

U.S. Navy April 2011

Proposed Plan

Area of Concern 55C – Wetland Area North of Trotter Road Operable Unit 22 Naval Air Station South Weymouth Weymouth, Massachusetts

The Proposed Plan

This Proposed Plan was prepared in accordance with federal law to present the Navy's proposed **No Further Action** decision for Area of Concern (AOC) 55C, the wetland area north of Trotter Road, at the former Naval Air Station (NAS) South Weymouth in Weymouth, Massachusetts. The Navy prepared this Proposed Plan after careful study in coordination with federal and state environmental regulatory agencies. This document provides the public with information regarding this plan and describes how to become involved in the decision-making process.



Introduction

The Navy prepared this Proposed Plan for AOC 55C based upon a thorough evaluation conducted in accordance with the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This law, better known as Superfund, establishes procedures for investigating and cleaning up hazardous waste sites. Key terms, such as CERCLA, are defined in the Glossary of Terms at the end of this document.

The Navy (as the lead agency) works closely with the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) in performing environmental investigations and related activities at the Base to return the property to the local communities.

The Navy prepared this Proposed Plan in accordance with CERCLA Section 117(a) and Section 300.430(f)(2) of the National Contingency Plan (NCP). This plan and the associated community involvement activities fulfill the Navy's public participation responsibilities under these laws.

The purpose of this Proposed Plan is to:

Let us know what you think!

Mark Your Calendar!

PUBLIC COMMENT PERIOD April 11, 2011 to May 11, 2011

The Navy will accept written comments on the Proposed Plan for AOC 55C during this period. Send written comments postmarked no later

than May 11, 2011 to:

Mr. Brian Helland
Remedial Project Manager
BRAC Program Management Office, Northeast
4911 South Broad Street
Philadelphia, PA 19112

or email your comments to: brian.helland@navy.mil

PUBLIC MEETING AND PUBLIC HEARING – April 25, 2011

The Navy will hold a public meeting at 7:00 p.m. that will include posters and a Navy presentation describing the Proposed Plan. Following the presentation, Navy will host a question-and-answer session. The Navy will then hold a formal public hearing from 8:00 p.m. until all comments are heard. At the formal hearing an official transcript of comments will be entered into the record. The above activities will be held at the New England Wildlife Center, 500 Columbian Street, South Weymouth, Massachusetts, 02190 (phone number 781-682-4878)

For more information, visit one of the Information Repositories listed at the end of this Proposed Plan.

- Provide information about the environmental investigations and removal actions completed at AOC 55C;
- Identify and explain the Navy's Proposed Plan;

- Encourage public review and comment on this Proposed Plan; and
- Provide information on how the public can be involved in the decision-making process.

This Proposed Plan summarizes key information from previous reports concerning AOC 55C. More detailed information can be found in the reports referenced in this Plan. The reports are available for public review at the Information Repositories for the Base (locations listed at the end of this document).

The Navy encourages the public to review the referenced reports to gain a better understanding of the environmental activities completed for AOC 55C and to provide the Navy with any comments or concerns.

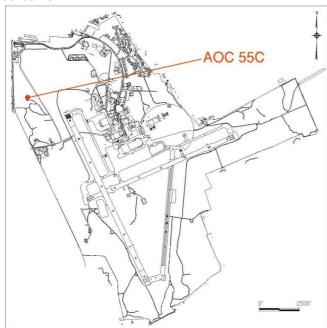


Figure 1 - AOC 55C Location

The CERCLA Process and AOC 55C

AOC 55C is one of many sites identified as Areas of Concern (AOCs) at NAS South Weymouth (see Figure 1). This area was investigated as part of the Environmental Baseline Survey (EBS) program as Review Item Area (RIA) 55C. Work plans for the EBS investigations, which described the number of samples, locations and media, and analytical parameters, were developed in collaboration with the EPA and MassDEP. Sites with sample results which exceed either risk benchmarks or background values for more than one hazardous substance are designated as CERCLA AOCs. RIA 55C thus became AOC 55C.

