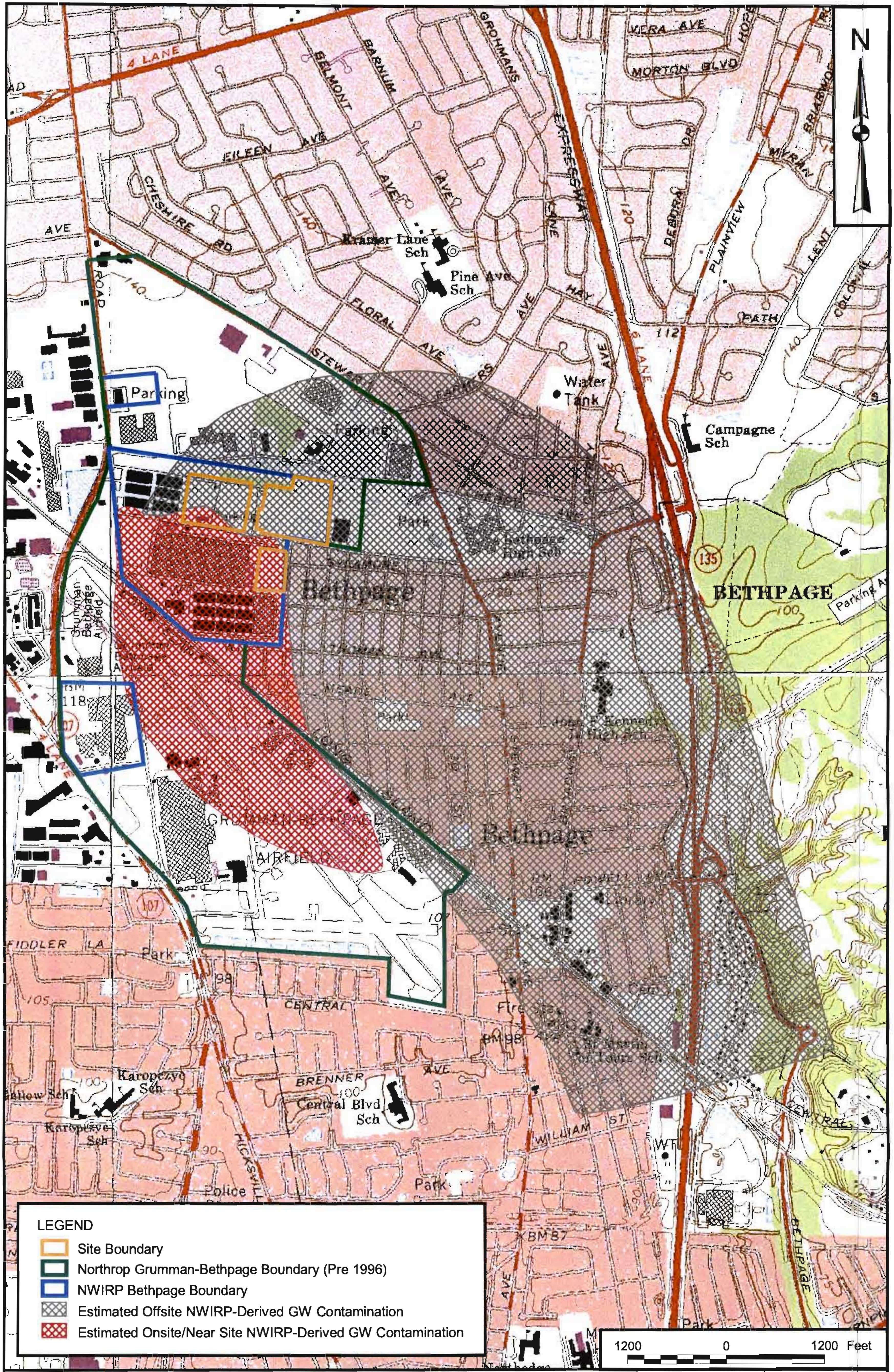
DRAWN BY J. LAMEY DATE 2/15/00	Tetra Tech NUS, Inc.	CONTRACT NUMBER N5174	OWNER NUMBER CTO 208
CHECKED BY DATE	VOLATILE ORGANICS ISOCONCENTRATION CONTOURS (1991-1994) INTERMEDIATE GROUNDWATER NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK	APPROVED BY —	DATE —
COST/SCHEDULE-AREA		APPROVED BY —	DATE —
SCALE AS NOTED		DRAWING NO. FIGURE 4	REV 0

P:\GIS\NWIRP_BETHPAGE\APR\BETHPAGE_RAB_21700.APR SITE MAP-QUAD 2/15/00 JAL

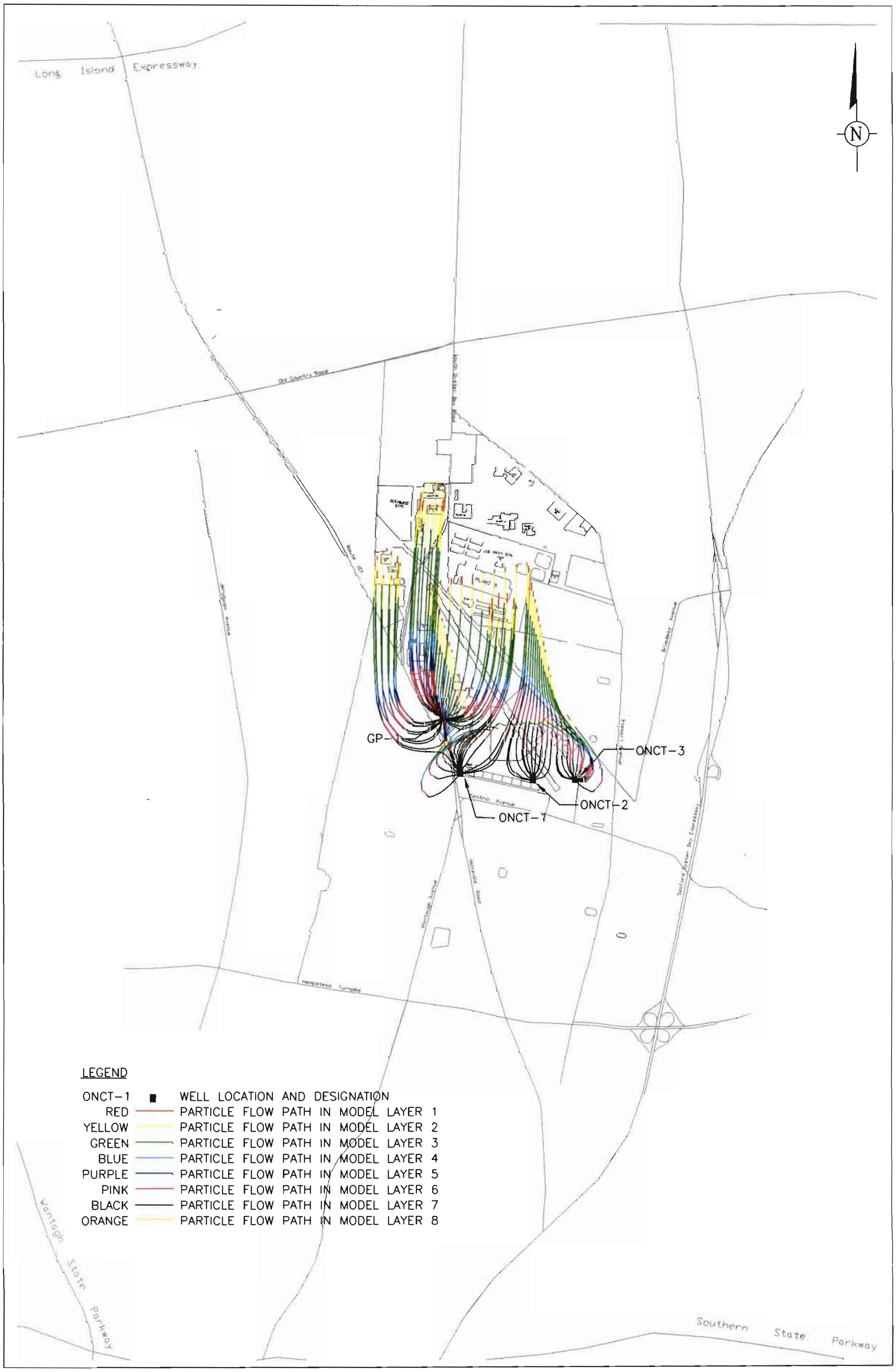


DRAWN BY J. LAMEY DATE 2/9/00	Tetra Tech NUS, Inc.	CONTRACT NUMBER N5174	OWNER NUMBER CTO 208
CHECKED BY — DATE —	SITE MAP NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK	APPROVED BY —	DATE —
COST/SCHEDULE-AREA		APPROVED BY —	DATE —
SCALE AS NOTED		DRAWING NO. FIGURE 5	REV 0

P:\GIS\NWIRP_BETHPAGE\APR\BETHPAGE_RAB_21700.APR ESTIMATED GROUNDWATER CONTAMINATION 2/15/00 JAL



DRAWN BY J. LAMEY	DATE 2/9/00	Tetra Tech NUS, Inc.	CONTRACT NUMBER N5174	OWNER NUMBER CTO 208
CHECKED BY	DATE	ESTIMATED GROUNDWATER CONTAMINATION NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK	APPROVED BY	DATE
COST/SCHEDULE-AREA			APPROVED BY	DATE
SCALE AS NOTED			DRAWING NO. FIGURE 6	REV 0



0' 2500' 5000'

SCALE: 1" = 2500'

MODEL LAYER	HYDROGEOLOGIC UNIT	BOTTOM ELEVATION (ft. msl)
1	UPPER GLACIAL (MAGOTHY AQUIFER NORTHEAST OF SITE)	40
2	UPPER GLACIAL (MAGOTHY AQUIFER NORTHEAST OF SITE)	25
3	UPPER MAGOTHY AQUIFER (LOCAL UPPER GLACIAL NORTHWEST OF SITE)	-50
4	MAGOTHY AQUIFER	-140
5	MAGOTHY AQUIFER	-235
6	MAGOTHY AQUIFER	-365
7	MAGOTHY AQUIFER	-530
8	MAGOTHY AQUIFER	-600

ft. msl - FEET RELATIVE TO MEAN SEA LEVEL

ARCADIS GERAGHTY&MILLER
88 Duryea Road
MELVILLE, NY 11747
Tel: 516/249-7600 Fax: 516/249-7610

NORTHROP GRUMMAN CORPORATION
BETHPAGE, NEW YORK

DRAWN
PINNACLE

DATE
1/4/99

SIMULATED PATH OF PARTICLES
STARTED IN MODEL LAYER 1,
REMEDIAL ALTERNATIVE 1,
ON-SITE CONTAINMENT OF
TVOC-IMPACTED GROUNDWATER

PROJECT MANAGER
S. FELDMAN

DEPARTMENT MANAGER

LEAD DESIGN PROF.

CHECKED

PROJECT NUMBER
NY0008.042

DRAWING NUMBER
B-10

G:\APROJECT\GRUMMAN\NY008.042\MODEL\FINALFS\FIGURES\B-15.DWG 1=2500

DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

RECEIVED
JAN 18 2000
BUREAU OF EASTERN
REMEDIAL ACTION

IN REPLY REFER TO
5090
Code 1821/JC
12 Jan 2000

MEMORANDUM

FOR THE MEMBERS OF THE RESTORATION ADVISORY BOARD (RAB) FOR THE INSTALLATION RESTORATION PROGRAM AT NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) BETHPAGE, NEW YORK

The Navy has scheduled a technical subcommittee meeting with the regulatory members of NWIRP Calverton's RAB which will be held on Monday, February 7, 2000 at the NYSDEC offices in Albany, New York. The meeting will begin at 2:00 p.m. This meeting is open to the community members of the RAB but not to the general public.

The main focus of this technical meeting will be to discuss the completeness of the Navy's Air Sparging/Soil Vapor Extraction system currently in operation at Site 1 - Former Drum Marshaling Area. A status will also be given relating to other environmental work being conducted by the Northrop Grumman Corporation and the groundwater monitoring well program being conducted by the Navy.

Decisions that are reached at this technical subcommittee meeting will then be announced at the next RAB meeting which will take place on **Thursday, February 17, 2000**. This meeting is open to the general public and will be held at the Bethpage Community Center at 103 Grumman Road West in Bethpage, NY. The meeting will begin at 7:00 p.m.

Enclosed are the minutes from the Restoration Advisory Board meeting held on September 30, 1999. These minutes were paraphrased from the meeting's official transcript. A copy of both the meeting minutes and the official transcript will be available for review at the Navy's Information Repository located at the Bethpage Public Library. In addition, the RAB's community co-chair will also be provided with two copies of the transcript.

If you need additional information, please call either Debbie Cohen of Tetra Tech NUS, Inc. at (412) 921-7118 or myself at (610) 595-0567, ext 163.

Sincerely,

James L Colter

JAMES L. COLTER
Remedial Project Manager
By direction of the
Commanding Officer

Enclosure: (1) Minutes from 9/30/99 RAB Meeting

Distribution:
NAVAIR, Judith Hare/Joe Kaminski
NYSDEC (Albany), Steve Scharf
NYSDEC (Stony Brook), Stan Farkas
NYSDOH, Bill Gilday
Nassau County DOH, Bruce Mackay
Nassau County DPW, Tim Kelly
Town of Oyster Bay, Hon. John Venditto
Tom Clark Town of Oyster Bay DPW, Tom Clark
DCMC, Marty Simonson
J.A. Jones, Al Taormina
U.S. EPA Region II, Carol Stein
Community Co-Chair, Jim McBride
Community RAB Member, Hon. Ed Mangano
Community RAB Member, Linda Mangano
Community RAB Member, Ed Resch
Community RAB Member, Charles Bevilacqua
Community RAB Member, Roy Tringali
Community RAB Member, Rosemary Styne
Community RAB Member, John Lovisolo

RESTORATION ADVISORY BOARD (RAB) MEETING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE
BETHPAGE COMMUNITY CENTER, BETHPAGE, NEW YORK
SEPTEMBER 30, 1999

The Meeting began at 7:00 pm and ended approximately 9:30 pm. RAB members attending were: Community members Jim McBride, Edward Mangano, Linda Mangano, Edward Resch, Roy Tringali, John Venditto (represented by Rick Fender); Martin Simonson representing Defense Contract Management Command (DCMC); Tim Kelly representing the Nassau County Department of Public Works (NCDPW); John Lovejoy representing the Nassau County Department of Health (NCDOH), and Steven Scharf representing New York State Department of Environmental Conservation (NYSDEC); and Navy members Joe Kaminski and Jim Colter. Members absent include community members Charles Bevilacqua, Thomas Clark, and Rosemary Styne and representatives from Bethpage Water District, New York State Department of Health (NYSDOH), and U.S. Environmental Protection Agency (USEPA) Region II.

