DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, MID-ATLANTIC
9742 MARYLAND AVENUE
NORFOLK, VA 23511-3095

5090 IN REPLY REFER TO
15/OPNEEV4/6072
June 11, 2007

Kymberlee Keckler
EPA New England, Region I
1 Congress Street
Suite 1100 (HBT)
Boston MA 02114-2023

Paul Kulpa
State of Rhode Island
Department of Environmental Management
Office of Waste Management
Providence RI 02908-5767

Dear Ms. Keckler & Mr. Kulpa

Subject: DRAFT ACTION MEMORANDUM FOR SOIL REMOVAL ACTION AT IR SITE 21 - MELVILLE WATER TOWER; PORTSMOUTH, RI

The Navy is forwarding the Draft Action Memorandum for a Non-Time Critical Removal Action that is to be conducted at Installation Restoration (IR) Site 21 - Melville Water Tower located in Portsmouth, Rhode Island. This document is being submitted for your review and/or comment.

This Action Memorandum documents the Navy's decision to pursue a removal action that will excavate selected areas of soils known to contain lead contamination. Due to the proximity of the adjacent Melville Elementary School, the Navy has decided that this removal action will address those soils that contain lead in excess of the Rhode Island Department of Environmental Management's (RIDEM's) residential standard of 150 mg/kg. In addition, the concrete building foundation and the concrete footings that supported the former water tower will also be removed as part of this action. This plan was presented to members of the local community during a public meeting that was held at the Melville Elementary School on May 1, 2007. No adverse comments were received.

Copies of this document have also been sent to those on the distribution list below for their review and comment.

5090
15/OPNEEV4/6072
June 11, 2007

If you have any additional questions regarding the enclosed document, you can contact me by phone at (757) 444-4217 or by email at james.colter@navy.mil.

Sincerely,

JAMES L. COLTER, P.E.
Remedial Project Manager
By direction of the
Commanding Officer

Enclosure

Copy to: (Paper Copies Only)
NAVSTA Newport, Cornelia Mueller (2 copies)
Newport RAB c/o C. Mueller, NAVSTA (4 copies)
Gannett Fleming, Jennifer Stump (2 copies)
Superintendent of Schools, Susan Lusi, Ph.D
Melville Elementary School Principal, Joanne Olson, Ph.D
Town of Portsmouth, Robert Driscoll
TtNUS, Steve Parker
Administrative Record

ACTION MEMORANDUM

DATE: June 15, 2007

FROM: Captain Todd W. Malloy, Commanding Officer, Naval Station Newport

SUBJECT: Non-Time Critical Removal Action
Melville Water Tower Site (Site 21)
Naval Station Newport, Newport, Rhode Island

1. PURPOSE

The purpose of this Action Memorandum is to document the decision by the U.S. Navy (Navy) to conduct a non time critical removal action (NTCRA) to remove contaminated soil and structures at the former location of the Melville Water Tower, located adjacent to the Melville Elementary School, 1351 West Main Road, in Portsmouth Rhode Island. This property is a part of the Naval Station (NAVSTA) Newport, in Newport Rhode Island.

This action is to be taken to reduce potential risks to the public health, welfare and the environment posed by contaminants in the soils resulting from painting and paint maintenance operations between the 1940s and 1990. Contaminated soil, building foundations, and the tower footings will be removed in this action.

This NTCRA is being conducted by the Navy under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Rhode Island Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations).

2. NAVSTA NEWPORT BACKGROUND

The NAVSTA Newport facility has been in use by the Navy since the era of the Civil War. During World Wars I and II, military activities at the facility increased significantly and the base provided housing and support for many servicemen. In subsequent peacetime years, use of on-site facilities was slowly phased out until Newport became the headquarters of the Commander Cruiser-Destroyer Force Atlantic in 1962. In April 1973, the Shore Establishment Realignment Program (SER) resulted in the reorganization of naval forces, and activity again declined. From 1974 to the present, research and development and training have been the primary activities at Newport. The base was renamed from the Naval Education and Training Center (NETC) to Naval Station Newport in 1998. The major commands currently located at NAVSTA Newport include the Naval Education and Training Center, Surface Warfare Officers School Command, Naval Undersea Warfare Center, and the Naval War College. Occupying approximately 1,063 acres, NAVSTA Newport is located along the western shoreline of Aquidneck Island for approximately 6 miles facing the east passage of Narragansett Bay. Portions of the facility are located in the City of Newport and the Towns of Middletown, Portsmouth, and Jamestown, Rhode Island.

3. SITE DESCRIPTION

This section presents an assessment of the environmental conditions at the site. The site conditions have been evaluated through performance of a several soil investigations conducted by RIDEM (December 2005) and The Navy (Tetra Tech NUS, Inc., May 2006 and September 2006).

a. Background. The Melville Water Tower Site is located adjacent to the southern boundary of the Melville Elementary School (see Figure 1). The tower is located on property which is part of NAVSTA Newport.

The Melville Water Tower Site is level, at elevation between 160 to 170 feet NGVD 1929. Design drawings from 1942 show the grade surface elevations of the ground under the tower at 169.5 feet. The affected area is approximately one half acre, approximately 100 feet north to south, by approximately 200 feet east to west.

The Site surface is predominantly soil and mown grass. A graveled portion of the ground is present on the western portion of the site where playground equipment was previously present. The foundation of the former boiler house and four footings for the tower structure are the only permanent features that are present. Access to the Site is restricted by a chain link fence along its eastern, northern, and western sides. The tree line to the south provides an approximate boundary to the affected area.

Paint chips were discovered on the ground surface in September 2005. The Rhode Island Department of Environmental Management (RIDEM) conducted a screening survey in December 2005 to determine concentrations of paint components in the surface soil. Screening tests found concentrations of lead and other metals in excess of direct exposure criteria for residential and unrestricted recreational soil use.

b. Removal Site Evaluation.