The Navy followed the CERCLA process in investigating and cleaning up AOC 55C. Each step in the CERCLA process was completed by the Navy with input, review, and approval from the EPA and input, review and comment from MassDEP. As part of the CERCLA process, samples were collected and analyzed for potential contaminants of concern. The results were screened against background values for the Base, human health risk-based benchmarks, and ecological risk-based benchmarks.

After a site is identified as an AOC, the Navy may then perform a streamlined risk assessment and/or removal action to address site concerns. The Navy prepared streamlined risk assessments that identified unacceptable human health and ecological risks. An engineering evaluation/cost analysis (EE/CA) was then conducted to select a removal action. A nontime critical removal action (NTCRA) was completed at AOC 55C to remove metal debris and impacted soil/sediment. The excavated material was removed from the site and wetland restoration activities and a groundwater investigation were performed.

Based on the available information, the Navy has concluded that No Further Action is required for AOC 55C. The recommendations for this AOC do not affect the strategy or progress of environmental investigations at other sites at the Base.

Information about AOC 55C is provided below. Documents referenced in this Proposed Plan are available at the Information Repositories for the Base.

Site Background and Characteristics

Where is AOC 55C?

AOC 55C is situated on a 0.4-acre parcel of land located in the northwest portion of NAS South Weymouth (Figure 1). It is located between Route 18 (Main Street) to the west and French Stream to the east.

What was AOC 55C used for?

AOC 55C was originally identified as an RIA due to the presence of metal debris that was scattered throughout the area. There was evidence that dumping had occurred in the past.

What does AOC 55C look like today?

AOC 55C is an undeveloped parcel of land that consists of a small seasonal surface water body or vernal pool and adjacent wetland areas. The Site has been replanted with various wetland plants following the 2010 removal action. See Figure 2.



Figure 2 – AOC 55C Post-Restoration (09/2010)

What were the investigation results?

Sediment, surface water, soil, and groundwater samples were collected at AOC 55C as part of the EBS program and during two supplemental investigations and the 2010 removal action. See sidebar for a timeline of the environmental investigations and removal action.

2001 - 2003 Phase II EBS Investigation

In 2001 and 2002-2003, several sediment, surface water and soil samples were collected. Because exact disposal processes and materials disposed were unknown, samples were analyzed for a wide range of compounds, with the following results:

- Volatile Organic Compounds (VOCs) –
 VOCs were detected in soil and surface water
 samples at trace/low concentrations below
 benchmark screening levels. One VOC was
 detected in sediment above screening levels.
- Semi-Volatile Organic Compounds (SVOCs)

 SVOCs were detected in soil, sediment, and surface water samples; several concentrations exceeded benchmark screening levels.
- Hydrocarbons Volatile and extractable petroleum hydrocarbons were detected in soil samples at trace/low concentrations below benchmark screening levels.
- Pesticides Up to seven pesticides in sediment and one pesticide in surface water were detected at concentrations exceeding screening levels. One pesticide concentration in soil exceeded screening levels.

Environmental Investigations at AOC 55C

1994: EPA listed NAS South Weymouth on the National Priorities List.

1995: The Navy performed a Phase I EBS to identify additional potentially impacted sites requiring further investigation. AOC 55C was one of the sites identified for further study.

2001: The Navy performed a Phase II EBS involving the analysis of soil, sediment, and surface water samples collected from the Site.

2002-2003: The Navy collected additional soil, sediment, and surface water samples as part of another mobilization of the Phase II EBS.

2007: The Navy conducted an electromagnetic (EM) survey to locate subsurface debris.

2007-2008: The Navy collected additional sediment and surface water samples, characterized the wetland within and adjacent to the site, and incorporated the results into an ecological risk assessment (ERA) to calculate risks posed to ecological receptors. A wetland functional assessment was part of the ERA.