WELCOME AND AGENDA REVIEW

Mr. Joe Kaminski, on behalf of Ms. Judith Hare, the Navy Co-Chair, welcomed everyone to the first RAB meeting for NWIRP Bethpage. Mr. Kaminski explained that Ms. Hare was not able to attend the RAB meeting because of an emergency permit hearing at a Navy facility in Texas that Ms. Hare was required to attend.

Mr. Kaminski reviewed the agenda, indicating that the meeting would deviate slightly from the agenda provided. Mr. Kaminski wanted to explain the RAB and RAB operating procedures before the Community RAB members selected the Community Co-chair. Mr. Kaminski also explained that although he realized there may be many questions, because this is an introductory meeting, the Navy may need to address many of the specific questions at future meetings (see Discussion of Future Meeting Topics).

Mr. Kaminski mentioned that one of the Navy's primary goals for NWIRP Bethpage is to transfer the property to Nassau County for economic redevelopment. For the transfer to occur, the Navy must meet the appropriate environmental regulations to ensure the property is suitable for transfer. Through the RAB, the Navy hopes the process for the transfer will proceed at a quicker pace.

Mr. Kaminski explained the background of the development of the RAB concept. The evolution from Technical Review Committee (TRC), which includes the Navy and regulators, to RAB came about to better meet the Department of Defense (DOD)'s need to provide more responsive cleanups at their facilities. By providing a forum for community participation in the remedial process, the Navy is better able to address community concerns early on in the process.

Mr. Kaminski discussed the RAB Directory that the DOD publishes annually and explained that once the Community Co-chair was selected, he would get the necessary information so that the Bethpage RAB could be included in the directory. In addition, Mr. Kaminski had a document on the whole Navy Installation Restoration (IR) Program to give to the Community Co-chair.

At the beginning of the meeting, all RAB members were given copies of the RAB Workbook and stenographer's transcripts from the May 24, 1999 public meeting. The RAB members were encouraged to use the workbook to keep handouts and other RAB meeting materials. A RAB Workbook will also be available at the Bethpage Library, which will be kept up-to-date with RAB meeting materials and meeting minutes.

In response to a RAB member's question on whether money was available to have a technical advisor to the community RAB members, Mr. Kaminski replied that while the Navy tries to provide the information/technical needs of the RAB, there is money available for a technical advisor if necessary. The availability and use of the money will be a discussion topic at a future RAB meeting.

INTRODUCTION OF MEMBERS

The RAB members introduced themselves providing their names and where they worked or whom they were representing.

BOARD RESPONSIBILITIES/OPERATING PROCEDURES/ADMINISTRATIVE ISSUES

Mr. Kaminski provided a presentation on the RAB responsibilities and operation. A copy of the presentation is attached. Mr. Kaminski indicated that the RAB was a forum for discussion and exchange of information between the Navy, the regulatory agencies, and the community on environmental restoration issues. Mr. Kaminski stressed that the key word was "advisory"; the Navy advises the community about Navy activities, the community advises the Navy on issues important to the community, and the regulators advise everyone on the appropriate regulations. Also, the RAB is not a decision-making process or body. The RAB consists of members from the existing TRC and the community. There is a Navy Co-chair (Ms. Hare) and a Community Co-chair, who is elected by the community members. The Co-chairs run the meeting jointly and all the members are equal on the RAB.

Mr. Kaminski outlined the responsibilities of the Navy, regulators, and community, the Navy Co-chair, and the RAB Community Co-chair. As part of the Navy responsibilities, Mr. Kaminski noted that the Navy puts together and distributes the meeting handouts, meeting minutes, and other necessary printed material that go to the RAB members before the next RAB meeting. Along with ensuring that state and Federal standards and regulatory issues are identified and addressed, regulators will often speak on various issues having to do with the cleanup of the property. This is where the assisting of educating and training of RAB members comes in.

RAB community members are responsible for providing input to the Navy and the regulatory agencies (e.g., NYSDEC, USEPA, and NCDHS) and for being a liaison between the Navy and community. They review documents as they become available and consider issues relative to cleanup. The community members have the responsibility to pass along the information, as necessary, to neighbors, other community members, or organizations. Mr. Kaminski indicated that it was very important for all RAB members to attend all RAB meetings and noted that RAB members who can not attend the meeting can provide a substitute; however, the continuity of RAB member attendance is important to the success of the group.

Mr. Kaminski went over the operating procedures, provided in Section 2 of the RAB Workbook. Mr. Kaminski discussed commitment (membership), and indicated that he referred to it as such because the Navy is asking the RAB members to make a commitment. The numbers of Community RAB members and alternatives were left blank in Section 2 to allow the community members to discuss the appropriate numbers later in the evening's meeting. He also indicated that the mission statement was flexible and could be amended when necessary. The effective date for the mission statement and operating procedures is when everyone signs the signature page (which was later passed around to the attending members to sign).

In addition, Mr. Kaminski indicated that the purpose of the RAB meetings is to discuss issues pertaining to the IR Program (the environmental cleanup of the property) and that the RAB meetings were not a forum for discussing other types of issues. Although important, issues not related to the IR Program need to be discussed under the appropriate forum.

SELECTION OF COMMUNITY CO-CHAIRPERSON

During a recess, the RAB community members were asked to select a Community Co-chair and to review the RAB mission statement. The Community RAB elected Mr. Jim McBride as the Community Co-chair. In addition, the RAB community members determined that the number of community RAB members would be nine and there would be one alternative member. Mr. John Lovisolo was selected as the alternative member.

OVERVIEW OF THE ENVIRONMENTAL PROGRAM AT NWIRP BETHPAGE

Mr. Jim Colter provided a presentation on the environmental program at NWIRP Bethpage. A copy of the presentation is provided as an attachment to these meeting minutes. Mr. Colter provided an overview of the last 14 years when the Navy became involved in environmental investigations and discussed the various steps in the Comprehensive Environmental Response Compensation Liability Act (CERCLA) program that the Navy follows for cleanup activities at NWIRP Bethpage.

The Navy's IR Program at NWIRP Bethpage was initiated in 1985 and an Initial Assessment Study (IAS) was completed in 1986. Three sites were identified in the IAS: Site 1 – Former Drum Marshalling Area; Site 2 – Recharge Basin Area; and Site 3 – Salvage Storage Area. Based on the IAS, remedial investigations were initiated for the three sites. Although the USEPA and NYSDEC issued a RCRA operating permit (in 1992) for NWIRP Bethpage, an agreement was made to continue cleanup activities under CERCLA. Remedial investigations were conducted from 1991 to 1993, a feasibility study completed in 1994, and the proposed remedial action plan for soils finalized in 1994. The Record of Decision (ROD) for soils (Operable Unit 1) was signed by the Navy and NYSDEC in July 1995.

The 1995 ROD requires the Navy to conduct various activities to address soil contamination at Sites 1 and 2 and to conduct interim measures to address groundwater contamination. These activities and the actual initiation or completion date for the activities are as follows:

- At Site 1, remediate volatile organic compound (VOC)-contaminated soils using Air Sparging/Soil Vapor Extraction (AS/SVE). The AS/SVE system was installed in June 1998 and is expected to operate through 2000.
- At Site 1, excavate soils with metals concentrations at hazardous levels and soils with PCB concentrations greater than 10 parts per million (ppm). Soil excavation will be initiated upon completion of the operation of the AS/SVE system.
- At Site 2, excavate soils with PCB concentrations greater than 10 ppm. Excavation activities were completed in June 1996.
- Fund construction of a groundwater treatment system for the Bethpage Water District (BWD) Plant 5. Navy reimbursement was forwarded to the BWD in August 1996 and construction of the treatment system was completed in late 1997/early 1998.

The concentrations of chemicals in the soils at Site 3 are below regulatory standards and the Navy is planning to pursue a no further action ROD for soil at Site 3. For groundwater, the Navy was pursuing remediation of groundwater (Operable Unit 2) only on the Navy property, until NYSDEC requested the Navy and Northrop Grumman to come up with a comprehensive remedy for groundwater. Therefore, groundwater contamination is being addressed through a 3-party groundwater approach developed between the Navy, Northrop Grumman, and NYSDEC. To date, Northrop Grumman has paid for treatment systems at BWD Plant 6 (initiated before 1994) and at BWD Plant 4 (initiated in 1995). As provided in the 1995 ROD, the Navy paid for a treatment system at BWD Plant 5. In 1997 as an interim measure, Northrop Grumman constructed and began operation of a groundwater pump and treatment system to contain groundwater. A draft feasibility study to address groundwater (Operable Unit 2) was submitted to the NYSDEC in February 1999. The Navy expects the feasibility study to be finalized by the end of 1999 and a ROD issued in March 2000.

The ROD for groundwater is anticipated to require the 1997 interim measure to be implemented as a final remedy. The Navy and Northrop Grumman would be responsible for implementation of the various activities under the remedy for groundwater. The ROD for groundwater would require that contaminated groundwater within Navy/Northrop Grumman property would be contained through the pump and treatment system. Because some contamination has already migrated beyond the Navy/Northrop Grumman property, treatment systems were installed at the public supply wells that were downgradient of the offsite contaminated groundwater. The public supply wells are monitored regularly and the treatment systems would be used if contamination were detected in the public supply wells. Currently contaminated groundwater has been detected approximately 200 feet upgradient of the public supply wells. Long-term monitoring would be implemented as part of the final action for groundwater and would be used to monitor the efficiency of the groundwater containment system and to determine whether contaminant concentrations in groundwater were decreasing.

Mr. Colter also discussed several areas discovered during investigations as part of the closure of NWIRP Bethpage that will be addressed further under the IR Program.

These areas are: Area of Concern (AOC) 22 – Former Underground Storage Tanks (UST) Location, Drywell 20-08, and Drywell 34-07. Currently remedial investigations are being conducted at these three areas and the Navy will implement any remedial actions determined to be necessary for the three locations.

Several RAB questions related to cleanup activities that Northrop Grumman conducted as part of the closure of NWIRP Bethpage. The activities conducted by Northrop Grumman were not conducted under the Navy's IR Program and Mr. Colter did not have many details on their activities. Mr. Colter indicated that Northrop Grumman's various investigations included collection of over 3,200 soil samples and removal of over 13,000 tons of contaminated soil. As with activities conducted by the Navy, Northrop Grumman consulted with the appropriate regulatory agencies and conducted the activities in accordance with the appropriate regulations. Mr. Colter indicated that information on activities conducted by Northrop Grumman was available through the NYSDEC and he could provide the name and phone number of a contact at the NYSDEC if any RAB members were interested.

There were also various questions about the cleanup levels and the residual risk that would remain at the sites after cleanup activities were complete. Mr. Colter indicated the cleanup levels for soil were based on industrial land use. More time would be necessary to explain how cleanup levels were developed, but the levels are basically developed based on a risk assessment (see Discussion of Future Meeting Topics). The industrial cleanup level for PCBs (10 ppm) is based on New York State/USEPA calculations based on estimates of quantities for exposure from ingestion (eating) of soil, direct contact with soil, and inhalation of dust, was well as exposure duration. The residential cleanup level for PCBs in soil is 1 ppm. PCBs were not detected in groundwater and are therefore not a contaminant of concern for groundwater. Mr. Colter explained that because PCBs adhere to soil, PCBs do not easily migrate into groundwater when the PCBs are spilled on surface soils.

In terms of cleanup activities at NWIRP Bethpage, although the industrial cleanup level for PCBs is 10 ppm, to get to the contaminated soil, the Navy excavated much of the overlying surface soil and backfilled the excavated areas with clean soil. Therefore, surface soil in these areas meet residential cleanup levels. In addition, when the excavation is complete, the Navy will put either gravel or a soil type covering over the areas. Inside the buildings, Northrop Grumman has conducted cleanup activities. Therefore, Mr. Colter explained that inside and outside the buildings, the public would not be exposed to PCB contaminated soil.

In answer to a question of whether there was a potential for residents living nearby to be exposed to PCBs in soil, Mr. Colter replied that residential sampling was conducted to address nearby residents' concerns. The results were given to the NYSDOH and the results indicated that the PCBs have not migrated to nearby properties.

Mr. Colter also indicated that the Navy is responsible for getting documents together to support the Finding of Suitability to Transfer (FOST). This FOST will discuss why the Navy considers the property environmentally suitable for transfer to Nassau County. The document will be reviewed by the regulatory agencies. Although preparation of the FOST will be conducted under a different environmental program than the IR Program, the Navy plans to provide the FOST to the RAB for review and to use the RAB as a forum to present the FOST at a public meeting and receive public comment on the FOST. For any transfer of property from the Navy to Nassau County, the Navy would only transfer property where cleanup activities have been completed. The Navy would retain any area where cleanup activities were ongoing and would not transfer those areas until the activities were complete.

DISCUSSION OF FUTURE MEETING TOPICS

Various potential discussion topics for future meetings were discussed. Many of the topics identified would require a full RAB meeting to discuss. Mr. Colter indicated that he would develop a draft agenda and send it to Mr. McBride to review and revise and then a final agenda will be developed and provided to RAB members along with the notice for the next meeting.

Potential agenda items for future RAB meetings include:

- Discussion of independent assistance (likely requires half of a RAB meeting)

- General and site-specific risk assessment discussion – including risk associated with contamination remaining at the facility (likely requires a full RAB meeting).
- More maps to show the sites and site data. Th Navy is working on the Graphical Information System (GIS) for Bethpage. The GIS is a computer database that enable the Navy to show all the data on computer. Presentation of GIS materials would likely require one meeting for both soil and groundwater data.
- General understanding of soil characteristics and groundwater modeling (likely require one RAB meeting).
- Presentation of the feasibility study for groundwater (likely require one RAB meeting).

In answer to a question as to whether the Navy would share the GIS with the water district or regulators, Mr. Colter indicated that the Navy typically does share the GIS with those who have the software required to run the GIS.

The RAB members requested a site visit before the next RAB meeting. Mr. Colter indicated that he could make himself available for a Saturday site tour if the RAB was interested and requested the RAB Community Co-chair contact Ms. Hare, the Navy co-chair, to arrange a day for a site visit.

CLOSING REMARKS

In closing, Mr. Kaminski thanked everyone for participating on the RAB. Mr. Kaminski explained that by participating on the RAB, the RAB members were making a serious commitment and showed the publics' interest in the activities at NWIRP Bethpage. As a first meeting of the RAB, Mr. Kaminski was pleased with the communication among RAB members and looked forward to even better dialog between the Navy and community at future meetings.

POSTSCRIPT NOTE

Stenographer's transcripts are prepared for RAB meetings to assist the Navy in preparation of meeting minutes. The transcripts are available in the NWIRP Bethpage

Information Repository at the Bethpage Library. To assist the stenographer, RAB members and other attendees at the meeting are requested to speak one at a time for the stenographer to accurately transcribe the meeting discussions.

ATTACHMENTS

- Agenda
- Presentation for Restoration Advisory Board (RAB) Organization Meeting
- Presentation of Overview of Navy's Installation Restoration (IR) Program at NWIRP Bethpage

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

September 30, 1999
Bethpage Community Center – Bethpage, NY
7:00 p.m.