Lead was found in paint taken from the tower in May 2006, at concentrations typical of lead-formulated paint. Paint chip samples were found to contain other metals also, but lead was identified as a primary ingredient. RIDEM and the Navy speculated that the lead found in the soil was present as a result of lead paint deposited on the ground from the water tower paint and former paint maintenance operations.

Soil sampling for lead was conducted in September 2006. Laboratory analysis of soil samples showed a predominance of lead in the soil under and surrounding the former water tower at concentrations exceeding the state standards for both residential and industrial properties. Concentrations were observed to decrease with depth, and indicated that soil exceeding the state standards exists within the top six inches of the ground surface across most of the affected area, but up to and beyond 24 inches below ground surface adjacent to the tower footings and former boiler house foundation, all of which are still in place.

Some lead contamination also appears to be present at the edge of the wooded area to the south of the former water tower. However, these lead concentrations are not as high as those in the immediate vicinity of the tower. In addition, slightly elevated concentrations of lead were found along West Main Road and within 2 feet of the fence line at the east side of the site, but these are likely to be a result of roadway contaminants and / or former treatment of the fence or guard rail which is also still present.

The distribution of the maximum concentrations from the samples collected confirms RIDEM speculation that lead from the former water tower structure has come to reside in the soil under that structure. Based on the distribution of lead concentrations, the lead from the paint on the tower appears to have been trapped in the soil, and impacts to other media such as groundwater are not anticipated. Other metals found in soil by RIDEM screening tests in 2005 are likely to be present as secondary ingredients in paint (pigments, additives, etc). However, because lead is the primary ingredient, lead can be used to direct the excavation in the immediate vicinity of the water tower, and removal of the lead will assure that paint-related releases are addressed in their entirety.

Finally, it has been observed that paint chips are present on the ground surface where portions of the tower components were placed as it was demolished and cut apart. The size and distribution of these chips are not reflected in samples collected due to the random scatter that occurred.

c. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant. The site contains an estimated 1340 cubic yards of soil contaminated with lead in excess of 150 mg/kg, which exceeds RIDEM direct exposure criteria for lead in residential and

unrestricted recreational use soil. Due to the proximity of the abutting school property and likely access by school children, this value is deemed appropriate as a remediation goal for this site.

d. National Priorities List (NPL) Status. On November 21, 1989, NETC Newport was added to the National Priorities List (NPL) (54 FR 48184). On January 11, 2007 Site 21 (Melville Water Tower Site) was determined to be a site by the signing parties to the Federal Facilities Agreement (FFA) for NETC Newport. Therefore the Navy is required to take response actions pursuant to CERCLA and the terms of the agreement. Although NETC Newport has undergone change of name to NAVSTA Newport, NPL status is not affected.

4. OTHER ACTIONS TO DATE

a. Previous Actions. No environmental actions have been conducted to remediate the soil to date. The tower was demolished in July and August 2006 because it was determined to be structurally unsound. Based on the presumption that the lead is present in the soil at the site due to paint and paint maintenance of the former tower, it is accepted that the source of the lead in the soil has been eliminated, and recontamination of the soil from this source would be impossible.

b. Investigations and Assessments: Three investigations have been conducted at the site as noted in 3b, above. These are described in the following reports:

March 29, 2006 - Results from Soil Screening Analysis, Melville School, RI. Letter from Paul Kulpa, Rhode Island Department of Environmental Management to Cornelia Mueller, NAVSTA Newport, Environmental Protection Division.

June 2, 2006 - Results from Paint Chip Sampling, Melville Water Tower, Portsmouth Rhode Island. Letter from Stephen S. Parker, Tetra Tech NUS, Inc. to James Colter, Naval Facilities Engineering Command.

February 8, 2007 - Results from Soil Sampling, Melville Water Tower, Portsmouth Rhode Island. Letter from Stephen S. Parker, Tetra Tech NUS, Inc. to James Colter, Naval Facilities Engineering Command.

c. Current Actions. The Navy has initiated contracting actions to implement a removal action to remove soil that contains lead at concentrations above 150 mg/kg. The removal action as described in this Action Memorandum is anticipated to be conducted in July and August 2007.

5. STATE AND LOCAL AUTHORITIES ROLE

a. State and Local Actions to Date. The site is located on property held by the Navy, and as such the Navy holds responsibility for removal actions, risk reduction and remediation of the site as needed. The site was incorporated into the Installation Restoration (IR) Program for NAVSTA Newport on January 11, 2007. State and local authorities have not undertaken any removal actions at the site, other than providing oversight of studies and actions conducted by the Navy. The State provides oversight of actions and review of documents for sites under the IR Program. The local community provides input on the Navy's action through participation in the Restoration Advisory Board, a group of community members who meet with Navy representatives periodically to discuss progress and provide input on IR Program sites.

b. Potential for Continued State and Local Response. The ownership of the land at the site is not anticipated to change in the foreseeable future, and the Navy will retain responsibility for the site. Therefore, there is no anticipated need for state or local lead on removal or remedial actions for this site. The State of Rhode Island will continue to oversee the investigations and removal actions and the

local community will continue to provide input on actions conducted at the site through the Restoration Advisory Board.

6. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Potential threats to public health, welfare or the environment posed by site contaminants, and statutory and regulatory authorities that apply to the site are discussed in this section.

a. Threats to Public Health or Welfare. Lead exceeds the RIDEM direct exposure criteria of 150 mg/kg for soil at residential and unrestricted recreational properties. There is a presumption that concentrations of lead in excess of 400 mg/kg pose a threat of health effects to humans. Although a risk evaluation for lead has not been conducted for this site, it is clear that exposure to these soils containing lead at the concentrations measured pose an unacceptable risk of health effects to children and adults.

b. Threats to the Environment. Concentrations of lead present in the surface soil may contribute risk to ecological receptors through transfer of lead through food chain and by incidental ingestion of soil by ecological receptors feeding in the area. A formal ecological risk assessment has not been conducted, but it is presumed that the cleanup criteria of 150 mg/kg for lead in soil would eliminate any possible risk to ecological receptors.

c. Regulatory Authorities. Lead exceeds the RIDEM direct exposure criteria for soil at residential and unrestricted recreational properties. The USEPA enforces cleanup of CERCLA sites where exposure is found to provide elevated risk to human or environmental receptors. Although a formal risk assessment and blood-lead model has not been conducted, it is expected that the values present pose an unacceptable risk under CERCLA. Both RIDEM Division of Site Remediation and the USEPA Federal Facilities group will assure the removal action is completed.

7. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action memorandum, would present an elevated risk of endangerment to public health, or welfare, or the environment. The Navy has determined that this threat can be eliminated by undertaking the removal action posed in this action memorandum.

8. PROPOSED ACTIONS AND ESTIMATED COSTS

This section describes the proposed removal action to mitigate the conditions cited in Section 6, above.

a. Proposed Action. The proposed soil removal action consists of the excavation, transportation and off-site disposal of contaminated soil, foundations and other structures. Following excavation, the removal areas will be backfilled, graded to the previous elevation present across the Site and reseeded.

The removal of contaminated soil and structures was proposed to the public on May 1, 2007. Attachment B presents the Fact Sheet issued at the public meeting and a sign – in sheet documenting the attendance. No comments on the proposed removal action have been received from the EPA, RIDEM, or from the public within the 30 day comment period.

The major components of the proposed removal action and the basis for the proposal are provided below. Details of the actions and methods to perform the soil removal action will be described in a Removal Action Work Plan, and a specification for construction. These documents will be made available to the public through the RAB and to the regulatory parties for review and comment. The following paragraphs describe the major components of this proposed action.

RA Work Plan – A Removal Action (RA) Work Plan will be prepared and submitted to the regulatory parties for review as a draft in order to solicit and address their concerns on the execution of the removal action. A Final RA Work Plan will also be prepared and distributed to provide a plan for execution of the project. The RA Work Plan will describe the details of the removals, schedule, the action limits, confirmation sampling to be conducted, and limits of the removals.

Access Agreements - The Navy has initiated an access agreement with the Portsmouth School Department to access the site through the south entrance and south parking lot of the Melville Elementary School. For public safety and to avoid unnecessary traffic changes, the existing curb cuts and school parking areas will be used to access the site with all equipment, material and staff.

Staging Area Setup – Prior to the start of excavation, staging areas, decontamination areas and site access controls will be set up. Fences will be opened as necessary for bringing equipment to the site then re-secured at completion. Staging areas will be sized to accommodate the excavated soil.

Erosion Control – Erosion control measures will be set up to prevent runoff or erosion of soil and debris from the site and staging areas.

Soil, Fill, and Debris Removal – The removal action will consist of three components, as described below. Figure 3 shows the target excavation areas.

- Soil containing lead at concentrations above 1,000 mg/kg will be removed from the area where found. Based on extensive sampling conducted, this area is anticipated to cover 12,000 square feet, extend to 2 feet below ground surface and involve the removal of an estimated 900 cubic yards of soil.
- The former Building 66 foundation and the four tower concrete footings will be excavated, demolished and removed from the subsurface. The foundation excavation is presumed to involve an area of 200 square feet, extend up to 5 feet below ground surface and involve removal of 200 cubic yards of soil and concrete.
- The lay down area and the surface soil across the open area will be scraped to a depth of six inches below ground surface. This will be conducted to assure that all paint chips that were dislodged from the tower during demolition are removed from the site. The surface soil removal is anticipated to impact an area approximately 25,000 square feet, extend to a depth of 6 inches below ground surface and involve the removal of approximately 240 cubic yards of soil and debris.
- The water supply line leading to this location from the street will be cut and capped at the sidewalk area, east of the building foundation. The single utility pole located at the site will be disconnected, removed and disposed of. A transformer on the utility pole is marked as a non-PCB containing transformer and will be removed and returned to NAVSTA.

Dust Controls During Excavation – Care will be taken during excavation to minimize the spread of dust from surface soil that may contain elevated concentrations of lead. A no visible dust emission rule will apply to this project site. Water will be used to keep dust down in the excavation area, the access-ways and staging areas will be protected with heavy-duty coverings, maintained as needed to prevent impact to the parking areas.

Confirmation Sampling – Confirmation samples will be collected from the bottom and sides of excavations and analyzed for the removal action goal for lead (150 mg/kg). to determine if the excavation is complete.

Staging of Material – Excavated soil and debris materials will be segregated and staged in covered stockpiles of like material (according to type and/or disposal facility) in a temporary staging area. Materials may include 1) soils, 2) organic material such as tree stumps, root balls, etc. and 3) building debris, such as concrete, rebar, brick, wood, metal, asphalt and building rubble. All materials will be

transported to the former Tank 53 area, which is Navy property, and is a secured, fenced location. This material will be placed on impermeable barriers and covered to prevent wind erosion until final disposal can take place. All material will then be tested to determine the appropriate disposal facility.

Waste Disposal – Stockpiled materials will be sampled and analyzed for characterization purposes and to facilitate disposal. After profiling and manifesting, material will be shipped to the approved disposal facility.