2008: The Navy conducted a human health risk assessment (HHRA).

2009: The Navy conducted an engineering evaluation/cost analysis (EE/CA) to determine the most appropriate way to remove the debris and associated contamination and eliminate the unacceptable risks.

2010: The Navy conducted a NTCRA to remove metallic debris and soil and restore the wetland. The Navy also conducted a groundwater investigation to confirm that any contamination from the debris had not leached to the groundwater.

- Inorganics Several metals were detected in soil, sediment, and surface water; concentrations exceeded applicable benchmark screening levels.
- Polychlorinated Biphenyls (PCBs) One PCB was detected at a concentration above benchmark screening levels in soil and sediment.

2007 Electromagnetic Survey

An electromagnetic (EM) survey was conducted in February 2007 to locate subsurface debris and delineate the extent of the metal debris area. The EM survey concluded that the majority of the metal debris was located within the shallow subsurface soil and sediment in an area of approximately 19,800 square feet in the middle of the Site.

Risk Assessments

Based on the results of the EBS investigations, the Navy initially proposed a removal action for AOC 55C. However, EPA recommended that additional investigations be conducted prior to any removal action to further evaluate human health and ecological risks at the Site, so that risks could be weighed against the disruption to the wetland ecosystem that would be caused by a removal action.

In 2007, sediment samples from 19 on-site locations were collected and analyzed for pH and lead. Based on the results, additional sediment samples were collected from 6 of the 19 locations and from 3 reference locations for full chemical analysis and toxicity testing.

These data along with the EBS investigation data were used to complete streamlined risk assessments to determine whether the detected concentrations of chemicals in the soil, sediment and surface water samples posed a significant threat to human and ecological receptors. A conservative subset of baseline risk assessment exposure scenarios was used for the streamlined risk assessments. These predicted effects were then considered when making decisions for AOC 55C. The streamlined ecological risk assessment (ERA) and human health risk assessment (HHRA) were completed in 2007 – 2008 and are described below.

Ecological Risks

The Navy completed an ecological risk screening program, including chemical analysis and toxicity testing, and assessment to characterize the functions and values of the wetlands at AOC 55C, and to determine whether risks to ecological receptors were significant enough to warrant a removal action. The goals of the ERA were also to determine whether sediment or surface water was toxic to ecological receptors, or whether contaminants were causing unacceptable risks to small mammals and birds via the food chain pathway. The field program included a wetland functions and values assessment, collection of sediment and surface water samples, and toxicity tests and chemical analysis. The streamlined ERA included the following three steps:

Step 1 - Define the Problem. The Navy collected and evaluated information about the site conditions (e.g., type of habitat, and types of plant and animal species at the site), chemicals of potential concern (COPCs), and potential exposure pathways. The Navy evaluated the following ecological receptor groups and pathways at AOC 55C: terrestrial plants and invertebrates exposed to surface soil; invertebrates exposed to sediment; aquatic receptors (invertebrates, plants, and amphibians) exposed to surface water; and wetland and terrestrial vertebrates exposed to surface soil and sediment.

Step 2 - Conduct a Risk Analysis. The Navy evaluated the possible harmful effects to the ecological receptors from exposure to the COPCs. The chemical concentrations that the ecological receptors might be exposed to were determined by directly sampling environmental media. Potential chemical exposure also depends on the plant and animal tissue concentrations, which were estimated based on bioaccumulation factors cited in technical references.

Step 3—Characterize the Risks. The results from the risk analysis were used to determine the probability of adverse effects to the ecological receptors at the site. Step 3a typically consists of a refinement of the conservative exposure assumptions and concentrations to evaluate the potential risks to ecological receptors (i.e., plants, invertebrates, and wildlife receptors). The objective of Step 3a is to determine which chemicals contribute to potentially unacceptable levels of ecological risk, and to eliminate from further consideration those COPCs that were retained in Steps 1 and 2 due to the use of conservative exposure scenarios. This allows the ERA to focus on chemicals that are considered risk drivers for the site, if any remain after the Step 3a refinement. For this ERA, the Step 3a refinement also included an evaluation of the toxicity test data collected at the Site.