Welcome and Agenda Review
Judithanne Hare
Naval Air Systems Command

Introduction of Members
All Members

Selection of Community Co-chairperson
Community Members

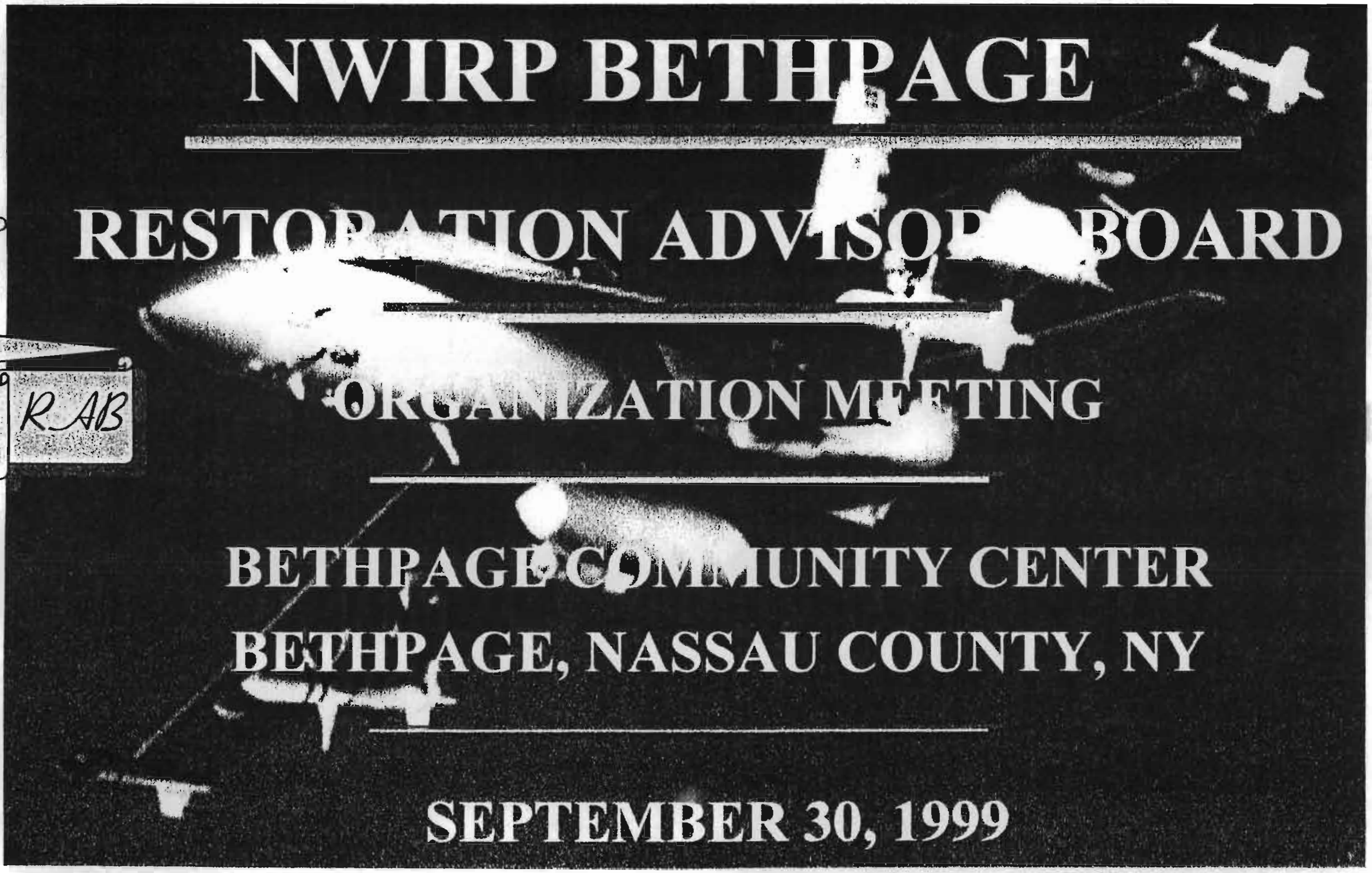
Board Responsibilities/Operating Procedures/Administrative Issues
Judithanne Hare
Naval Air Systems Command

Overview of the Environmental Program at NWIRP
Jim Colter
Naval Facilities Engineering Command - Northern Division

Dates and Discussion Topics for Future Meetings
All Members

Closing Remarks
Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.



NWIRP BETHPAGE

RESTORATION ADVISORY BOARD

ORGANIZATION MEETING

BETHPAGE COMMUNITY CENTER
BETHPAGE, NASSAU COUNTY, NY

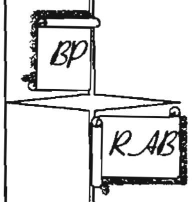
SEPTEMBER 30, 1999

OPENING REMARKS

- **Welcome** - Joe Kaminski, NAVAIR
- **Agenda Review**
  - Introductions
  - RAB Responsibilities/Operation
  - Election of Community Co-Chair
  - Overview of On-going Remediation
  - Set Next Meeting
- **RAB Concept**
  - Origination
  - National Scope
- **RAB Workbook**

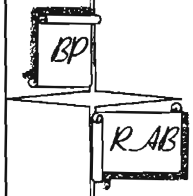
RAB PURPOSE

- Forum for Discussion
  - Navy, Regulatory Agencies, Community
- Advisory Not Decision-Making
  - Decisions by Navy/Regulators in Accordance With NY and Federal Laws
- Consider Environmental Cleanup Issues
  - Priorities
  - Cleanup Levels
  - Remedial Action Alternatives
- Partnership



RAB STRUCTURE

- Existing TRC
- Community
- Navy/Community Co-Chair
- Jointly Operated
- All Members Are Equal



RESPONSIBILITIES

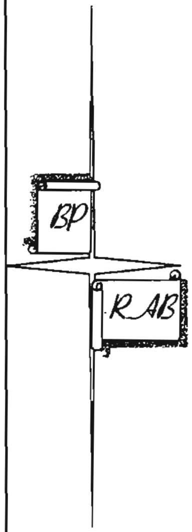
- <u>Navy</u>
  - Explain Cleanup Actions
  - Incorporate Community Input
  - Provide Admin/Logistics Support
  - Distribute Discussion Material
  - Put Documents in Public Repository

RESPONSIBILITIES

- <u>Regulatory Agencies</u>
  - – Identify Issues
  - – Explain Regulations
  - – Ensure Compliance With Regulations
  - – Assist in Educating RAB Members

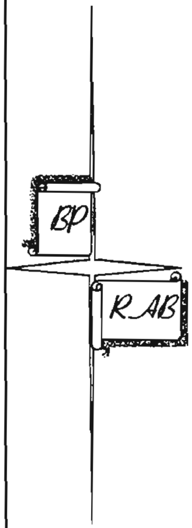
RESPONSIBILITIES

- <u>Community Members</u>
  - – Act as Liaison With Community
  - – Know Community Concerns
  - – Understand the Navy Cleanup Process
  - – Provide Constructive Cleanup Input
  - – Explain Decisions to Constituents



RESPONSIBILITIES

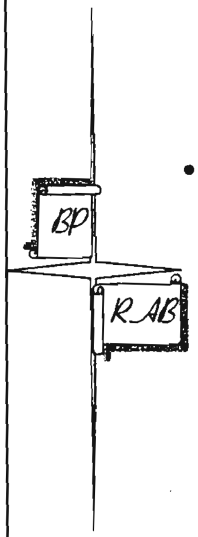
- <u>All Members</u>
  - Prepare for All Meetings
  - Attend All Meetings
  - Ensure issues are brought forward
  - Review and Comment on Reports and Issues
  - Report back to the Group You Represent



RESPONSIBILITIES

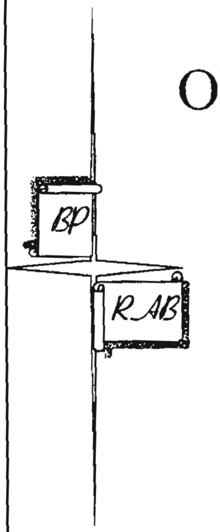
- <u>Navy Co-Chair</u>
  - Coordinate with Community Co-Chair to Prepare Agenda
  - Ensure Navy Participates in an Open and Constructive Manner
  - Ensure RAB Members Have an Opportunity to Provide Input
  - Refer Non-Cleanup Issues to Appropriate Officials

RESPONSIBILITIES

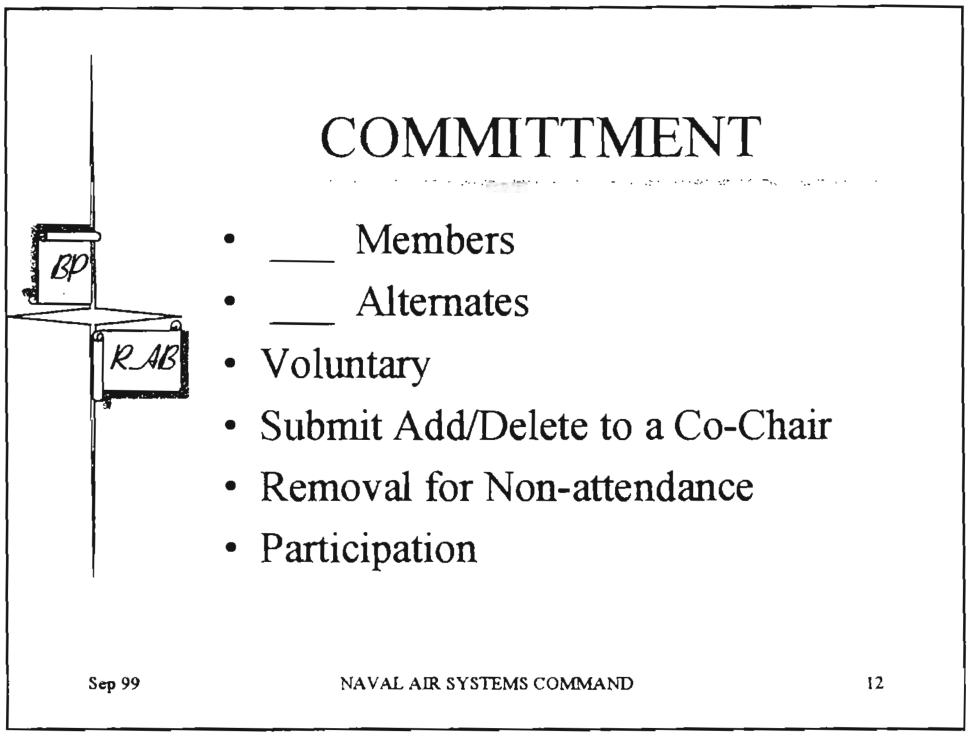


- <u>Community Co-Chair</u>
  - Coordinate with Navy Co-Chair to Prepare Agenda Prior to Meeting
  - Ensure Community Members Participate in an Open and Constructive Manner
  - Ensure that Community Concerns are Brought Forward and Questions Answered
  - Report Back to the Community

OPERATING PROCEDURES

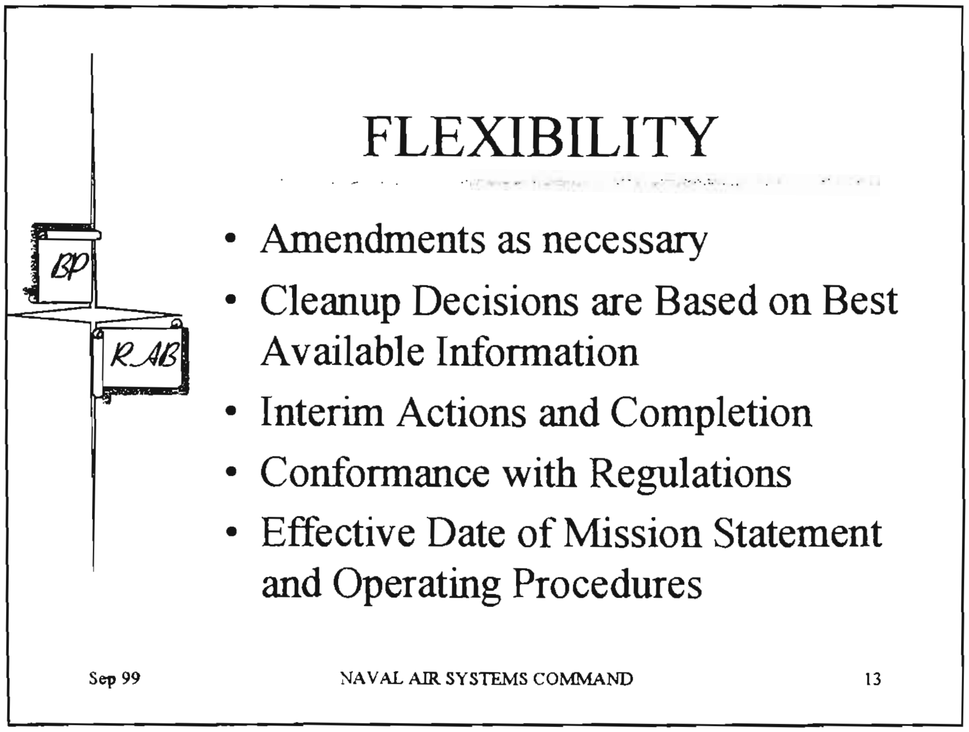


- Meetings Called by Agreement
- Convenient Location
- Navy Will Announce Meeting and Provide Handouts
- Navy Update Since Last RAB
- Navy Responsible for Minutes
- Subcommittees are Encouraged



COMMITTMENT

- ___ Members
- ___ Alternates
- Voluntary
- Submit Add/Delete to a Co-Chair
- Removal for Non-attendance
- Participation



FLEXIBILITY

- Amendments as necessary
- Cleanup Decisions are Based on Best Available Information
- Interim Actions and Completion
- Conformance with Regulations
- Effective Date of Mission Statement and Operating Procedures

FUTURE MEETINGS

- Frequency
  - Next Meeting
- Topics
  - ?
- Site Visit
  - Meet on Site

CLOSING

- Serious Commitment
- Civic Hard Work
- Participation
- Dedication
- Energy
- Time
- Care
- Thanks on behalf of the Navy

OVERVIEW OF NAVY'S INSTALLATION RESTORATION (IR) PROGRAM AT NWIRP BETHPAGE

prepared by
Northern Division, Naval Facilities
Engineering Command

September 30, 1999

CREATION OF THE NAVY'S IR PROGRAM

- Although acceptable for many years, the old industrial processes and ways of handling wastes are now known to be potentially damaging to the environment
- In 1975, the Department of Defense (DOD) took the first step to create a program to identify and clean up environmental problems at federal facilities

CREATION OF THE NAVY'S IR PROGRAM (Continued)

- In 1980, Congress enacted the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to address historic hazardous waste disposal and spill sites
- CERCLA consists of the following stages:
  - Preliminary Assessment (PA)
  - Site Investigation (SI)
  - Remedial Investigation (RI)
  - Feasibility Study (FS)
  - Record of Decision (ROD)
  - Remedial Design (RD)
  - Remedial Action (RA)

