

Proposed Plan for Site 7 RTC Silk Screening Shop

About This Document

The Navy, as the lead agency, is accepting formal public comments on this proposal from March 1 to March 31, 2003. The Navy, **United States Environmental Protection Agency (USEPA)**, and **Illinois Environmental Protection Agency (IEPA)** developed this plan. This Proposed plan is being presented to satisfy the statutory and regulatory requirements for public participation under the **Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)**. The Navy will make a final decision on how to protect the community after considering and addressing the public comments.

This plan highlights key information from the **Remedial Investigation/Risk Assessment (RI/RA)** report. The **RI/RA** report is maintained at **Naval Training Center (NTC) Great Lakes**. More complete information can be found in this report and other documents at **NTC Great Lakes**.

Facility Description

NTC Great Lakes (see Figure 1) is located in Lake County, Illinois along the shores of Lake Michigan. It is bounded on the north by the City of North Chicago, on the south by the Veterans Administration Hospital and Shore Acres Golf Course & Country Club, on the east by Lake Michigan, and on the west by U.S. Route 41 (Skokie Highway). **NTC Great Lakes** is used to support naval training and consists of the Administrative Command, the Recruit Training Command, and the Service School Command. In 1986, an **Initial Assessment Study (IAS)** conducted at **NTC Great Lakes** identified 14 potentially contaminated sites. Each site was evaluated with respect to contamination characteristics, migration pathways, and pollutant receptors. The study

concluded that seven of these sites, including Site 7, warranted further investigation to assess potential long-term impacts.

Site Description

Site 7 covers approximately 4000 square feet and is bounded on the south by Building 1212, on the west by a paved parking area and Indiana Street, on the north by a concrete vault (housing steam pipes that run in a north-south and east-west direction from the vault) and 8th Avenue, and on the east by Ohio Street (see Figures 1 and 2). The **Recruit Training Center (RTC)** Silk Screening Shop was located in the **RTC Training Aids Branch** of Building 1212 between 1943 and 1995. Site 7 currently serves as a parking lot and is covered with asphalt. Two 500-gallon **aboveground storage tanks (ASTs)** and a fenced drum accumulation area were formerly located across from the former Silk Screening Shop, along with an unpaved storage area for trailers and equipment that extended northward to 8th Avenue. Until 1985, the **RTC Silk Screening Shop** made flags and banners used in parades; finished silk screens were washed in a booth and the wash waters passed through a drain that penetrated the outside wall and discharged onto the ground outside Building 1212. From 1985 until 1995, the wash waters were collected in 55-gallon drums and temporarily stored in the fenced drum accumulation area prior to disposal by a private contractor. The **ASTs** were used to store petroleum fuels (diesel and gasoline). In 1992, a petroleum release occurred and some petroleum-contaminated soil was excavated and disposed.

The site investigation identified soil contaminated with **polynuclear aromatic hydrocarbons (PAHs)**, mainly benzo(a)pyrene and dibenzo(a,h)anthracene, possibly from the petroleum fuel spill, asphalt pavement, and parking lot surface runoff. The investigation indicated that site activities had not resulted in contamination of the groundwater. **PAHs** identified as **chemicals of potential concern (COPCs)** were

The Proposed Cleanup Plan

Based on an evaluation of findings from detailed environmental studies and the results of the **RI/RA**, including the hot spot removal, **No Further Action (NFA)** has been proposed for the site. **NFA** has been proposed because the **RI/RA** conducted for Site 7, including the hot spot removal,

concludes that the site risks are within the acceptable range for protection of human health and the environment. In addition, no **land use controls (LUCs)** are required because the **RI/RA** was conducted to meet CERCLA and the USEPA risk management range criteria that allows unrestricted site use.

This document summarizes the NTC Great Lakes Proposed Plan. For detailed information on the investigation for Site 7, consult the documents for review at NTC Great Lakes. Call the NTC Great Lakes Environmental Department at (847) 688-5997, extension 161 to review the information.

Bolded terms throughout this Proposed Plan are explained in the Glossary of Terms presented on page 5.