How is Ecological Risk Defined?

The risk to ecological receptors is expressed as a Hazard Quotient (HQ). A receptor's exposure estimate (e.g., amount of chemical ingested in food) is compared to a benchmark for chemical uptake that is designed to be protective. When the HQ is below 1.0, toxicological effects are unlikely to occur and no significant risk is present. When the HQ is above 1.0, there is a potential for unacceptable risk to be present.

ERA Conclusions

The ERA conclusions for AOC 55C are summarized below:

- Plants and invertebrates could be impacted by the metals copper, lead, and zinc in the eastern portion of the Site.
- Elevated levels of metals, PAHs, and PCBs posed potential risks to sediment invertebrates. The toxicity test results indicated that risks to sediment invertebrates were possible in specific areas of the Site.
- The toxicity tests conducted to determine if dissolved metals in the surface water were causing increased mortality or decreased growth of aquatic organisms, relative to laboratory control and reference locations, concluded that there was no unacceptable risk to aquatic organisms.
- Potential risks to wildlife, specifically insectivorous wetland birds, were possible due to the metals copper, mercury, and zinc.

Wetland Functional Assessment Conclusions

The wetland functional assessment completed in 2007 concluded that the AOC 55C wetlands provide several functions and values, especially sediment/toxicant retention and wildlife habitat. However, the functions and values were compromised by a history of dumping and grading. The disturbed soils and mounds of debris appeared to have interfered with the growth of denser and more diverse vegetation and made the wetlands less visually appealing.

Human Health Risks

The streamlined HHRA used a 4-step process.

Step 1 - Hazard Identification. COPCs were identified as those analytes with detected concentrations that exceeded benchmark screening levels and background levels, if applicable. COPCs were used for site-specific risk calculations (i.e., Steps 2 through 4 described below).

Step 2 - Exposure Assessment. This process examines possible pathways by which humans may come into contact with the COPCs. The HHRA evaluated only reasonable maximum exposure risks to future residential receptors as a conservative approach to aid in risk management decisions.

Step 3 - Toxicity Assessment. The possible harmful effects to humans from the COPCs were

evaluated. These chemicals were separated into two groups: carcinogens (COPCs that may cause cancer) and non-carcinogens (COPCs that may cause adverse health effects other than cancer).

Step 4 - Characterize the Risk. Lastly, the results from the exposure and toxicity assessments were combined to calculate the overall risks from exposure to site COPCs. (See text box describing how risk calculations are expressed.)

How Are the Risks Defined?

It depends on the type of chemical. For potential carcinogens, the risk to human health is expressed in terms of the likelihood of the chemical causing cancer over an estimated lifetime of 70 years. EPA's acceptable risk range for carcinogens is from 1 in 1 million to 1 in 10,000. In general, calculated risks greater than 1 in 10,000 would require consideration of cleanup alternatives. For non-carcinogens, the risk to human health is expressed as a Hazard Index. A Hazard Index greater than 1 suggests that adverse health effects are possible.

Risks from lead exposure are not evaluated using the same methodology as other contaminants. Estimations of blood-lead concentrations are used to evaluate potential adverse health effects. Infants and young children are extremely susceptible to adverse effects from exposure to lead. Blood-lead levels (either fetal or young child) greater than 10 µg/dL are considered to be a "concern." EPA's stated goal for lead is that individuals exposed would have no more than a 5 percent probability of exceeding the level of concern of 10 µg/dL.

If the HHRA concludes that risks are within the acceptable range for carcinogens, the Hazard Index is less than 1 for non-carcinogens, and fewer than 5 percent of the population is likely to have blood lead levels greater than 10 µg/dL, the site is determined to pose no unacceptable risk to human health.