NAVY'S IR PROGRAM AT NWIRP BETHPAGE

- Navy's IR Program Commences - 1985
- Initial Assessment Study -1986
- Phase I Remedial Investigation -1992
- Federal & State Operating Permits Issued - 1992
- Phase II Remedial Investigation - 1993
- Feasibility Study - 1994
- Proposed Remedial Action Plan - 1994
- Record of Decision for Operable Unit 1 - 1995
- Remedial Design
- Remedial Action

NWIRP Bethpage IR PROGRAM (Historic)

- INITIAL ASSESSMENT STUDY (IAS) - 1986
  - **Identified 3 Areas of Concern:**
    - **Site 1 – Former Drum Marshaling Area**
    - **Site 2 – Recharge Basin Area**
    - **Site 3 – Salvage Storage Area**
  - **Chemicals detected in Soil and Groundwater at all 3 sites**
  - **Remedial Investigation Recommended**

NWIRP Bethpage IR PROGRAM (Historic)

- FEDERAL & STATE RCRA PERMITS ISSUED - 1992 CLEAN UP AUTHORITY REMAINED UNDER CERCLA

- REMEDIAL INVESTIGATION (RI) WORKPLAN APPROVED IN AUGUST 1991
  - **Delineates the nature and extent of an area where contamination has been confirmed in any media (i.e. soil, groundwater, surface water, sediment)**

NWIRP Bethpage IR PROGRAM (Historic)

- CONDUCTED RI FIELDWORK IN 1992 AT:
  - Site 1: Former Drum Marshaling Area
  - Site 2: Recharge Basin Area
  - Site 3: Salvage Storage Area
- MAY 1992 - RI Report Finalized
  - Based on regulatory comments, concluded that enough data gaps existed to warrant a Phase II RI

NWIRP Bethpage IR PROGRAM (Historic)

- NOVMEBER 1992 - Finalized Workplan for Phase 2 RI
- CALENDAR YEAR 1993
  - Conducted Phase 2 RI Fieldwork
  - Finalized Phase 2 RI Report in October
- CALENDAR YEAR 1994
  - Finalized Feasibility Study (FS) in March
  - Finalized Preferred Remedial Action Plan (PRAP) for Soils in October

SOILS
OPERABLE UNIT 1
NWIRP BETHPAGE

- JULY 1995 - Navy & NYSDEC Sign Record of Decision (ROD) for Soils
  - Navy will Excavate PCB-contaminated Soils > 10 ppm at Site 2
    - Completed in June 1996
  - Navy will Remediate VOC-contaminated Soils at Site 1 using Air Sparging/Soil Vapor Extraction (AS/SVE)
    - System Start Up in June 1998
    - Operations to continue through 2000
  - Navy will Excavate Metals considered hazardous and PCB-contaminated soils > 10 ppm at Site 1
    - To be implemented upon completion of AS/SVE System

SOILS
OPERABLE UNIT 1
NWIRP BETHPAGE

- CONTENTS OF JULY 1995 ROD for Soils - Continued
  - Navy will fund construction of a treatment system for Bethpage Water District (BWD) Plant 5 as a Groundwater IRM
    - Navy Reimbursement forwarded in August 1996
    - Construction Completed in late 1997/early 1998

GROUNDWATER
OPERABLE UNIT 2
NWIRP BETHPAGE

- 3-party Groundwater Approach between Navy, Northrop Grumman & New York State DEC
  - Began in 1994
  - Northrop Grumman Pays for Treatment System on BWD Plant 6 prior to 1994 & for BWD Plant 4 in 1995
  - Navy Pays for Treatment System on BWD Plant 5 in 1996
  - Preliminary Feasibility Study (FS) in 1996
  - Northrop Grumman constructs and begins operation of an IRM in 1997 (Pump & Treat)
  - Northrop Grumman began a revised version of FS in 1998
  - Draft FS submitted to NYSDEC in February 1999
  - Final FS due in Winter 1999
  - ROD to be Issued in March 2000

GROUNDWATER
OPERABLE UNIT 2
NWIRP BETHPAGE

- Contents of Groundwater ROD anticipated to be:
  - The IRM constructed in 1997 will become the final groundwater remedy plus long-term groundwater monitoring
    - Groundwater Remedy
      - 4 Deep Extraction Wells connected to single Air Stripping Treatment System
      - All Groundwater contamination will be contained within Navy/Northrop Grumman property boundaries
      - Contaminated Groundwater to the south of Northrop Grumman property to be treated by Navy & Northrop Grumman Treatment Systems on Bethpage Water District Plants 4, 5 & 6
      - Long-Term Monitoring of Groundwater deeper and to the south of BWD Plants

GROUNDWATER OPERABLE UNIT 2 NWIRP BETHPAGE

- Contents of Groundwater ROD (Continued):
  - Long-Term Monitoring
    - Navy to Construct 20 new monitoring wells within local community right-of-ways during 2000/2001
    - Quarterly Sampling & Analysis for several years by Northrop Grumman Corporation

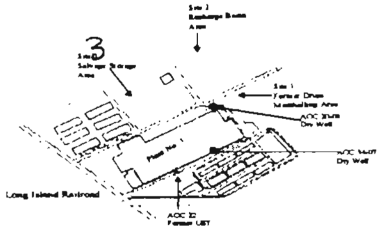
NEWLY DISCOVERED CONTAMINAITON ADDED TO NAVY IR PROGRAM

- Areas Discovered During Closure of NWIRP Bethpage:
  - Area of Concern (AOC) 22: Former Underground Storage Tank (UST) Location (Navy)
  - Drywell 20-08 (Northrop Grumman)
  - Drywell 34-07 (Northrop Grumman)
- Remedial Investigations currently underway at all three Locations
- Navy will implement any remedial actions determined to be necessary at all three locations under IR Program

ENVIRONMENTAL CLEAN UP ISSUE NOT RELATED TO NAVY IR PROGRAM

- The following work was completed by Northrop Grumman As part of their efforts to vacate the Navy's 105-acres:
  - Over 3,200 Soil Samples Taken
  - Over 13,000 Tons of Contaminated Soil Removed

NWIRP BETHPAGE SITE MAP



QUESTIONS

AND

ANSWERS

DEPARTMENT OF DEFENSE UNITED STATES OF AMERICA

DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

RECEIVED
AUG 18 2000
BUREAU OF EASTERN REMEDIAL ACTION

IN REPLY REFER TO

5090
Code 09TB/JC

17 AUG 2000

MEMORANDUM

FOR THE MEMBERS OF THE RESTORATION ADVISORY BOARD (RAB) FOR THE INSTALLATION RESTORATION PROGRAM AT NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) BETHPAGE, NEW YORK

The Navy would like to announce that a Restoration Advisory Board (RAB) meeting has been scheduled for **Thursday, August 31, 2000.** This meeting is open to the general public and will be held at the Bethpage Senior High School located at the intersection of Stewart Avenue and Cherry Avenue in Bethpage, NY. Directions to the high school have been attached. The meeting will commence at 7:00 p.m.

The main topic will be to discuss the Proposed Remedial Action Plan (PRAP) for Groundwater at the Navy and Northrop Grumman sites in Bethpage. The PRAP, prepared by New York State Department of Environmental Conservation (NYSDEC), has been the main focus over the past several months and NYSDEC, the Navy, and Northrop Grumman have been working to finalize and prepare the plan for presentation to the public. The Navy will also update the members regarding the status of other environmental work that is being conducted at NWIRP Bethapge.

Also enclosed are the minutes from the Restoration Advisory Board meeting held on February 17, 2000. These minutes were paraphrased from the meeting's official transcript. A copy of both the meeting minutes and the official transcript will be available for review at the Navy's Information Repository located at the Bethpage Public Library.

If you need additional information, please call either Debbie Cohen of Tetra Tech NUS, Inc. at (412) 921-7118 or myself at (610) 595-0567, extension 163.

Sincerely,

JAMES L. COLTER
Remedial Project Manager
By direction of the
Commanding Officer

Enclosures: (1) Minutes from 2/17/00 RAB Meeting (w/attachments)

Distribution:
NAVAIR, Judith Hare/Joe Kaminski
NYSDEC (Albany), Steve Scharf
NYSDEC (Stony Brook), Stan Farkas
NYSDOH, Bill Gilday
U.S. EPA Region II, Carol Stein
Nassau County DOH, Bruce Mackay
Nassau County DPW, Tim Kelly
Town of Oyster Bay, Hon. John Venditto
Town of Oyster Bay DPW, Tom Clark
DCMC, Marty Simonson
J.A. Jones, Al Taormina
Community Co-Chair, Jim McBride
Community RAB Member, Hon. Ed Mangano
Community RAB Member, Linda Mangano
Community RAB Member, Ed Resch
Community RAB Member, Charles Bevilacqua
Community RAB Member, Roy Tringali
Community RAB Member, Rosemary Styne
Community RAB Member, John Lovisolo

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

August 31, 2000
Bethpage High School – Bethpage, NY
7:00 p.m.

Welcome and Agenda Review
Judithanne Hare
Naval Air Systems Command

Review and Approval of Minutes
All Members

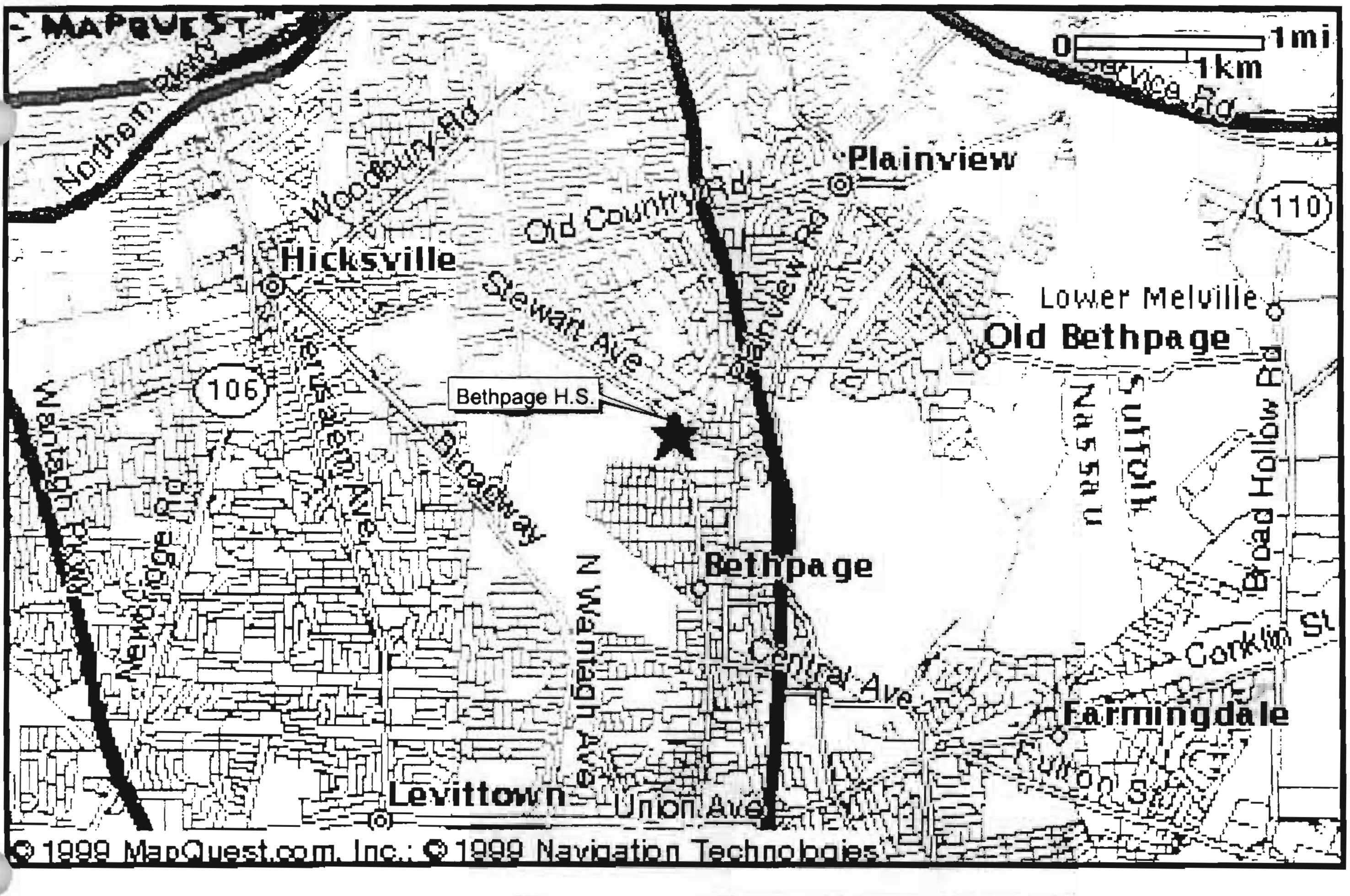
Update on Activities at NWIRP Bethpage
Jim Colter
Naval Facilities Engineering Command - Northern Division

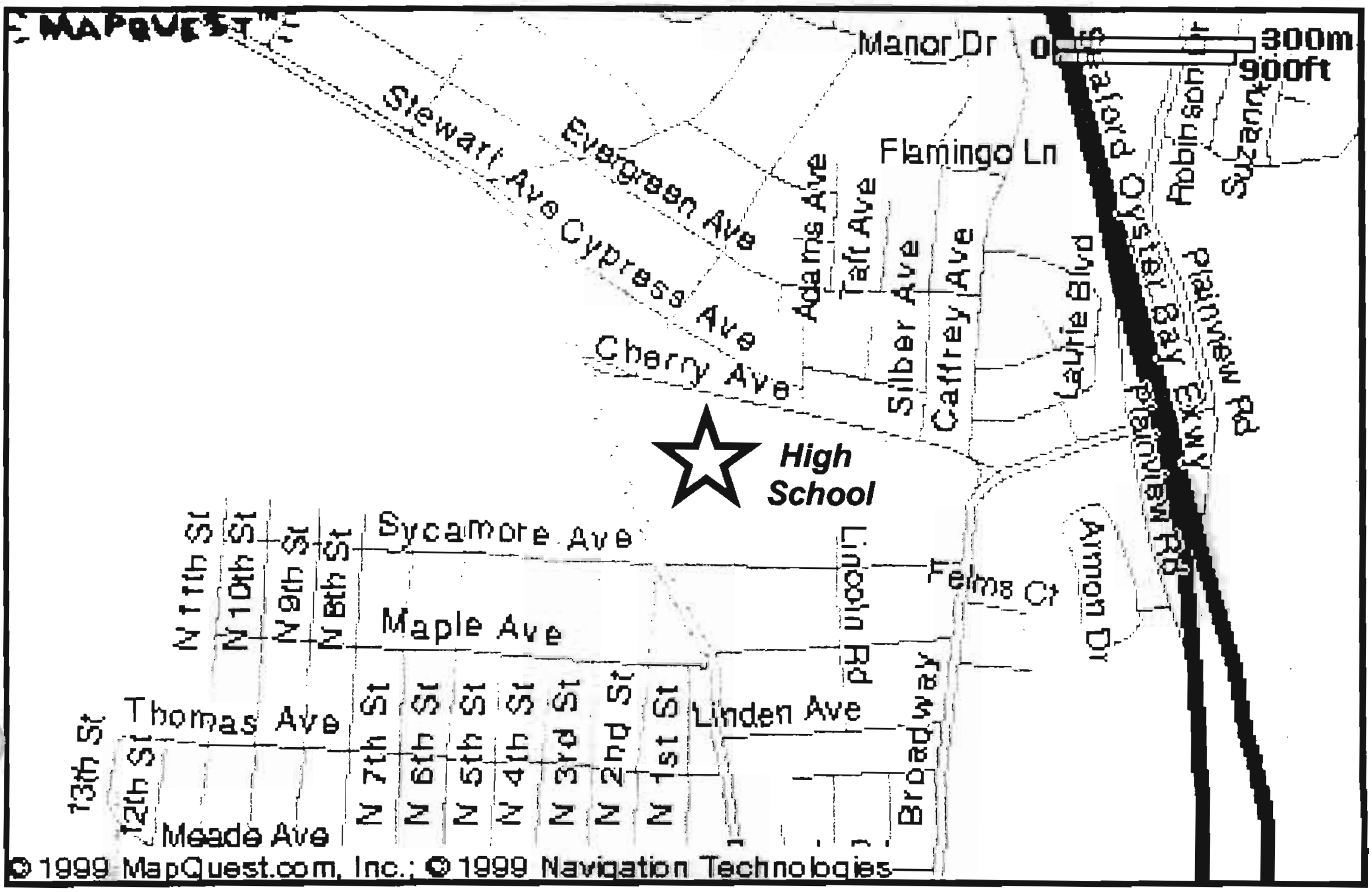
Dates and Discussion Topics for Future Meetings
All Members

Closing Remarks
Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.