Site Restoration – Excavated areas will be backfilled with clean fill and a minimum 4 inches of top soil. The excavated areas and other areas damaged during the removal action will be restored the original base grade elevation and seeded to prevent surface erosion.

b. Contribution to Remedial Performance. This removal is anticipated to constitute the final remedy for the site. If conditions are found during the excavation that warrant continued removal from the site, those actions will be addressed as needed. By removing soil exceeding direct exposure criteria, the risk posed by the contaminants present will be addressed, and no additional efforts are anticipated.

c. Alternative Actions Considered. Alternative technologies were not evaluated in detail. The level of risk posed by the contaminants present and the proximity to the school and community warrant entire removal of those contaminants, and detailed evaluations are not required.

d. Applicable or Relevant and Appropriate Requirements (ARARs). The removal action complies with the following federal and state ARARs:

- Clean Air Act (CAA), National Emission Standards for Hazardous Air Pollutants (NESHAPS) (USC 7411, 7412; 40 CFR Part 61) – Requirements for monitoring of air emissions must be met; activities will be carried out in a manner which will minimize potential air releases.
- Resource Conservation and Recovery Act (RCRA), Subtitle C - Standards for Hazardous Waste Facilities (42 USC 6291 et seq.) - Soils and debris must be tested, and if hazardous, handled and disposed according to standards.
- Clean Water Act (CWA), Section 402, National Pollutant Discharge Elimination System (NPDES) (33 USC 1342; 40 CFR Parts 122-125, 131) – Any discharges from the staged soils must be captured. Discharges into surface waters must meet ambient water quality criteria.
- Rhode Island Remediation Regulations (CRIR 12-180-001, Section 8; DEM-DSR-01-93, as amended August 1996 and August 2004) – Removal will be directed by presence of soil exceeding direct exposure criteria for residential use soil (lead >150 mg/kg)
- Rhode Island Clean Air Act - Fugitive Dust Control (RIGL 23-23 et seq.; CRIR 12-31-05) – Actions must take reasonable precaution to prevent particulate matter from becoming airborne.
- Rhode Island Clean Air Act - Emissions Detrimental to Persons or Property (RIGL 23-23 et seq.; CRIR 12-31-07) – Actions must prevent airborne emissions of contaminants that may be injurious to humans, plant or animal life or cause damage to property.
- Rhode Island Clean Air Act - Air Pollution Control (RIGL 23-23 et seq.; CRIR 12-31-09) - Removal action air emissions must be monitored and emissions controlled if necessary.
- Rhode Island Clean Air Act - Air Toxics (RIGL 23-23 et seq.; CRIR 12-31-22) - Removal action air emissions must be monitored to assess compliance and operation and maintenance activities carried out in to minimize potential air releases. Navy contractors will conduct monitoring for dust and airborne lead during the removal operations.
- Rhode Island Hazardous Waste Management Standards for Treatment, Storage, and Disposal Facilities (RIGL 23-19.1 et seq.; CRIR 12-030-003) – Soils and debris must be tested, and if hazardous, handled and disposed according to standards.

f. Project Schedule. The following project schedule has been developed to minimize impact to the school, the community and to assure safety to the public during all phases of the work. In particular, site work will be conducted when no school activities are scheduled.

Attachment A – Figures

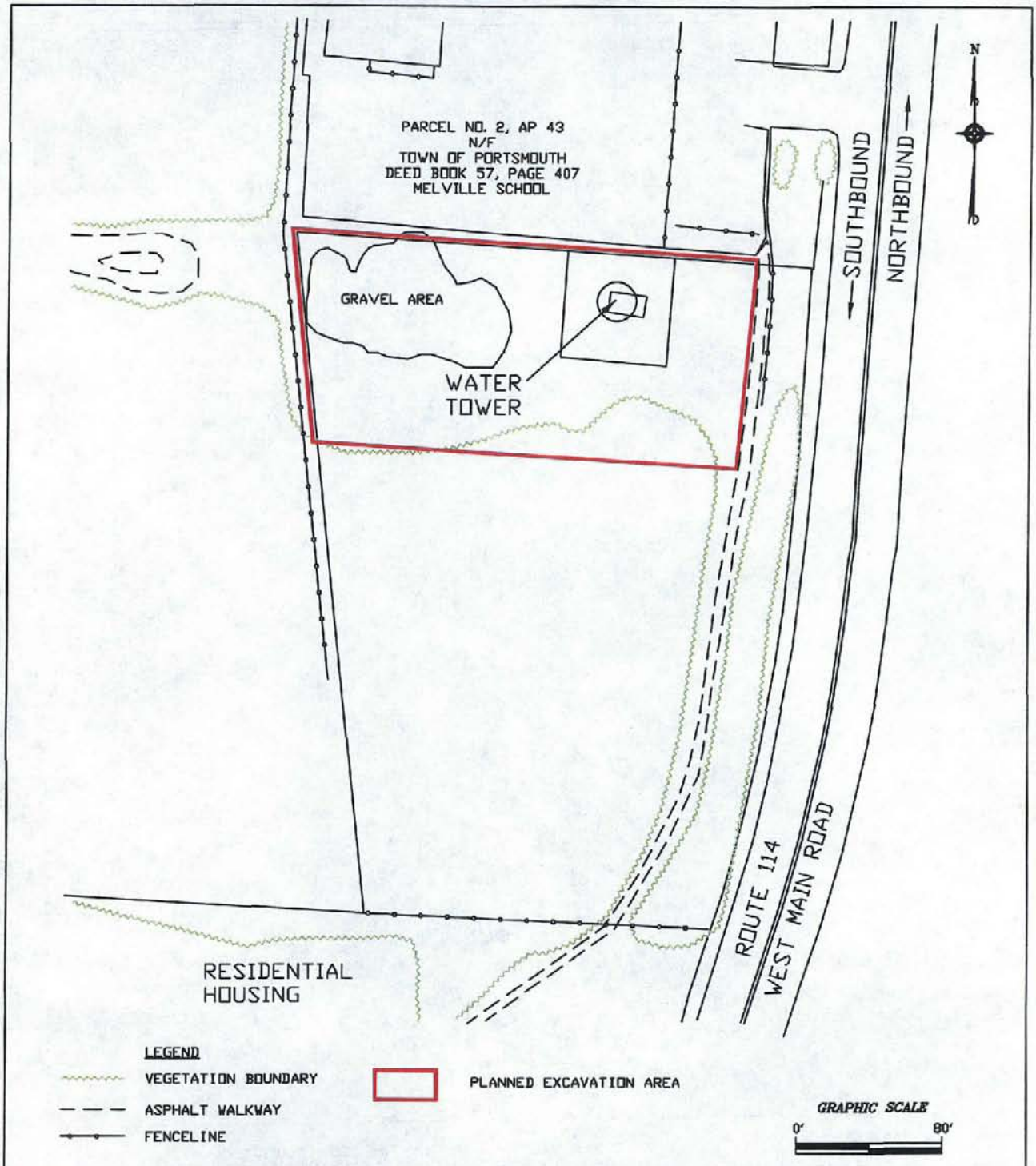
Figure 1 – Locus
Figure 2 – Historical Features
Figure 3 –Removal Action Target Areas