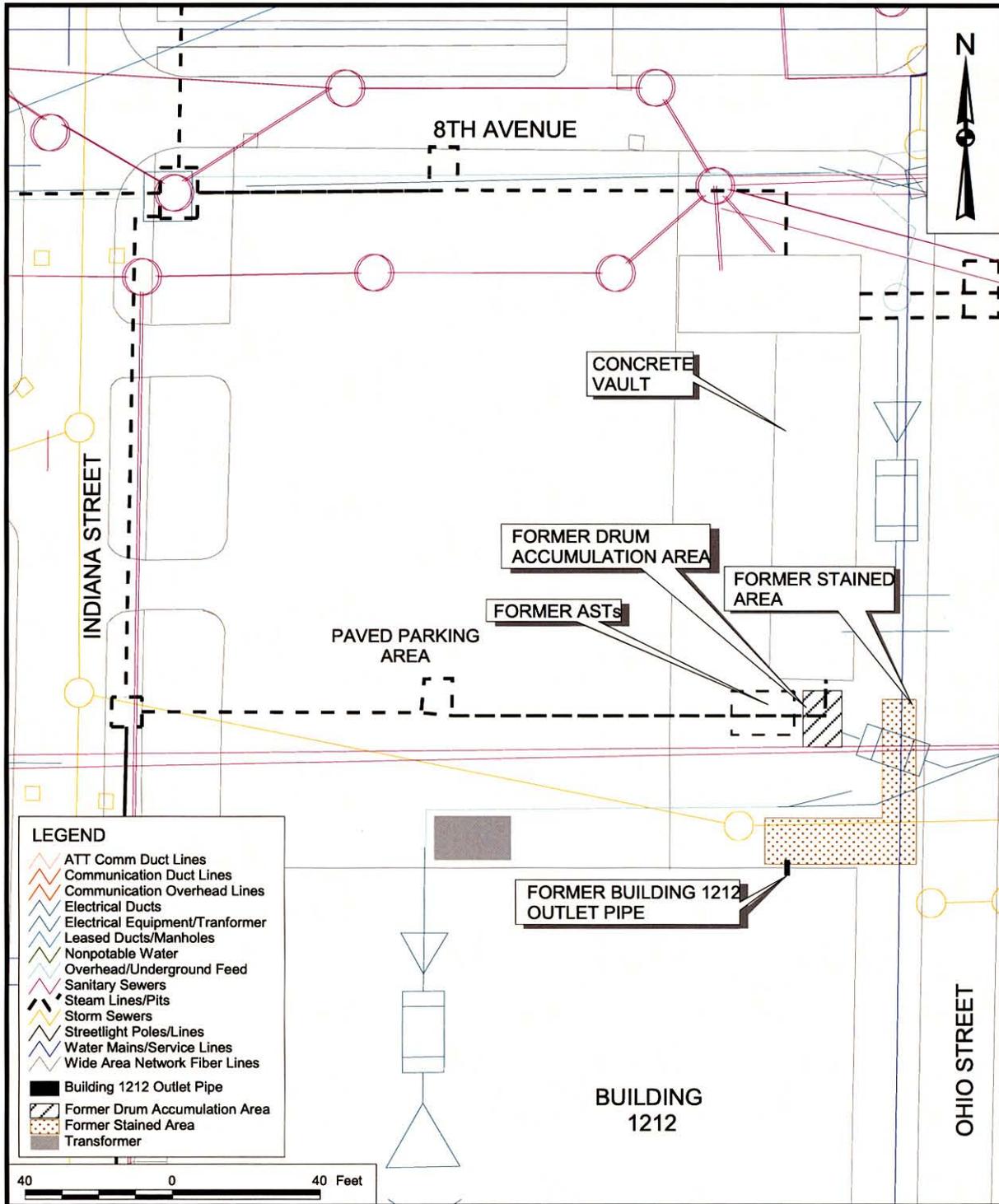


DRAWN BY K. PEILA	DATE 3/11/02
CHECKED BY RFD	DATE 3/11/02
COST/SCHEDULE AREA	
SCALE AS NOTED	



SITE LOCATION MAP
 SITE 7 - RTC
 SILK SCREENING SHOP
 NAVAL TRAINING CENTER
 GREAT LAKES, ILLINOIS

CONTRACT NUMBER N4276	
APPROVED BY RFD	DATE 3/11/02
APPROVED BY	DATE
DRAWING NO. FIGURE 1	REV 0



LEGEND

- ATT Comm Duct Lines
- Communication Duct Lines
- Communication Overhead Lines
- Electrical Ducts
- Electrical Equipment/Transformer
- Leased Ducts/Manholes
- Nonpotable Water
- Overhead/Underground Feed
- Sanitary Sewers
- Steam Lines/Pits
- Storm Sewers
- Streetlight Poles/Lines
- Water Mains/Service Lines
- Wide Area Network Fiber Lines
- Building 1212 Outlet Pipe
- Former Drum Accumulation Area
- Former Stained Area
- Transformer