MAP TO HIGH SCHOOL





RESTORATION ADVISORY BOARD (RAB) MEETING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE
BETHPAGE COMMUNITY CENTER, BETHPAGE, NEW YORK
February 17, 2000

The second meeting of the RAB began at 7:00 pm and ended approximately 9:30 pm. RAB members attending were: Community members Jim McBride (Community Co-Chair), Charles Bevilacqua, Edward Mangano, Linda Mangano, Edward Resch, Rosemary Styne, Roy Tringali; Martin Simonson representing Defense Contract Management Command (DCMC); Tim Kelly representing the Nassau County Department of Public Works (NCDPW); and Stan Farkas (Stony Brook) and Steven Scharf (Albany) representing New York State Department of Environmental Conservation (NYSDEC); and Navy members Judith Hare, Joe Kaminski, and Jim Colter. Members absent include community members John Venditto and Thomas Clark and representatives from Bethpage Water District, Nassau County Department of Health (NCDOH), New York State Department of Health (NYSDOH), and U.S. Environmental Protection Agency (USEPA) Region II.

There were also a number of people attending from the local community.

WELCOME AND AGENDA REVIEW

Ms. Judith Hare, the Navy Co-Chair, welcomed everyone to the second RAB meeting for NWIRP Bethpage. Ms. Hare apologized for missing the first meeting, but was not able to attend the RAB meeting because of an emergency permit hearing at a Navy facility in Texas that she was required to attend.

Ms. Hare welcomed a visitor, Mr. Bill Pakulis, who was observing the Bethpage RAB because he is in the process of starting a RAB at a Navy facility in Connecticut.

Jim Colter mentioned that the site tour held in December 1999 had good attendance. A technical meeting for NWRIP Bethpage was held on February 7, 2000. Mr. Colter explained that the technical meetings are a subgroup of the RAB, which the Navy and regulators use to discuss technical issues for the environmental cleanup at NWIRP Bethpage. The entire RAB is invited; however, the Navy accommodates the regulators' availability when scheduling the meetings. The regulators and Navy use the technical meetings to discuss activities for NWIRP Bethpage and work out the next steps. The February technical meeting was originally scheduled to be held in Albany, but because of the regulators' schedule, a teleconference was held instead. Mr. Jim McBride, Community Co-Chair, recommended that the technical meetings be held on Long Island so that the RAB members could attend. The Navy noted that meeting minutes are prepared for the technical meetings and are then made available to the RAB. The minutes from the February technical meeting are included as an attachment to these minutes.

Mr. Colter went over the agenda and briefly introduced the presenters for the meeting. In answer to a question of when the Navy could plan to have someone to attend a RAB meeting to discuss some of the topics requested at the first RAB meeting, Mr. Colter indicated as part of the evening's discussion, the request for groundwater information would be addressed. The Navy also stated that NYSDEC, who was in attendance, would also be able to provide some additional information on the status of the groundwater feasibility study and Record of Decision (ROD).

REVIEW AND APPROVAL OF MINUTES

The stenographer transcripts from the September 30, 1999 RAB meeting were paraphrased and summarized into meeting minutes. The minutes were mailed out to all the RAB members for review. No comments were made on the September 30, 1999 RAB meeting minutes and the minutes were approved as written.

NAVY'S GROUNDWATER INVESTIGATION

Mr. Dave Brayack of Tetra Tech NUS, Inc. (TtNUS) provided a presentation of the Navy's groundwater investigation at NWIRP Bethpage. Mr. Brayack showed the locations of the Navy's sites, the Northrop Grumman facility, and the Hooker/RUCO facility. The Hooker/RUCO and portions of the Northrop Grumman facilities are located upgradient of NWIRP Bethpage. He indicated that general regional groundwater flow was to the south and east and that groundwater contamination in this area is a very complex issue. Dave described the plume as a mixture of several chlorinated solvents (such as trichloroethylene, tetrachloroethylene, trichloroethane) all co-mingled from multiple responsible party sources including the Navy. Mr. Brayack's discussion focused on the Navy's sources. Site 1, The Former Drum Marshaling Area, is the Navy's major groundwater concern on the NWIRP property. Site 2, The Recharge Basin Area, consists of three large recharge basins used for stormwater management and also used to reinject discharged water from Northrop Grumman operations back into the aquifer. This site also consisted of former sludge drying beds where soils contaminated with PCBs were discovered and subsequently excavated and disposed in an offsite landfill. Site 3, The Salvage Storage Area, was described as an area where neither soils nor groundwater were a significant environmental concern.

Mr. Brayack pointed out the location of the Navy's groundwater monitoring wells and explained that several groundwater monitoring wells located on the Northrop Grumman property are used to monitor groundwater upgradient of the Navy's property. Mr. Brayack explained about the Geographical Information System (GIS), which is a computer program that is used to link data points to locations on a map. The GIS for NWIRP Bethpage is being used to aid in the presentation of the groundwater data. The GIS also includes the monitoring wells that the Navy installed in the nearby neighborhood.

Isoconcentration contour maps were used to identify groundwater source areas, where areas with higher groundwater concentrations were generally nearer to the source. Mr. Brayack showed a figure showing the isoconcentrations for chlorinated solvents in groundwater. On the figure, production wells are shown as a square with an "X" inside. These production wells were mostly used by Northrop Grumman who would extract groundwater for noncontact cooling and then discharge the water to a series of recharge basins, including those on the Navy's property (Site 2).

Mr. Colter explained that because of the co-mingling of plumes from the three properties (Navy, Northrop Grumman, and Hooker/RUCO), the NYSDEC suggested that all three parties work together to comprehensively address groundwater contamination in this region. The Navy agreed to participate in the cleanup of groundwater along with Northrop Grumman, but because of difficulties encountered by having two lead regulatory authorities involved, it was decided that it would be better to allow Hooker/RUCO to address groundwater contamination at their facility separately under the supervision of the U.S. EPA Region II. The NYSDEC would continue directing groundwater remediation activities for the Navy and Northrop Grumman. Mr. Colter indicated that questions about overall groundwater cleanup were better addressed by NYSDEC and that a presentation on the status of the groundwater feasibility study and ROD could be a possible agenda item for a future RAB meeting.

A question was asked whether the groundwater was suitable for drinking. The Navy indicated that some of the contaminated groundwater plume has migrated offsite and has impacted, or may impact, public supply wells operated by the Bethpage Water District (BWD). All of the BWD wells located downgradient of the Navy/Northrop Grumman properties have treatment systems. In addition, all Nassau County public supply wells are monitored regularly to identify any public supply wells that may be potentially affected by contamination. Therefore, the groundwater distributed by the BWD is suitable for drinking.

A question was asked as to whether it was known how long the Bethpage public wells have been contaminated and whether any of the Bethpage residents have been affected. It was indicated that the Bethpage Water District would have that information. In addition, the Nassau County Health Department should also have information. It was indicated that because of industrial, commercial, and residential development in Nassau County, groundwater has the potential to be impacted by various sources. So all drinking water wells in Nassau County are monitored at least quarterly to make sure that the water is suitable for drinking.

Mr. Steve Scharf of NYSDEC indicated that the groundwater plume appeared to be receding in one area, but other portions of the plume appear to be spreading. An interim remedial measure has been implemented which includes the containment of contaminated groundwater on the Navy/Northrop Grumman property.

There was some discussion on the RAB participation in all the cleanup work at the Bethpage facility. The RAB was set up by the Navy to participate in the cleanup activities that are being conducted by the Navy. The Navy does not have all the Northrop Grumman information, but will update the RAB on information that Northrop Grumman provides to the Navy. Mr. Colter indicated that later in the agenda, the Navy would discuss the Navy's responsibility and explain the coordination among the members for groundwater cleanup activities.

Mr. McBride said he thought that the RAB should be part of all groundwater contamination discussions, since the Navy is participating in the groundwater clean up. However, Ms. Hare indicated that anything the Navy produces is public information, but the Navy cannot regulate or control the activities of Northrop Grumman. NYSDEC is regulating the groundwater cleanup. The Navy volunteered to prepare the groundwater feasibility study along with Northrop Grumman, but the overall management and remedy selection efforts are the responsibility of NYSDEC.

Mr. Brayack continued his presentation on groundwater, explaining that it appears that the production wells extracted some of the contaminated groundwater that mixed with the rest of groundwater pumped for non-contact water and then the water was discharged to the recharge basins. This pumping and recharge of groundwater impacted the flow and distribution of groundwater contamination at the facility.

Groundwater modeling by the Navy was conducted in the 1994/1995 timeframe to predict the migration of groundwater and the maximum extent of contaminated groundwater. Groundwater monitoring wells were installed in the predicted areas of maximum extent to monitoring groundwater contamination in those areas.

In answer to a question of how the contaminated groundwater plume looks today, it was explained that the interim containment system installed for groundwater (by Northrop Grumman) has stabilized the migration of contaminated groundwater off site. However, contaminated groundwater that was found off site before installation of the containment system is not contained by this interim system. Possible remedies for the offsite-contaminated groundwater have been identified (as part of a feasibility study) and NYSDEC has not proposed a selected remedy. Mr. Scharf explained that the proposed remedial action plan for the offsite-contaminated groundwater is currently being prepared. A draft plan has been reviewed internally, NYSDEC is currently addressing the comments, and then a proposed remedial action plan will be released for public review and comment. Mr. Colter noted that because of the potential for the offsite-contaminated groundwater to impact the public supply wells, as a precaution the Navy installed treatment systems for those wells.

A RAB member requested a general description of the hydrogeology in the area. Mr. Brayack explained that the aquifer is basically one large unit that starts at about 50 feet below ground surface to a depth of about 700 feet. At about the 700-foot depth, there is an approximate 100-foot thick confining unit, referred to as the Raritan clay layer. Beneath the Raritan clay layer is another aquifer that is not used because of the depth to the aquifer. While there are some clay layers shallower than the Raritan clay layer, these layers are only a few feet thick and are not continuous.

In answer to a question of why most of Long Island obtains drinking water from the upper glacial aquifer but the Bethpage area does not, it was explained that the upper glacial aquifer is shallow and is very susceptible to contamination from general land uses. It was clarified that public supply wells in Nassau County do not use the upper-glacial aquifer and it has not been used since the beginning of the 1900s (mostly because of contamination of nitrates from septic systems). It was also indicated that the upper glacial aquifer generally is in the upper 50 to 100 feet, but there is not a very noticeable difference between the geology of the upper glacial aquifer and the underlying aquifer. Both aquifers consist of sand and gravel with the soil a little coarser in the upper glacial aquifer.

AS/SVE OPERATION AT SITE 1

Ms. Marlene Lindhardt of Foster Wheeler Environmental Corporation (FWENC) provided a presentation on the operation of an air sparging/soil vapor extraction (AS/SVE) system at Site 1.

Ms Lindhardt explained that the system has been in place since 1998 and is used to treat soil. Site 1 is about 4 acres with mostly sand and gravel soil types. There are some clay layers at the site and the groundwater table is about 54 feet below ground surface. The major contaminants of concern at the site are volatile organic compounds (VOCs), including tetrachloroethylene (PCE), trichloroethylene (TCE), and trichloroethane (TCA). The AS/SVE system removes the VOCs by injecting air, which mobilizes the volatile contaminants into the soil vapor, and then capturing the vapor for treatment with an offgas treatment system. Ms. Lindhardt showed the layout of the system, which consists of a series of air injection wells (11 wells) and vapor collection wells (13 wells). The system includes monitoring locations to monitoring the offgases from the system. Activated carbon adsorption units are used to treat the offgases.

The system is not operated in the winter because the system piping is above ground and the air temperature is too cold during the winter. The system includes an alarm system that activates a pager so that if there is a problem with the system during operation FWENC is notified and can send someone to the site to correct the problem. Also, weekly equipment maintenance is conducted on the system.

The system was constructed in the summer of 1998 and operated 24 hours per day from July 1998 until December 1998 when it was shut down for the winter. The system was then started up again in March 1999 and operated until December 1999. The system is expected to be started up again in the Spring 2000.

Bi-monthly vapor sampling and analysis is conducted during operation of the system. Ms. Lindhardt showed a figure showing the removal of VOCs based on the sampling and analysis. Since the system began operation, it has removed over 400 pounds of VOCs. Ms. Lindhardt also mentioned a pilot scale system was operated before construction of the current system at the site, which removed the equivalent of several hundred pounds of VOCs.

Ms. Lindhardt indicated that because of some significant clay lenses in three areas of the site, the efficiency of the system to remove VOCs is less in these areas. The rest of the site has had sufficient removal of the VOCs. So the system will be modified to address the three trouble spots. Soil sampling will be conducted to identify air injection wells that can be turned off to increase the air flow in the other air injection wells to maximize the extraction of VOCs from the three areas.