GRAPHIC SCALE
0' 1 MILE 2 MILES

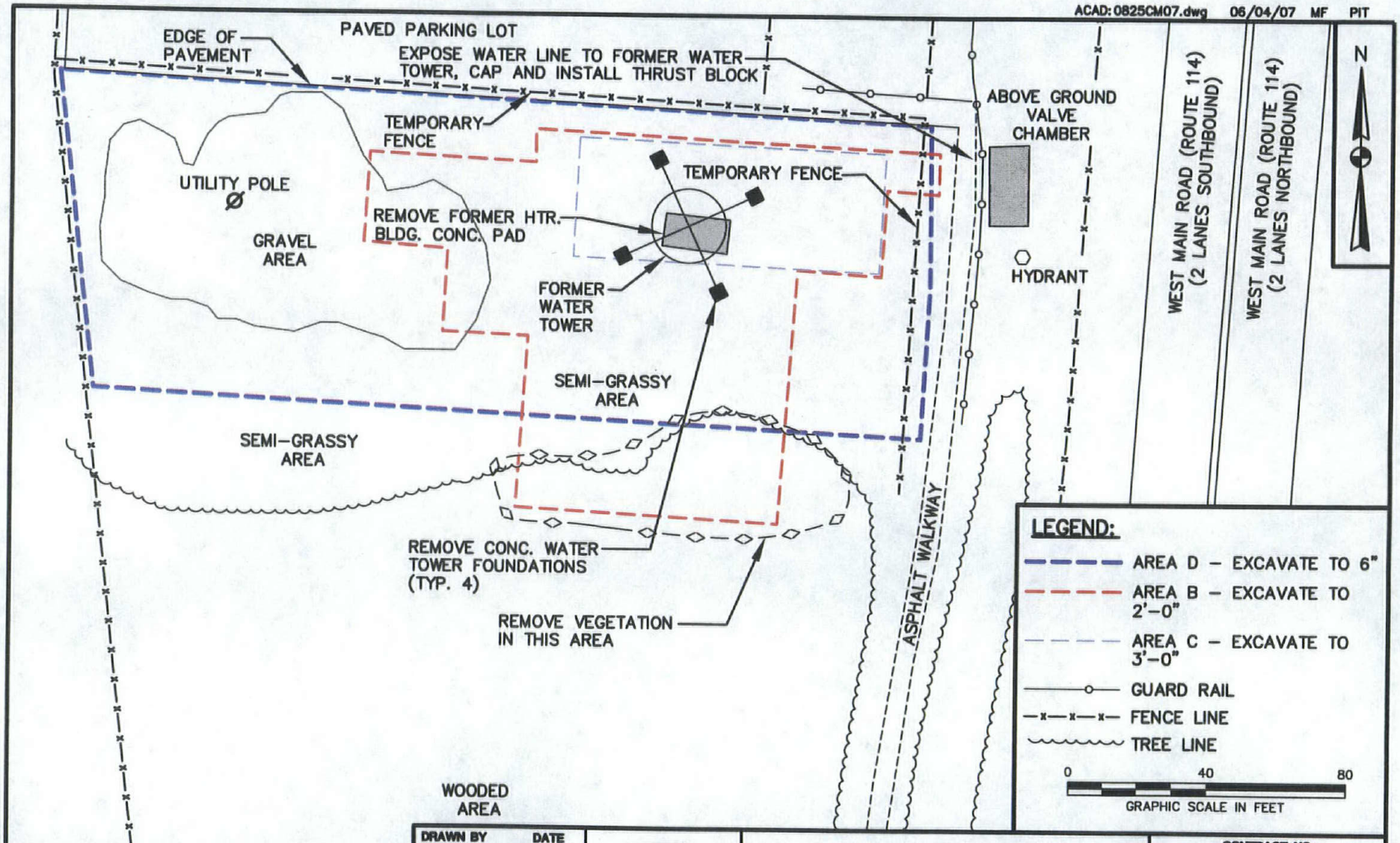
NOTES:
1. BASE MAP IS A PORTION OF THE USGS PRUDENCE ISLAND QUADRANGLE MAP (7.5 X 15 MINUTES), DATED: 1955 (PHOTOREVISED 1970 & 1975).
2. ALL LOCATIONS TO BE CONSIDERED APPROXIMATE.

