



# 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:

- **Excavate** contaminated soil.
- **Remove** foundations of the former structures.
- **Dispose** of contaminated soil in an approved off-site facility.
- **Restore** 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](mailto: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 comments** 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](mailto: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 completed and re-seeded before the fall school semester begins. The completion report will be completed late 2007.**



### **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 contaminated 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.

**September 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.

**December 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.

**September 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 former Melville Water Tower site. However, if any complications arise or the program cannot be completed within the summer construction period, the project may be suspended until it can be assured that the work can continue while ensuring safety of the students 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, hearings, and other outreach efforts. Progress on the 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 3<sup>rd</sup> 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 selected 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 the third Wednesday of selected months at 7:00 p.m. For information on RAB meetings, contact Cornelia Mueller, 401-841-7561, or visit:**  
<http://www.rabnewportri.org>

# 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](mailto:cornelia.mueller@navy.mil)

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(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

be added to the site mailing list  
note a change of address  
be deleted from the mailing list

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please check the appropriate box and fill in the correct address information above.