A question was asked whether a ditch in the northern part of the Navy property that runs to a community park (which formerly was a landfill) has been investigated. The Navy indicated that the ditch was investigated as part of the Phase 2 Environmental Baseline Survey (which has not been issued to the public). Contamination was not found in the ditch. The Navy is not familiar with the history of the community park. Mr. Mangano explained that the park being referred to is the Bethpage Community Park that was donated by Grumman back in the 1960s. Testing at the landfill was conducted and contamination was not found at the park.

UPDATE ON ACTIVITES AT NWIRP BETHPAGE AND THE FEBRUARY 7, 2000 TECHNICAL MEETING

Mr. Colter provided a presentation highlighting the discussion at the technical subcommittee meeting held on February 7, 2000 (by teleconference). The meeting minutes are included as attachments to the RAB meeting minutes.

The technical meeting participants included NYSDEC (both Albany and Stony Brook), the State Health Department, Northrop Grumman, and the Navy. An update on the AS/SVE system was provided at the technical meeting. Investigation of Drywells 20-08 and 34-07, Area of Concern (AOC) 22, and AOC 22 was discussed. And the status of the Phase 2 Environmental Baseline Survey and groundwater (Operable Unit 2) were discussed.

Drywells 20-08 and 34-07

These two drywells were identified by Northrop Grumman and 2 rounds of sampling have been completed to date by Northrop Grumman. The delineation of contamination has not been completed, so additional sampled has been proposed. The additional sampling and identification of the remedy would be conducted by Northrop Grumman and then the actual implementation of the remedy would be conducted by the Navy.
In answer to a question of whether the RAB would be able to see the work plan before approval by NYSDEC, it was indicated that the work plan would be submitted to NYSDEC for review and comment and after addressing NYSDEC's comments the work plan would be released to the public for review. Mr. Colter clarified that Northrop Grumman may chose to make a presentation at a RAB meeting, but only the Navy documents must be provided or discussed with the RAB. Because Northrop Grumman is a private entity, they do not have the same obligations as the Navy for public involvement.

In answer to a question of what the RAB's purpose is if investigations and remedial activities at NWIRP Bethpage are being conducted by Northrop Grumman (which is out of the RAB's realm). Ms. Hare answered that the RAB is a way for the Navy to communicate with the public and for the public to interact with the Navy. This way the Navy and regulators can have public input throughout the process and take into consideration the publics comments. The Navy cannot determine whether Northrop Grumman participates on the RAB. By choice, Northrop Grumman can participate and does participate on another RAB. The Navy is fortunate that Northrop Grumman is doing a good job participating and cooperating with the cleanup, so that the clean up can occur at a faster pace. If Northrop Grumman chose not to participate as much as they have, the clean up of NWIRP Bethpage probably would not have progressed as far as it has to date. So, although the Navy can not mandate that Northrop Grumman attend the RAB meetings or provide a presentation/update, the Navy believes that Northrop Grumman would agree to do some type of presentation.

AOC 20

This AOC was a drywell where Northrop Grumman found metals contamination. The Navy conducted sampling in and around the AOC. Based on the results of the investigation it was found that the concentrations of metals did not require additional remediation. The draft copies of the report summarizing the investigation and the conclusions was provided to the regulators and will be sent out to the RAB members.

AOC 22

This AOC was a former underground storage tank (UST) location. Northrop Grumman identified a potential free product layer and the Navy continued investigation by installing 13 borings. The results of the investigation indicated that the soils showed some petroleum contamination; however, the concentrations were below regulatory standards. Therefore no action for soil is proposed. The free product layer detected on the water table was not found to be sufficient for recovery. Groundwater contamination found at the AOC (petroleum and solvent related) would be addressed as part of the facility groundwater treatment system. As with AOC 20, the draft report of the Navy investigation and the conclusions were provided to the regulators and will be sent out to the RAB members.

Phase 2 Environmental Baseline Survey (EBS)

The draft Phase 2 EBS was sent out for comments in March 1999. NYSDEC comments were received in February 2000 and comment resolution is expected to go through March 2000. The Navy projects that the final Phase 2 EBS will be submitted in April 2000.

Groundwater (Operable Unit 2)

The Navy will begin installation of monitoring wells in the community in March/April 2000. The wells will be used to monitor the effectiveness of the groundwater containment system and evaluate the concentrations of chemicals in the area downgradient of the containment system.

NYSDEC is expecting to get the Proposed Remedial Action Plan (which identifies the preferred remedy) out in April 2000 and a signed Record of Decision is expected in May 2000. Mr. Colter noted that many of the likely components of the remedy are already in place.

OTHER TOPICS

A question was asked whether there was money available to have a technical advisor for the RAB. The Navy indicated that the money is available and a presentation on the program that makes the money available to the RAB has not yet been done for the RAB. Ms. Hare explained that the money was intended to provide technical assistance to the community if the Navy was not able to provide the technical assistance.

There was some discussion on the option for government deferral (where the Navy continues clean up of a site while still allowing the town to start development of the property). Mr. Mangano indicated that Bethpage did not decide to go for the option of government deferral and the town will not be able to develop the areas that the Navy has retained for cleanup until those areas are remediated and deeded over to the town.

There was also some discussion on the clean up levels required for soil and groundwater and the concern that the clean up levels for soil were not developed to protect the groundwater. Mr. Colter indicated that discussion of migration of chemicals from soil to groundwater would need to be a subject of another presentation at another meeting. As part of the site tour in December 1999, the remaining soil contamination was discussed. Mr. McBride said he was impressed with the site tour and the clean up that has been completed by the Navy. Mr. Colter offered to have another site tour if any concerned citizens requested one.

DATES AND DISCUSSION TOPICS FOR NEXT MEETING

Ms. Hare indicated that the Navy would like to coordinate the Bethpage and Calverton RABs so that they were looking at May 2000 for the next RAB meeting.

It was suggested that Mr. Scharf may want to do a presentation on the Proposed Remedial Action Plan at the next meeting. It was also noted that if anyone had any topics for the next meeting or had any concerns to please contact Mr. Colter or Mrs. Hare.

CLOSING REMARKS

Because of other obligations of some of the RAB members, the discussion of future RAB meetings and topics was not discussed in detail. Ms. Hare indicated that she would coordinate with Mr. McBride to develop an agenda and date for the next meeting.

POSTSCRIPT NOTE

Stenographer's transcripts are prepared for RAB meetings to assist the Navy in preparation of meeting minutes. The transcripts are available in the NWIRP Bethpage Information Repository at the Bethpage Library. To assist the stenographer, RAB members and other attendees at the meeting are requested to speak one at a time for the stenographer to accurately transcribe the meeting discussions.

ATTACHMENTS

- Agenda
- February 7, 2000 Technical Meeting Teleconference Minutes
- Presentation on the Site 1 Air Sparging/Soil Vapor Extraction System
- Presentation on the Highlights of the Technical Subcommittee Meeting

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

February 17, 2000
Bethpage Community Center – Bethpage, NY
7:00 p.m.

Welcome and Agenda Review
Judithanne Hare
Naval Air Systems Command

Review and Approval of Minutes
All Members

Navy's Groundwater Investigation
Dave Brayack
Tetra Tech NUS, Inc.

AS/SVE Operation at Site 1
Marlene Lindhardt
Foster Wheeler Environmental Corporation

Update on Activities at NWIRP Bethpage and February 7 Technical Meeting
Jim Colter
Naval Facilities Engineering Command - Northern Division

Dates and Discussion Topics for Future Meetings
All Members

Closing Remarks
Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.

SUBJECT: Meeting Minutes for Phone Conference Held on Feb. 7, 2000 Regarding Various Issues at NWIRP-Bethpage

Reference: Agenda entitled, "Technical Subcommittee of the Restoration Advisory Board – Naval Weapons Industrial Reserve Plant Bethpage: February 7, 2000

Attendance List:

- Jim Colter (Navy)
- Todd Bober (Navy)
- Steve Lehman (Navy)
- Joe Kaminsky (NAVAIR)
- Al Taormina (NAVAIR)
- Stan Farkas (NYSDEC-Stony Brook)
- Steve Scharf (NYSDEC-Albany)
- John Helmset (NYSDEC-Albany)
- Jim McBride (Bethpage RAB Co-chair)
- Bill Gilday (New York State Health Dept)
- John Lovejoy (Nassau County Health Dept)
- Carol Stein (USEPA Region II)
- Dave Brayack (TtNUS)
- Marlene Lindhardt (Foster Wheeler)
- John Cofman (Northrop Grumman)

Jim Colter opened the meeting at about 10:15 a.m. by announcing that the next RAB will be at the Bethpage Community Center, Thursday Feb. 17, 2000. Jim then began discussions on Site 01, the Drum Marshaling Area. Jim explained that the ROD was signed in 1995 and that the current air sparging system at site 01 was originally intended to decrease VOC levels in the soils to concentrations that are not regulated for offsite disposal. It was additionally mentioned that Foster Wheeler accomplished a boring program last summer and that a rough draft report summarizing the boring data as well as the progress of the air sparge system was sent out last week.

Marlene Lindhardt then discussed the results of the air sparge remediation program. Marlene stated that geoprobes around the perimeter showed low VOCs. Marlene also stated that the vacuum had decreased around some of the extraction wells (e.g. from 8 inches of water to less than 4 inches of water) resulting in a decreased radius of influence and therefore a lower removal efficiency. Some of the reasons for the loss of vacuum were removal of soil moisture in the soil pore spaces, the addition of some of the Tetra Tech pilot wells to the system, and localized effects caused by the presence of clay lenses within the vadose zone.

Steve Scharf stated that he had not been receiving the monthly reports regarding Foster Wheeler's progress on a regular basis. As a result, Steve asked Marlene to summarize monthly trends such as GAC consumption and trends for total VOC removal. Marlene stated that, initially, there was a significant decrease in the removal of VOCs when the system was first started up but that removal quantities had dropped off significantly as the system operated. One factor for this offered by Marlene was the fact that the significant increase in precipitation due to last year's storms may have contributed to the decrease in treatment performance.

Steve Scharf stated that the Navy needs to improve communications with NYSDEC on projects like the AS/AVE system at Site 1. Jim Colter stated that the program was particularly fast paced at Bethpage due to the availability of funds but that better communication would occur in the future. It was also pointed out that John Helmset who is from the NYSDEC Construction department was included on the monthly progress report distribution list and should have been receiving the monthly progress reports.

It was requested that the Nassau County Health Department be included on the e-mail distribution list.

John Helmset asked how the current contaminant levels relate to those cleanup requirements specified in the ROD and also if the Navy can start excavating soils for offsite disposal at Site 01? Jim Colter responded by stating that the ROD may need to be reopened to better define cleanup requirements for all contaminants of concern, however the Navy is waiting to obtain data from the Northrop Grumman drywell investigations so that a comprehensive and thorough cleanup strategy can be developed for both Site 01 and the drywells. In order to accomplish the cleanups without adversely impacting the conveyance of land to Nassau County, the Navy will retain Site 01and associated dry wells until remediation is in place. The Navy does however, intend to transfer the remainder of the 105-acres as soon as possible.

NYSDEC mentioned that the EPA has recently implemented exemptions for disposal of VOC contaminated soils. These exemption are known as Phase IV exemptions. The Phase IV exemptions are currently being reviewed by NYSDEC and they are hoping to promulgate guidance this Spring to begin to implement the EPA's Phase IV exemptions which could effect the cleanup number that are currently being used by the Navy for VOCs at Site 01.

NYSDEC also asked if the Navy was planning to continue running the AS/SVE system until a decision is made regarding excavation of Site 01 for other site-related contaminants (i.e. metals & PCBs). JimColter said that additional AS/SVE would be accomplished and that in about two weeks the Navy will forward its recommendations for how to modify the AS/SVE for optimal performance.

John Cofman provided an update on the status of the Northrop Grumman dry well investigation. He stated they had originally planned on having the investigations completed by now but that was based on the assumption that clean endpoint samples would have been collected during the first round of sampling. However, this did not happen and they have had to go out for subsequent sampling rounds to try and achieve clean endpoint samples. At this time, John's thoughts are that soils and groundwater have been delineated but that internal draft document from ROUX had just been received and is still being reviewed by Northrop Grumman. John estimated, however, that they would still be in a position to discuss remedial options in an FS some time in June 2000.

NYSDEC asked John Cofman if PCBs had migrated under the building. John replied that their sampling program involved taking soil samples every two feet for PCBs and based on this, PCBs had not migrated under the building. They also asked if the PCB contamination that is being found in the drywells represents a similar situation to that out at Site 1. John answered that both areas are similar.

NYSDOH then asked if the Navy was going to retain separate parcels for Site 1 and the drywells. The Navy replied that the land to be retained would join both areas into one contiguous land mass.

A question was asked to the Navy as to how the PRGs and cleanup levels for the 1995 ROD for Site 1 were determined. Dave Brayack responded that the VOC goals were developed based on the following:

1) soil to groundwater transfer leachate modeling developed for the protection of groundwater
2) decreasing the VOC levels in the soil to a point so that any future excavation in the area would not release significant VOCs in the air to nearby residential areas, and
3) decreasing VOC levels in the soil to a point where they are no longer considered to be a hazardous waste with regards to offsite disposal.

Dave Brayack then discussed the AOC 20 investigation that was in the vicinity of a former dry well. The Navy explained that this areas was added to the AOC 22 investigation since it was discovered that some metal results reported in the AOC 22 Site Assessment, conducted by Northrop Grumman, exceeded TAGM 4046 values. It was further concluded that these results were inadvertently entered into the AOC 22 tables and should have been part of the AOC 20 Site Assessment effort. Since no conclusion were offered in the Northrop Grumman report with regards to these exceedances, the Navy decided to conduct some further delineations. Dave went on to explain that the program consisted of the installation of several borings in and around the suspected location of the former drywell but that the original detections of metals could not be reproduced. Some sporadic detections of metals were found but none that would indicate that a source of metal contamination existed.

Dave did note that a gravel layer was encountered at a depth which would be consistent with the construction of a drywell and that this gravel was probably the residual material from the former dry well.

NYSDEC asked John Cofman if the Plant 24 area on Northrop Grumman property will have a delineation report. John answered yes.

Dave Brayack continued with a discussion of the AOC 22 investigation. Dave stated that sometime around 1984, fuel oil tanks were pulled and that these tanks primarily held #6 fuel oil but were reported to have also held #2 and/or #4 fuel oils at one time or another. During drilling, the drillers encountered refusal at a depth and concluded that the refusal was caused by the concrete slabs that supported these tanks still remained in place. During their Site Assessment effort, Northrop Grumman had discovered this area and reported a high concentration of total TPH at depth leading them to believe that a free product layer existed near the water table which occurs at a depth of approximately 50 feet below grade surface (bgs). Northrop Grumman asked that the Navy continue the investigation under it's IR program and the Navy agreed. The Navy's primary goal was to see if a free product actually existed, and if so, how large was it and was it recoverable? The Navy installed 13 soil borings, including one from within Plant 3, and concluded that there was no significant petroleum contamination in soils from 0 to 20 feet bgs but that residual TPH was measured from 20 feet to the water table (about 50 feet). Also, the boring taken from within Plant 3 showed no concentration of petroleum. The conclusion was that, at one time, there may have been a free product layer near the soil-water interface due to measured TPH levels. The thickest product on the water table was measured to be approximately 0.02 feet thick. Low levels of BTEX residuals were measure in the groundwater (e.g. 17 ppb benzene, 20 ppb 2-methylnaphtalene) and also chlorinated solvents, mainly TCE at 86 ppb, was also detected. It was pointed out that the TCE could be the residual from a historic source that no longer exists from within Plant 3 due to Northrop Grumman's extensive soil excavation program that they conducted. It was further pointed out that this groundwater contamination was being addressed as part of the regional groundwater operable unit #2.