SITE LOCUS		FIGURE 1
FORMER MELVILLE WATER TOWER		
PORTSMOUTH, RHODE ISLAND		
DRAWN BY: D.W. MACDOUGALL	REV.: 0	
CHECKED BY: S. PARKER	DATE: JUNE 6, 2007	
SCALE: AS SHOWN	ACAD NAME: \00825\0210\FIG_1.DWG	

TETRA TECH NUS, INC.
55 Jonspin Road Wilmington, MA 01887
(978)658-7899



SITE MAP			FIGURE 2
FORMER MELVILLE WATER TOWER			TETRA TECH NUS, INC.
PORTSMOUTH, RHODE ISLAND			55 Jonspin Road Wilmington, MA 01887 (978)658-7899
DRAWN BY:	D.W. MACDOUGALL	REV.: 0	
CHECKED BY:	S. PARKER	DATE: JUNE 6, 2007	
SCALE:	AS NOTED	ACAD NAME: \00825\0210\FIG_2.DWG	



SOURCE:
DIGITIZED FROM PART OF A PARCEL MAP PREPARED BY LARRY E. TILTON, SURVEYOR.

DRAWN BY MF	DATE 6/4/07
CHECKED BY	DATE
REVISED BY	DATE
SCALE AS NOTED	

Tetra Tech NUS, Inc.

EXCAVATION PLAN FOR MELVILLE WATER TOWER SITE PORTSMOUTH, RHODE ISLAND

CONTRACT NO. 0825	
OWNER NO.	
APPROVED BY	DATE
DRAWING NO. FIGURE 3	REV. 0

FORM CADD NO. TTNUS-AH.DWG – REV 1 –9/10/98

Attachment B

Fact Sheet and Public Meeting Sign – In Sheet

FACT SHEET

SOIL CLEANUP AT THE FORMER MELVILLE WATER TOWER, PORTSMOUTH, RHODE ISLAND

NAVAL STATION NEWPORT
Installation Restoration Program
Newport, Rhode Island

The Cleanup Proposal...

After evaluation of soil at the former Melville Water Tower property, the Navy proposes the removal of contaminated soil from the property.

The Navy will:

- **Excavat** contaminated soil.
- **R mov** foundations of the former structures.
- **Disp s** of contaminated soil in an approved off-site facility.
- **R stor** the excavated areas for continued use of the property.

Find Out More...

The Navy invites you to attend the Public Meeting on Tuesday, May 1, 2007 at the Melville Elementary School. The Navy will respond to your questions and concerns about the proposed cleanup and how it may affect you. For further information on the public meeting, contact Cornelia Mueller at cornelia.mueller@navy.mil

All Are Welcome at the Public Meeting
Tuesday, May 1, 2007
6:30 PM
Melville Elementary School,
Portsmouth, Rhode Island

What do you think?

The Navy is accepting public comment on this removal action from May 1, 2007 to June 1, 2007. You don't have to be a technical expert to comment -- if you have a concern or preference, the Navy wants to hear it before making a final decision.

To comment formally:

Offer oral comments during the Public Meeting on May 1, 2007.

Provide written comm nts by fax, or by mail postmarked no later than June 1, 2007 to:

Cornelia Mueller
Naval Station Newport
Environmental Department
1 Simonpietri Drive
Newport, RI 02841
Fax: (401) 841-7071

E-mail comments by June 1, 2007 to: **cornelia.mueller@navy.mil**

In accordance with the law that established the Superfund program (the Comprehensive Environmental Response, Compensation and Liability Act - CERCLA), this document summarizes the Navy's cleanup proposal. For detailed information on the information that brought the Navy to make this proposal, refer to the Soil Investigation Report and other documents available for review at the information repositories at the Portsmouth, Middletown, and Newport Public Libraries.

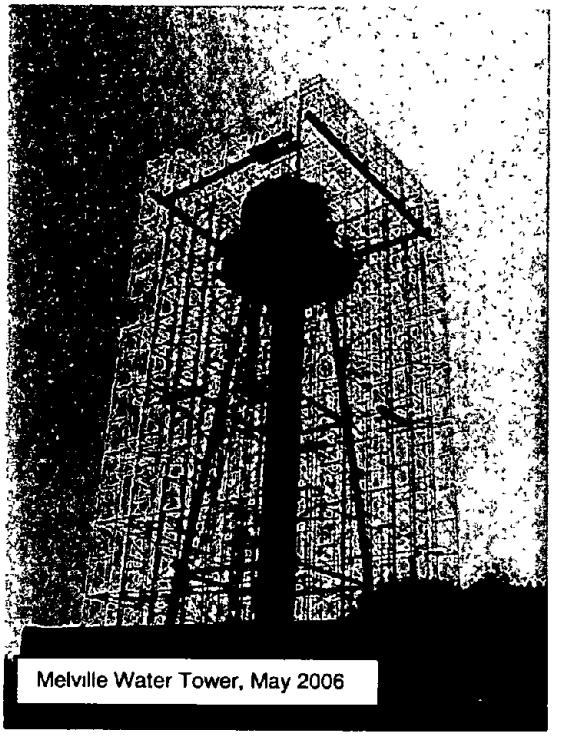
A Closer Look at the Navy's Proposal...

Approximately 800 cubic yards of soil are planned to be excavated. This removal will take place in a series of steps, beginning after the conclusion of the school calendar year in 2007.

The basic steps for this action are described below:

- Excavate the contaminated soil within the vicinity of the former water tower to a depth of 2-3 feet deep using conventional earth-moving equipment.
- Transport that soil immediately from the site to a temporary location to be staged and characterized for proper disposal.
- Remove 3-6 inches of topsoil from the remainder of the area to capture remaining paint chips left from tower demolition.
- Collect confirmation samples to assure all the soil exceeding the lead criteria is removed from the site.
- If necessary, continue excavation based on the results of the confirmation sampling.
- Demolish and remove foundations from the site.
- Back-fill the excavated area with clean fill brought to the site.
- Place clean topsoil on the affected areas and reseed to promote a new grass area.
- Dispose of the stockpiled material at an approved off-site facility.
- Prepare a report to describe the work and present the results of confirmation sampling.