40 0 40 Feet

DRAWN BY J. BELLONE	DATE 4/10/01
CHECKED BY GP	DATE 4/18/01
COST/SCHEDULE-AREA	
SCALE AS NOTED	



SITE MAP
SITE 7 - RTC
SILK SCREENING SHOP
NAVAL TRAINING CENTER
GREAT LAKES, ILLINOIS

CONTRACT NUMBER N4278	
APPROVED BY RFD	DATE 4/20/01
APPROVED BY	DATE
DRAWING NO. FIGURE 2	REV 0

P:\GIS\GREAT_LAKES_NTC\QAPP_2001.APR\SITE 7 - SITE MAP 2/26/03 KMP

evaluated to estimate risks to potential military (7×10^{-6}), maintenance/construction workers (less than 6×10^{-7}), and residential receptors (9.3×10^{-6}). Quantitative risk estimates based on 95 percent **upper confidence limit (UCL)** concentrations were compared to **USEPA** and **IEPA** benchmarks to interpret the quantitative risks and to aid risk managers in determining the need for remediation at this site. Cancer risks were interpreted using **IEPA's** target of 1×10^{-6} and the **USEPA's** "target range" (1×10^{-4} to 1×10^{-6}), the target range for most hazardous waste facilities addressed under **CERCLA** and the **Resource Conservation and Recovery Act (RCRA)**. Leachability to groundwater and inhalation of vapors and particulates from soil were also evaluated by comparison of maximum detected concentrations to **USEPA** and **IEPA Soil Screening Levels (SSLs)** for residential exposure that are based on a target of 1×10^{-6} . As part of the hot spot removal activity based on the locations of samples with elevated **PAH** concentrations, 48.5 tons of **PAH**-contaminated soil was excavated and disposed off-base at a permitted treatment, storage, and disposal facility (Kestrel Hawk Landfill in Racine, Wisconsin).

Why Remediation Is Considered Complete

The Navy's studies of Site 7 have resulted in the following conclusions:

- Areas of soil where concentrations of **PAHs** greatly exceeded the **USEPA** and/or **IEPA** benchmarks were excavated and disposed at a permitted facility. This resulted in site-wide **PAH** concentrations similar to background values for urban and agricultural areas in the United States and allows for unrestricted reuse of the site.
- No groundwater contamination was identified.
- The excavated area was restored to pre-excavation ground surface levels with certified clean fill material.
- A **RI/RA** evaluation of current conditions has been conducted, and concludes that no pathways pose a threat to public health or the environment indicating that no further remediation is necessary.

- The land use at the site is currently a parking area next to Building 1212 for employees. The future land use is not expected to change.

Next Steps:

By August 2003, the Navy expects to have reviewed comments and signed the **Record of Decision (ROD)** describing the final decision. The **ROD**, which will include a summary of responses to public comments, will then be made available to the public at **NTC Great Lakes**. The Navy will also announce its decision through the local news media.

What do you think?

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 on how to protect your community. To comment formally:

- Offer oral comments during the comment portion of the public meeting, if such a meeting is requested (see page 5 for details).
- Send written comments postmarked no later than March 31, 2003 to:

NTC Great Lakes
 Attn: Dan Fleming
 Dept. of Navy
 EPA Midwest
 Building 1A, Code N457
 201 Decatur Avenue
 Great Lakes, IL 60088
 Tel: 847-688-5997, extension 161

- E-mail comments by March 31, 2003 to:

flemingdm@efdsouth.navfac.navy.mil

For More Detailed Information

To help the public understand and comment on the proposal for the site, this publication summarized a number of reports

Site History

Following is a brief environmental history of Site 7:

- **1943 - 1995** - Silk Screening Shop was located in the RTC Training Aids Branch of Building 1212.
- **1985** - The ground surrounding the drain outlet (an area approximately 3 feet by 15 feet) was reported to be stained.
- **1986** - **IAS** conducted at **NTC Great Lakes** identified 14 potentially contaminated sites. Each site was evaluated with respect to contamination characteristics, migration pathways, and pollutant receptors. The study concluded that seven of these sites, including Site 7, warranted further investigation to assess potential long-term impacts.
- **1992** - A petroleum release from one of the two 500-gallon **ASTs** tanks was documented.
- **1995** - Additional sampling and analysis of surface soil was conducted at this site. Results of the analyses indicated that five chemicals (inorganics and **PAHs**) exceeded the **IEPA TACO** residential criteria.
- **2002 - 2003** - Site 7 **RI/RA**. Based on the results of the investigation, human health and ecological risk evaluations were performed and **COPCs** for soil were identified. A hot spot removal action was performed and the site risks re-evaluated.

and studies. The technical and public information prepared to date for the site are available at NTC Great Lakes.