NYSDEC asked if this report was sent to the State's Spills Program. The Navy asked if Stan Farkas could forward his copy of the draft report to Nick Acampora of the Spills Program in NYSDEC Region I offices in Stony Brook. Stan stated that he would

At this point around 11:15 a.m., the RAB community co-chairman, Jim McBride, had to leave the meeting at 11:15 AM.

Prior to leaving, Mr. McBride asked about the ability of the community members of the RAB to comment on the Phase I and Phase II EBS's for NWIRP-Bethpage. Jim Colter stated that only final EBS's are placed in the Public Repository and that currently only the Phase I EBS is in the repository. Jim stated that the Navy welcomes RAB comments on the EBS's but is not soliciting RAB input. Jim explained that at this point, the Navy is trying to streamline the EBS process so that Transfer documents such as FOSTs/FOSLs (Finding of Suitability for Transfer/Lease) and other property transactions can be done expeditiously. Jim reminded everyone that documents such as the FOST for Bethpage incorporates information contained within the EBS reports.

Steve Scharf asked about the DOH's position on PAHs and Bill Gilday of the DOH stated it is not a TAGM 4046. Steve also asked why the Navy collects soil samples at different depths for the EBS (eg. Some at 4 feet and some at 8 feet). Jim Colter responded that the Northrop Grumman's logic was that if no noticeable contamination is found at shallower depths, there is no reason to proceed with sampling at deeper depths.

Steve Scharf asked who did sampling inside buildings. Jim Colter responded that the Phase I site assessment effort was done by the Radian Corporation and Phase II sampling was done by both Radian and Davirka & Bartilucci (D&B).

Jim Colter stated that the Navy's EBS reports are important documents because they summarize the efforts taken by the Northrop Grumman Corporation since Northrop Grumman does not have a community outreach program nor a requirement to establish one. Jim stated that the EBS needs to be finalized so that it can be released to the Public and allow the transfer process to continue.

Jim Colter stated that the Draft FOSL for Navy Plants 5 and 20 was e-mailed out in December 1999 and that the property owner (NAVAIR) is anxious to sign a lease with Northrop Grumman to allow them to continue to use these facilities in the interim while the transfer process continues.

Discussions regarding groundwater (Operable Unit #2) were then initiated. Jim Colter mentioned that the Navy is moving forward with contracting procedures to install groundwater monitoring wells as recommended in the plan developed by ARCADIS Geraghty & Miller. Jim also stated that the Navy's program now includes the installation of 3 vertical profile borings (VPBs) at locations agreed to by NYSDEC and Northrop Grumman in a previous teleconference. NYSDEC responded that they would like to obtain some basic information describing the sampling such as QA/QC, analytical methods, depth, location, etc. for the vertical profile borings at GM 38, 76, and 77. The Navy stated that a letter workplan is being developed and will be forwarded to the State upon completion.

Steve Scharf then gave the status of the OU2 PRAP and ROD. Steve said he needed the CADD figures from Cofman and would also like a copy of the Bethpage aerial photos from Al Taormina. Steve's goal is to have a PRAP by April, and a public meeting and signed ROD in May. Jim Colter offered that the State take advantage of the RAB to help aid with the community input requirements. Jim recommended that the State plan on presenting the contents of the PRAP at a future RAB meeting.

Prior to the conclusion of the meeting, a question was asked about EPA's role in the Bethpage cleanup program. Ms. Carol Stein responded that she wanted to listen in to get a sense of the progress being made by the Navy but that the EPA has deferred regulatory decisions to New York State. Carol did offer to look into the requirements for the Phase IV VOC disposal waiver and encouraged NYSDEC and NYSDOH to contact her for further information regarding this new guidance.

Site 1 Air Sparging/Soil Vapor Extraction System

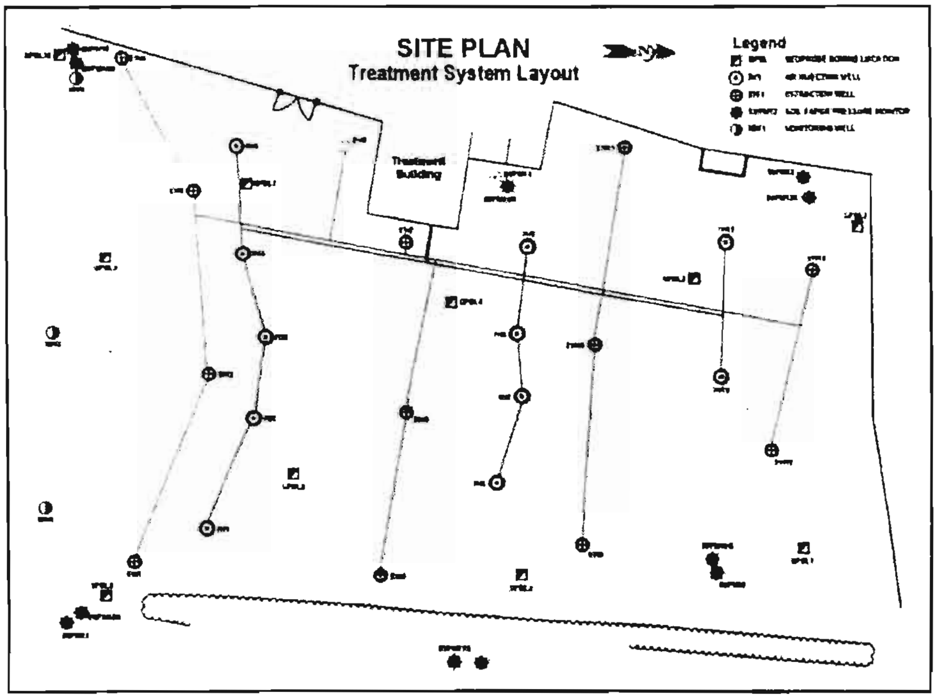
Jim L. Colter, Remedial Project Manager
Steven B. Lehman, PE, Design Manager
US Navy - NorthDiv
Marlene B. Lindhardt, CHMM, Project Manager
Foster Wheeler Environmental Corporation

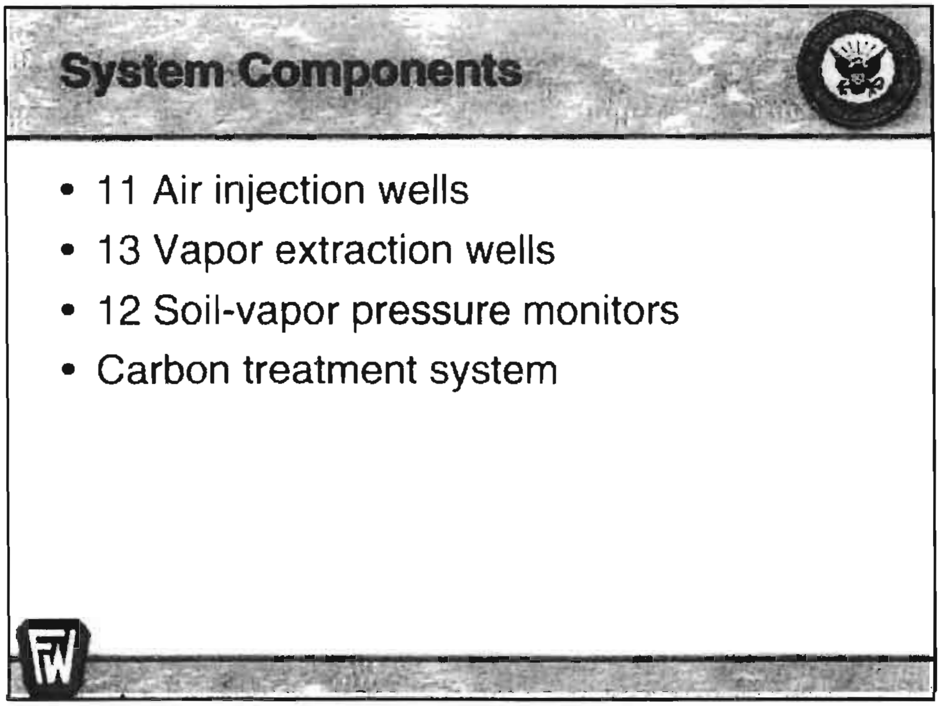
Site Description

- Approximately 4 acres
- Soil is sand, gravel and clay
- Water table is 54 feet below ground surface
- Primary VOCs are PCE, TCA and TCE

Purpose of the System

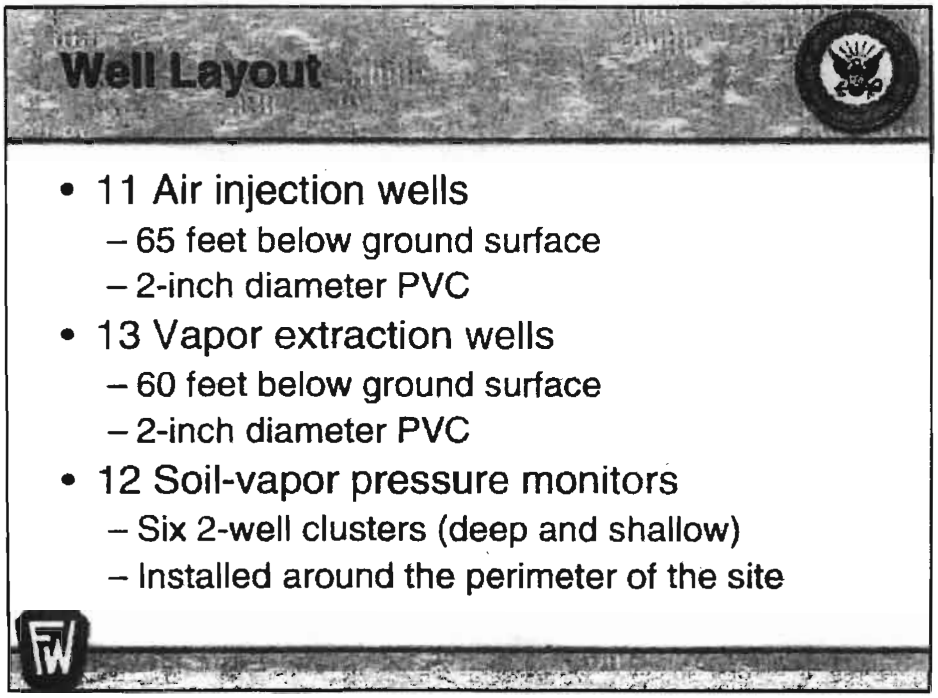
- Remove volatile organic compounds from soil
- Injects air into the soil to mobilize the VOCs into vapors
- Captures the vapors for treatment through extraction wells





System Components

- 11 Air injection wells
- 13 Vapor extraction wells
- 12 Soil-vapor pressure monitors
- Carbon treatment system



Well Layout

- 11 Air injection wells
  - 65 feet below ground surface
  - 2-inch diameter PVC
- 13 Vapor extraction wells
  - 60 feet below ground surface
  - 2-inch diameter PVC
- 12 Soil-vapor pressure monitors
  - Six 2-well clusters (deep and shallow)
  - Installed around the perimeter of the site

Treatment System

- 500-gallon Moisture separator
- Injection blower - 7 1/2 hp
- Extraction blower - 7 1/2 hp
- Two 1,800-lb. Activated carbon units
  - Piped in series

Alarm and Autodialer System

- Automatically dials a pager
  - Loss of power
  - No vacuum at extraction blower
  - Extraction blower vacuum
  - Injection blower shutdown

Operational Status

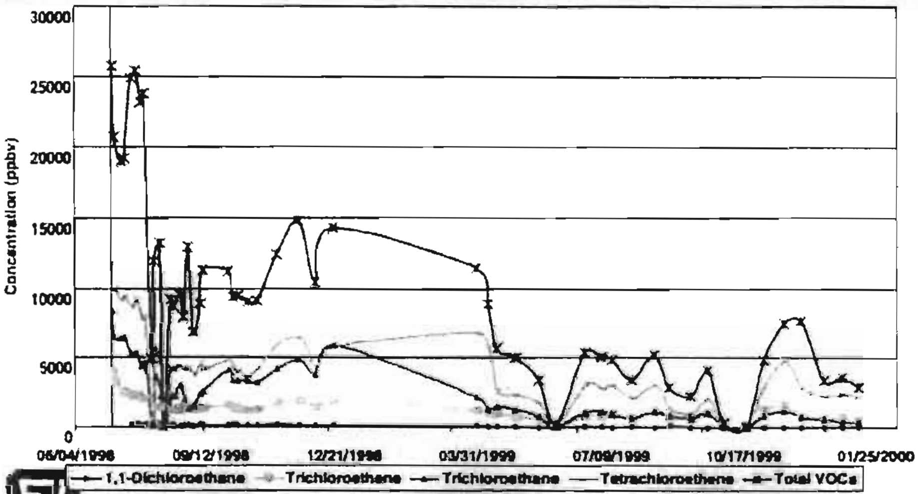
- Constructed in summer of 1998
- Operated 24 hours per day
- Operated 7/98 - 12/98
- Operated 3/99 - 12/99

Operations & Maintenance

- 24-hour Autodialer
- Bi-Monthly vapor sampling and analysis
- Weekly equipment maintenance
- Environmental monitoring