The soil work at the site is planned to be c mpleted and re-seeded before the fall school sem st r b gins. The c mpletion rep rt will be c mpl ted lat 2007.



Melville Water Tower, May 2006

Why is Removal Needed?

Soil under the former Water Tower was impacted by lead from paint applied and removed from the tower between the 1940s and the 1990s. Use of lead based paints on structures such as this was a common practice on public and private buildings and structures during that period.

As commonly happens, over the course of many years, this paint deteriorated, chipped and was scraped, without adequate control to prevent intrusion of lead into the soil.

Soil investigations confirmed that paint constituents are present in the soil at the site. In particular, lead is present at concentrations that pose unacceptable risk to persons using or accessing the site. The proximity of this contamination to children attending the school requires contamimated soil to be removed.

In addition, some paint chips were dislodged from the steel structure as it was as it was demolished. Despite best efforts to collect these chips, some small pieces were found in this area. In order to assure removal of these last remaining paint chips, the entire area will have 3-6 inches of soil removed.

Site History

The Melville Water Tower was installed in the late 1930s to provide pressure to fire suppression systems at the Melville fueling piers and fuel storage facilities. It was located on an open field on the west side of West Main Road in Portsmouth.

S pt mber 2005 – Paint chips are found on the ground on the grassy area and footpath next to the water tower. Navy begins policing the area to pick up paint chips that are dislodged from the tower and fall to the ground.

October 6, 2005 – Navy meets with parents and the Rhode Island Department of Health to discuss their concerns.

October 2005 – The Navy begins providing bus service to the students who walk to Melville Elementary School from the south to avoid the need to walk over the foot path near the tower. The foot path was closed at this time.

D cember 27, 2005 – Rhode Island Department of Environmental Management conducts initial testing on soil and paint chips found in the vicinity of the water tower. Report on findings is published March 29, 2005.

May 25, 2006, Navy conducts an evaluation of the paint and the tower. Environmental protection agency collects soil and paint samples to confirm the states findings. It is determined that the tower is unsound and should be demolished.

July 2006 – Navy hooks up to Portsmouth water supply to by-pass the tower and initiates demolition of the tower.

Sept mber 25 to 28, 2006 – Navy conducts a detailed soil investigation, a draft report is provided to the RIDEM and USEPA October 20, 2006.

January 11, 2007 – The water tower site is added to the Newport Naval Station Installation Restoration Program, which is regulated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or "Superfund".

February 14, 2007 – The soil investigation report is finalized and it is determined that the soil will be removed and disposed of at the earliest opportunity.

March 21, 2007 – The Navy presents the findings of the soil investigation report to the RAB, and presents a preliminary plan to remove the contaminated soils during the school's summer vacation in 2007.

What is the Cleanup Objective?

The acceptable concentration is 150 mg/kg of lead in soil (cited as "lead free" by the Rhode Island Department of Health). This is the most stringent published state standard for lead in soil. It is based on current health risk standards, and the understanding that some lead is always present in soil as a background condition.

For this removal action, soil with lead concentrations exceeding this concentration will be removed from the site.

The Navy is keeping the site fenced until the removal action can be completed and the new soil is re-seeded.

What impacts will the removal have on the local community and the environment?

The construction effort is planned for July and August 2007, and residents may notice:

- noise from construction activities, and
- an increase in truck traffic on West Main Road, and on the Sakonnet River Bridge.

What are the next steps?

The Navy will prepare an "Action Memorandum" directing this removal action in June 2007. The Action Memorandum and work plan describing the removal will be available at the information repositories at the Portsmouth, Middletown, and Newport Public Libraries.

These plans will be reviewed by the U.S. Environmental Protection Agency and the Rhode Island Department of Environmental Management and implemented after agreement on how the work will be carried out.

Is this the final action?

This is anticipated to be the final action to remediate lead contamination at the form r Melville Water Tower site. However, if any complications arise or the program cannot be complet d within the summer construction period, the project may b suspended until it can be assured that th work can continue while ensuring safety of the stud nts and employees of the school.

What if there are changes?

Any major changes to the cleanup plan will be proposed to the public as required by Superfund through additional public meetings, h arings, and other outreach efforts. Progress on th planned actions will be presented to the public through regular meetings of the RAB.

Soil Investigations

Two soil investigations have been conducted at the site. The first was a screening study conducted by the Rhode Island Department of Environmental Management in December 2005. This screening step found concentrations of lead and other possible paint ingredients in surface soil (0-3 inches in depth) to be above the state criteria. Other metals were also found in the paint chip sample.

The second study was undertaken by the Navy in August 2006 after the tower was demolished. This second study was conducted in order to determine the horizontal and vertical extent of contamination in the soil. Four different depth intervals were sampled systematically at given distances.

Using the data collected, the Navy was able to map out the extent of the soil that exceeds the state criteria, thus requiring removal.

Why Does the Navy Recommend this Plan?

The Navy recommended a removal action that uses excavation to address contaminated soil at the site. This approach:

- Addresses the contaminated soil by removing it from the vicinity of the school and school age children quickly and completely.
- Isolates the contaminated soil from the environment by disposing of it properly, thereby contributing to the long-term protection of human health and the environment.
- Allows re-use of the property as needed, and as appropriate.

Stay Informed

The Newport Naval Station RAB is a volunteer group of local citizens who meet regularly to hear and advise the Navy as they:

- identify and evaluate contaminated Navy facilities,
- comply with procedural and substantive requirements of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA), and
- conduct proactive public outreach programs and community relations.