Glossary of Terms

This glossary defines the terms used in this Proposed Plan. The definitions in this glossary apply specifically to this Proposed Plan and may have other meanings when used in different circumstances.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A Federal law also known as "Superfund". This law was passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). This law created a special tax that goes into a trust fund to investigate and cleanup abandoned or uncontrolled hazardous waste sites.

Chemical of potential concern (COPC): A substance detected at a concentration and/or in a location where it could have an adverse effect on human health and the environment.

Initial Assessment Study (IAS): A report that describes several sites and documents the types and locations of environmental contaminants.

Polynuclear aromatic hydrocarbon (PAH): High molecular weight, relatively immobile, and moderately toxic solid organic chemical that features multiple benzenic (aromatic) rings in their chemical formula. PAHs are typically formed during the incomplete combustion of coal, oil, gas, garbage, or other organic substance.

Record of Decision (ROD): An official document that describes the selected Superfund remedy for a specific site. The ROD documents the remedy selection process and is issued by the Navy and USEPA following the public comment period for the proposed plan.

Remedial Investigation / Risk Assessment (RI/RA): A report that describes the site, documents the type and location of environmental contaminants, and presents the results of the risk assessment.

Soil Screening Levels (SSLs): Generic screening levels are not national cleanup levels; instead, they are intended to be used to streamline the evaluation and cleanup of site soils by helping site managers eliminate areas, pathways, and/or chemicals of concern at National Priority List sites.

Tiered Approach to Corrective Action Objectives (TACO): IEPA's method for developing remediation objectives for contaminated soil and groundwater. These remediation objectives protect human health and take into account site conditions and land use. Remediation objectives generated by TACO are risk-based and site-specific.

Upper confidence limit (UCL): Statistical term used to define a numerical value that is greater than a certain percentage of the numerical values of a given data set. For example, the 95 percent UCL of a data set of concentrations expresses the concentration value that is greater than 95-percent of the individual concentration values of the data set.

What's a Formal Comment?



Formal comments are used to improve the final decision. During the 30-day formal comment period, the Navy will accept formal written comments and hold a meeting, if requested, to accept formal verbal comments.

To make a formal comment, you need to present your views during the public meeting or submit a written comment during the comment period. A request for a public hearing to present your formal comments must be made in writing. The request must be postmarked no later than March 31, 2003. Written comments and requests for a public hearing should be sent to:

NTC Great Lakes
Attn: Dan Fleming
Dept. of Navy
EPA Midwest
Building 1A, Code N457
201 Decatur Avenue
Great Lakes, IL 60088



Federal regulations require the Navy to distinguish between "formal" and "informal" comments. Although the Navy uses the comments throughout site investigation and clean-up activities, the Navy is only required to respond in writing to formal comments on the Proposed Plan. If a public meeting is requested, there will be no verbal response to your comments during the formal meeting portion of the meeting. After the formal portion of the public meeting is closed, the Navy may respond to informal questions.

The Navy will review the transcript of formal comments received at the meeting and written comments received during the formal comment period before making a final decision. They will then prepare a written response to formal comments. The transcript of formal comments and the Navy's written responses will then be issued in a document called a Responsiveness Summary when the Navy releases the final ROD.

Use This Space to Write Your Comments

The Navy wants your written comments on the options under consideration for determining the final decision for Site 7, RTC Silk Screening Shop. You can use the form below to send written comments. If you have questions about how to comment, please call Dan Fleming at (847) 688-5997 extension 161. This form is provided for your convenience. Please mail this form or additional sheets of written comments, postmarked no later than March 31, 2003, to the address below. Comments may also be e-mailed to the address shown below.

NTC Great Lakes
Attn: Dan Fleming
Dept. of Navy
EPA Midwest
Building 1A, Code N457
201 Decatur Avenue
Great Lakes, IL 60088
email: flemingdm@efdsouth.navfac.navy.mil

(Attach sheets as needed)

Comment submitted by: _____

Fold, staple, stamp, and mail -----

Place
Stamp
Here

NTC Great Lakes
Attn: Dan Fleming
Dept. of Navy
EPA Midwest
Building 1A, Code N457
201 Decatur Avenue
Great Lakes, IL 60088