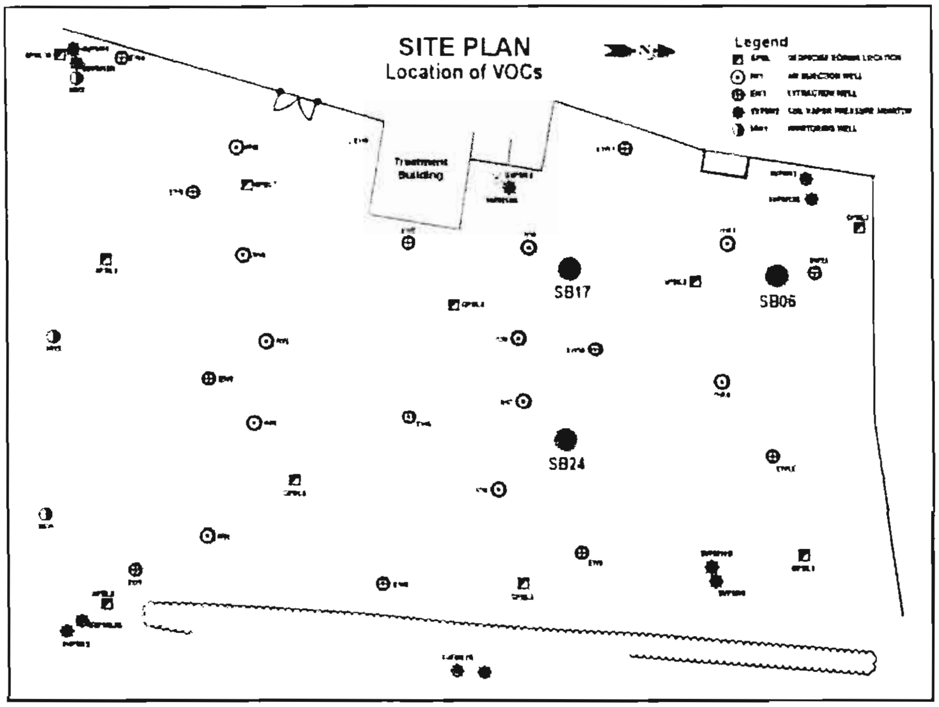
Removal of VOCs

Concentration vs. Time



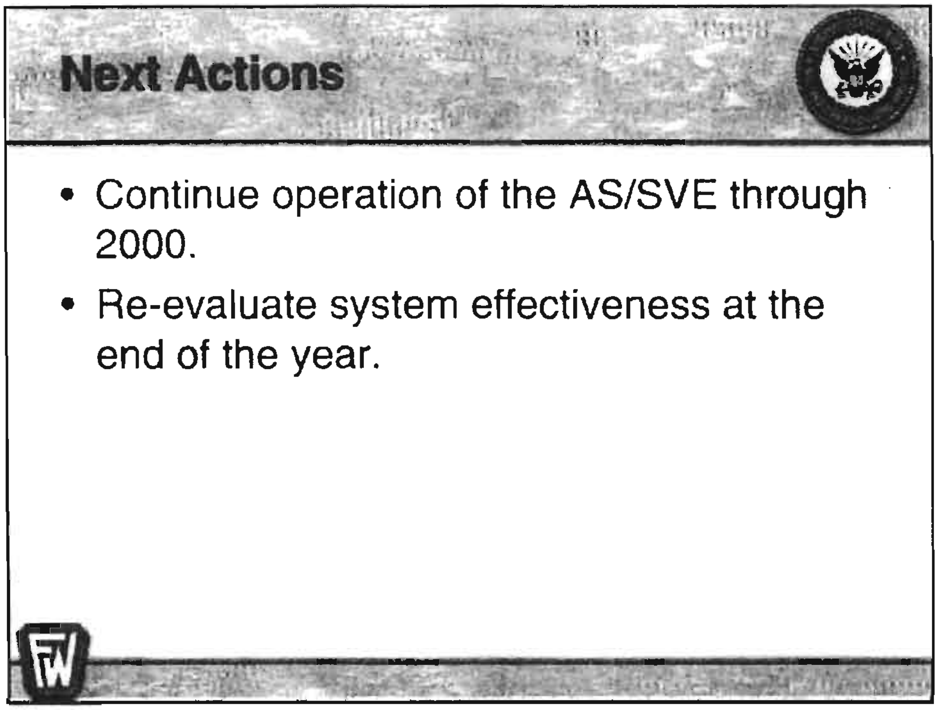
Remediation Status

- Since July 1998, removed over 400 lbs. of VOCs from site soils
- Current data shows significant decrease of VOCs
- VOCs remain in small areas



Next Actions

- Start-up in Spring 2000
- Adjustments to address 3 boring locations
  - Turn off airflow at locations that do not show VOCs
  - Increase airflow and extraction in 6 locations
  - Increase vapor pressure monitoring and increase/decrease pressure as necessary



Next Actions

- Continue operation of the AS/SVE through 2000.
- Re-evaluate system effectiveness at the end of the year.

HIGHLIGHTS OF TECHNICAL SUBCOMMITTEE MEETING

- Meeting held via teleconference on February 7, 2000
- Update on Site 1 Air Sparging/Soil Vapor Extraction (AS/SVE) System
- Drywells 20-08 & 34-07
  - 2 rounds of sampling completed to date
  - Delineation not yet complete
  - Schedule for future sampling rounds pending

HIGHLIGHTS OF TECHNICAL SUBCOMMITTEE MEETING

- AOC 20
  - Former Drywell
  - Metals detected in initial NG investigation
  - Navy conducted sampling in and around AOC
  - Samples taken near original location did not contain metals in excess of TAGMs
  - Samples below drywell below TAGM
  - Sporadic detections above TAGM but barely above background
  - Concluded that no additional actions are required
  - Results to be included in transfer documents

HIGHLIGHTS OF TECHNICAL SUBCOMMITTEE MEETING

- AOC 22
  - Former UST Location
  - NG identified as potential free product layer
  - Navy continued investigation by installing 13 borings (1 inside Plant 3)
  - Found minor soil contamination down to 20 feet (PAHs)
  - Soil contaminated with petroleum directly beneath former tank location extends from 20 feet to water table
  - Soils located 10 to 40 feet away from former tank location showed soils contaminated with petroleum only at water table (55 to 60 feet)

HIGHLIGHTS OF TECHNICAL SUBCOMMITTEE MEETING

- AOC 22 (Continued)
  - Soils 60 feet away from former tank location did not reveal any soil contamination
  - Although soils were detected with petroleum, levels of VOCs & SVOCs did not exceed State cleanup standards, therefore, no action for soils required
  - Free product detected on water table, however, maximum thickness was 0.02 feet and found not to be recoverable
  - BTEX and TCE detected in groundwater but will be addressed by groundwater treatment system (Operable Unit 2)

HIGHLIGHTS OF TECHNICAL SUBCOMMITTEE MEETING

- Phase 2 EBS
  - Draft sent out for comments in March 1999
  - NYSDEC comments received February 2000
  - Comment resolution through March 2000
  - Final Phase 2 EBS out in April 2000

HIGHLIGHTS OF TECHNICAL SUBCOMMITTEE MEETING

- Groundwater (Operable Unit 2)
  - Monitoring wells associated with NG plan to be installed by Navy starting in March 2000
  - Preferred Remedial Action Plant (PRAP) by April 2000 (NYSDEC-lead)
  - ROD Signed in May 2000

DEPARTMENT OF DEFENSE
UNITED STATES OF AMERICA

DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

IN REPLY REFER TO

5090
Code 1824/JC

0 5 MAR 2001

MEMORANDUM

FOR THE MEMBERS OF THE RESTORATION ADVISORY BOARD (RAB) FOR THE INSTALLATION RESTORATION PROGRAM AT NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) BETHPAGE, NEW YORK

The Navy would like to announce that a Restoration Advisory Board (RAB) meeting has been scheduled for **Tuesday, March 13, 2001.** This meeting is open to the general public and will be held at the NWIRP Bethpage Community Center located on 103 Grumman Road in Bethpage, New York.

The agenda for the meeting, which will begin at 7:00 p.m., will be to discuss the status of the Navy's remedial activities ongoing at the NWIRP Bethpage facility.

If you need additional information, please call either Judy Lamey of Tetra Tech NUS, Inc. at (412) 921-8817 or myself at (610) 595-0567, extension 163.

Sincerely,

James L. Colter

JAMES L. COLTER
Remedial Project Manager
By direction of the
Commanding Officer

Distribution:
NAVAIR, Judith Hare
NYSDEC (Albany), Steve Scharf
NYSDEC (Stony Brook), Stan Farkas
NYSDOH, Bill Gilday
U.S. EPA Region II, Carol Stein
Nassau County DOH, Bruce Mackay
Nassau County DPW, Tim Kelly
Town of Oyster Bay, Hon. John Venditto
Town of Oyster Bay DPW, Tom Clark
DCMC, Marty Simonson
J.A. Jones, Al Taormina
Bethpage Water District, John Molloy
Community Co-Chair, Jim McBride
Community RAB Member, Hon. Ed Mangano
Community RAB Member, Linda Mangano
Community RAB Member, Ed Resch
Community RAB Member, Charles Bevilacqua
Community RAB Member, Roy Tringali
Community RAB Member, Rosemary Styne
Community RAB Member, John Lovisolo
Non-RAB Members Community Mailing List
Community Member, Debra McDonald
Community Member, Anna Baerga
Community Member, Betty Seiden
Community Member, Erik Dumont

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Bethpage

March 13, 2001
Bethpage Community Center, Bethpage, NY
7:00 p.m.

Welcome and Agenda Review
Judithanne Hare
Naval Air Systems Command

Review and Approval of Minutes
All Members

Status of Activities at NWIRP Bethpage
Jim Colter
Naval Facilities Engineering Command – Northern Division

Action Item Review and Dates and Discussion Topics for Future Meetings
All Members

Closing Remarks
Judithanne Hare
Naval Air Systems Command

Presenters will be available after the program for questions.

RESTORATION ADVISORY BOARD (RAB) MEETING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE
NWIRP BETHPAGE SECURITY BUILDING, PLANT 17, BETHPAGE, NEW YORK
October 25, 2000

The seventh meeting of the RAB began at 7:00 pm. RAB members attending were: Judith Hare, Joe Kaminski, and Jim Colter from the Navy, community members Jim McBride, John Lovisolo, Rosemary Styne, Roy Tringali, and Edward Mangano; Steve Scharf representing New York State Department of Environmental Conservation (NYSDEC), Charles Bevilacqua representing the Conservation Fund Advisory Board; Thomas Clark representing Oyster Bay Department of Public Works; William Gilday representing New York State Department of Health (NYSDOH); Tim Kelly representing Nassau County Public Works; and Martin Simonson representing Defense Contract Management Agency. Members absent included community members Linda Mangano, John Venditto, and Edward Resch; John Molloy representing Bethpage Water District; Carol Stein representing U.S. EPA Region II; Bruce Mackay representing Nassau County Department of Health; Stan Farkas and Nick Acampora representing New York State Department of Environmental Conservation (NYSDEC).

There were also approximately 15-20 attendees from the general public.

WELCOME AND AGENDA REVIEW

Ms. Judith Hare, the Navy Co-chair, welcomed everyone and introduced a guest to the RAB meeting, Mr. Conrad Mayer, Director of the Environmental Department of Northern Division's Naval Facility Engineering Command.

Jim Colter provided an update on the AS/SVE system at IR Site 1. The Navy had conducted a soil boring program to determine the effectiveness of AS/SVE system. Based on the results, the Navy adjusted the system to address areas where the effectiveness has been low. The system was restarted in June 2000 and was continuing to run. Four soil vapor extraction wells and four air injection wells were shut down and flow rates on the remaining wells were adjusted appropriately. The Navy anticipated operation of the system to the end of the calendar year then the Navy would make a *determination* as to whether to continue operation in 2001. The decision will include input from the New York State Department of Environmental Conservation. To date, over 500 pounds of VOCs have been treated by the system and 104 pounds since June 2000. This estimate is based on only four VOCs: 1,1-DCA, TCE, PCE, and 1,1,1-TCA. The total VOCs removed are actually higher and include other VOCs.

Concerning Dry Wells 20-08 and 34-07, Northrop Grumman is taking the lead on the investigation. Northrop Grumman Corporation (NGC) had recently finished delineation of the soil contamination in June 2000. Prior to this, NGC had excavated to approximately 35 feet below ground surface and removed PCB contaminated soil at levels greater than state clean up levels. However, PCBs still remained at depth. NGC issued a fieldwork report and exposure assessment to the Navy in July and the Navy provided comments in August. Northrop Grumman finished the revisions to the exposure assessment in October and will be issuing the draft to the regulators. NYSDEC wants NGC to look at the dry wells further as part of a focused feasibility study. Upon completion of the state's review, Northrop Grumman will prepare a CMS if warranted. The time frames are to be determined based on NYSDEC review.

AOC 22 was discovered during the closure process conducted in 1999. Concerning AOC 22, the Navy submitted a fieldwork report in January 2000. NYSDEC issued comments in March. The state requested additional investigation. The Navy has retained this property and put comment responses on hold and will address them after the property transfer is complete.

The Navy issued a Draft Finding of Suitability to Transfer (FOST) in September 2000 that discusses the suitability to transfer most of the facility. Th FOST excludes the 8 acres still under investigation that will be retained by the Navy. This FOST was distributed to the RAB and a copy is housed in the library. Comments are due in December. The original date was to be November, but the Navy extended another thirty days to accommodate NYSDEC's request. The Navy will then incorporate those comments and issue a signed FOST document sometime in January 2001.

Regional groundwater is another issue that the Navy is taking participation. The joint Feasibility Study (FS) outlining available options to address groundwater was finalized in early October 2000. There will be a public availability session held on December 6 at

JFK Junior High School at 7:00 P.M. This session will be a series of poster board presentations to help explain the FS process, how it relates to groundwater, and the options explored and evaluated. Currently, NYSDEC will be issuing a PRAP in November for the preferred remedy that they selected based on the FS. A public meeting is tentatively scheduled for December 13 to announce that remedy. The place and time has yet to be determined. After conducting the public meeting and responding to public comment, NYSDEC will issue a ROD for groundwater remediation.

Mr. Colter mentioned that since the last RAB, the Navy had started installing a system of monitoring wells off-site of Navy property. Mr. Brayack stated that they had started the installation last April and presented a figure showing the location of these wells. The wells were installed in clusters and the approximate depth is indicated by the well name: S-Shallow (approximately 50 feet bgs), I-Intermediate (100-200 feet bgs), D1-Deep (300-400 feet bgs), and D2-Deep (approximately 600 feet bgs). Mr. Brayack stated that part of the underlying geology is composed of primarily of sand that extend to approximately 600-800 feet below ground surface. Over 5000 vertical feet of monitoring wells have been installed to date. Mr. Brayack presented a total of four figures. Not shown on the figures were the wells that were installed prior to the current program. Figure 3 showed the locations of the vertical profile borings. Figure 4 showed Planned Offsite Monitoring Wells. Leaflets have been distributed near where the drilling has been or will be conducted.

A question came up about cancer in their household. An individual had received a questionnaire about cancer in their household. Mr. Bill Gilday of NYSDOH explained that a local group had borrowed the mailing list from the Department of Health and that the questionaire was likely related to pesticides on Long Island and was to be used for the development of a map showing the incidences of cancer. Mr. Gilday stated that he would discuss this topic after the meeting with the concerned citizen.

Mr. Steve Scharf clarified that residents would not be exposed to contaminated groundwater. Some municipal wells have been impacted, however, water in these wells is treated prior to distribution. Also, the Interim Remedial Measure will become a permanent part of the PRAP. The PRAP is at the library now and a press release will be put out to announce the availability and the comment period.

Ms. Hare addressed the remaining items on the agenda and then the meeting continued with Mr. Scharf's presentation.

ACTION ITEMS

Action Item	Person(s) Responsible	Tentative Due Date	Status
Add all people who signed in on general mailing list to receive RAB meeting notice	J. Lamey		