The RAB meets at the Newport Naval Officers' Club at 7:00 PM on the 3rd Wednesday of selected months. Check our calendar for dates and for occasional changes to time or place.

For more information on the RAB, visit: http://www.rabnewportri.org

Different Kinds of Cleanup

The Navy typically looks at a number of possibilities to reduce the risks presented by contamination at a site. These possibilities are then narrowed to options that would best protect human health and the environment. For soil, these options normally include:

1. Take no action:
This option is evaluated as a matter of course to provide a baseline to make comparisons.

2. Isolate the contaminants:
Isolation provides a barrier between contaminants and receptors (people and wildlife). Barriers can be as simple as fences (to keep people away) or as complex as multi-layer cover systems combined with legal land-use restrictions.

3. Remove contaminants:
Removal of contaminated soil allows immediate improvement at the site: The soil is disposed of or treated elsewhere, where there is adequate space and distance to protect people or sensitive environments.

4. Treat contamination on site:
Treatment uses chemical or physical processes on a site to destroy or remove contaminants. Treated material might be left on site, or removed. Contaminants captured by the treatment process are then disposed of at an approved disposal facility.

5. Monitor the contaminants:
Many remedies are combined with monitoring after completing the remedial action to assure that the action achieved the cleanup objectives.

6. Interim actions:
A series of interim actions are sometimes select d for one part of a site until another part of the site is restored. These interim actions would need to be supportive of the final remedy so as to be sure the situation is not worsened.

The most aggressive approach was selected (#3) since contamination is present close to the school and community.

For More Detailed Information

This publication summarizes the reports and studies to help the public understand and comment on the proposal for the site. The soil investigation report and supporting documents prepared for the site have been provided to the following information repositories for Naval Station Newport:

Middletown Public Library
West Main Road
Middletown, RI
401-846-1573
Hrs. Mon-Fri: 10:00 – 8:00
Sat: 10:00 – 5:00

Newport Public Library
300 Spring Street
Newport, RI
401-847-8720
Hrs. Mon: 12:30 – 9:00
Tue-Thu: 9:30 – 9:00
Fri-Sat: 9:30 – 6:00
Sun: 1:00 – 5:00

Portsmouth Public Library
2658 East Main Road
Portsmouth, RI
401-683-9457
Hrs. Mon-Thu: 9:00 – 8:00
Fri-Sat: 9:00 – 5:00

Also, keep up to date on the Installation Restoration Program by visiting the RAB Web site:
http://www.rabnewportri.org

Additionally, information can be obtained by contacting the Navy, EPA, or RIDEM at:

Mr. James Colter, PE
Remedial Project Manager
US Navy, NAVFAC Midlant
9742 Maryland Avenue
Norfolk VA 23511-3095

Kymberlee Keckler
Remedial Project Manager
Federal Facilities, Superfund Section
U.S. Environmental Protection Agency (HBT)
One Congress Street – Suite 1100
Boston, MA 02114-2023
(617) 918-1385 or (888) 372-7341

Paul Kulpa
Remedial Project Manager
Office of Waste Management
R.I. Department of Environmental Management
235 Promenade Street
Providence, RI 02908-5767
(401) 222-2297 ext. 7111

The public is invited to attend the regularly scheduled RAB meetings held on th third Wednesday of selected months at 7:00 p.m. For information on RAB meetings, c ntact Cornelia Mueller, 401-841-7561, or visit:
http://www.rabnewportri. rg

Public Comment Sheet

Use This Space to Write Your Comments
Or to request to be added to the mailing list

The Navy wants your thoughts on the proposal under consideration for cleaning up the soil at the former Melville Water Tower site. You can use the form below to send or fax written comments. If you have questions about how to comment, please call Cornelia Mueller at 401-841-7561. This form is provided for your convenience. Please mail this form or additional sheets of written comments to:

Cornelia Mueller
Naval Station Newport
Environmental Department
1 Simonpietri Drive
Newport, RI 02841
Fax: (401) 841-7071

Or E-mail to:
Cornelia Mueller at cornelia.mueller@navy.mil

(Use reverse side and attach sheets as needed)

Comments Submitted by:

MAILING LIST ADDITIONS, DELETIONS OR CHANGES

If you did not receive this through the mail and would like to

b added to the site mailing list
note a change of address
be d l ted from the mailing list

Name: _____
Address: _____
_____
_____

Please check the appropriate box and fill in the correct addr ss information abov .

Public Comment Sheet (cont....)

Place
Stamp
Here

Cornelia Mueller
Naval Station Newport
Environmental Department
1 Simonpietri Drive
Newport, RI 02841

Sign- In Sheet
Public Meeting For Melville Water Tower
Soil Investigation and Plan For Cl an-up
Naval Station-Newport Installation Restoration Program
May 1, 2007

Name	Address	Do you wish to be included on a mailing list?
Kymberlee Keckler	USEPA, 1 Congress St (HBT), Boston	No
David Peterson	" " "	No
Cornelia Mueller	Navy Environmental	—
Marianne Baynes	1517 W main Rd Ports Patient head of PTO	yes
Bob Vanderslice	RI Dept Health	
Steve Parker	Tetratech	
John Vitkevich	Restoration Advisory Board	
Tim Colter	Navfac	
Lisa Rand	PAO, NAVSTA	
Robert VanderSlice	RIDOH	
Norman DeMott	RIDOH	
Paul Kulpa	RI DEM	
Dr Joanne Olson	Melville School	
Dr Susan Lusi	Portsmouth Schools	
Jim Forrelli	TetraTech	
Brandon Smith	TetraTech	
Meghan Wims	Daily News (Newport)	
Thurston Gray	Restoration Advisory Board	
Karen Rezendes	Parent	