HHRA Conclusions

The greatest contributors to potential cancer risk to future residents were identified as human health risk-based contaminants of concern (COCs). The soil COCs included PAHs, arsenic and total PCBs. The sediment COCs included PAHs, arsenic, and dieldrin. Although surface water was included in the overall evaluation of risk, the cancer risks from exposure to surface water were minimal and well below EPA's acceptable risk range.

The non-cancer hazard indices were below the EPA target of 1.0. Exposures to lead in surface soil, all soil, or sediment at the study area did not exceed EPA's target level of concern.

The HHRA concluded that there was potentially an unacceptable cancer risk to future residents exposed to surface soil or to combined soil, sediment, and surface water.

Removal Action

The streamlined risk assessments summarized above indicated that an unacceptable risk to human health would exist for future residents, and that the site posed unacceptable risks to invertebrates and plants. The functions and values assessment of the wetland indicated that the wetland would not be irreparably harmed by a removal action. Based on these findings, the Navy decided to complete a removal action.

2009 Engineering Evaluation/Cost Analysis (EE/CA)

The Navy prepared an EE/CA to support a NTCRA to remove metal debris and associated impacted soil and sediment and eliminate unacceptable risks to human health and the environment.

The proposed soil/sediment removal action as described in the EE/CA included excavation, transportation, and off-site disposal of contaminated soil/sediment and metal debris. Following excavation, the removal areas were to be backfilled, graded to the pre-existing base grade elevation present across the Site, and replanted to restore the wetlands and protect the area from erosion. Wetland monitoring would be conducted twice a year, in late spring and mid to late summer, for the first two full growing seasons following wetland restoration, to ensure that the restoration is completed successfully.

The EE/CA developed clean up goals for AOC 55C (see table). Because the sediments and soils are collocated, the clean up goals are for combined surface soil and sediment. The selected clean up goal is the lower of the ecological or human health risk-based values, unless the established Base background value is higher. In that case, the background value was selected. Most of the COCs in the table had clean up goals that were based on background levels, but six COCs (cadmium, copper, lead, total Aroclors, and total PAHs) were based on ecological risk-based values. Site-specific ecological risk-based values were derived from the sediment toxicity data collected as part of the ERA. One COC, Aroclor 1260, had a clean up goal based on human health-based values.

Soil/Sediment COCs	Units	Clean Up Goal
Arsenic	mg/kg	5.31
Benzo(a)anthracene	μg/kg	810
Benzo(a)pyrene	μg/kg	1829
Benzo(b)fluroanthene	μg/kg	770
Cadmium	mg/kg	8.1
Copper	mg/kg	249
Dibenzo(a,h)anthracene	μg/kg	96
Dieldrin	μg/kg	52
Indeno(1,2,3-cd)pyrene	μg/kg	175
Lead	mg/kg	722
Mercury	mg/kg	0.49
Zinc	mg/kg	395
Aroclor-1260	μg/kg	220
Total Aroclor	μg/kg	871
Total PAHS	μg/kg	17992

An Action Memorandum documenting the selected removal action and cleanup goals was reviewed by EPA and MassDEP and signed by the Navy on January 14, 2010. The Action Memorandum noted that the NTCRA would provide long-term effectiveness and permanent protection for human health and the environment, and would constitute the final remedy for the Site. By removing the metal debris and soil/sediment with COCs that contributed to the unacceptable risks, the risk posed by the COCs would be addressed, and no additional efforts were anticipated. Removal of the affected soil and sediment to attain the proposed remedial goals would reduce the risks to acceptable levels.

2010 Non-Time Critical Removal Action

The NTCRA was conducted from January to April 2010, consistent with the EE/CA and Action Memorandum. The impacted area was cleared of vegetation and the surface debris was segregated and disposed off site. Trees, limbs and stumps were stockpiled and used during site restoration to create protected features and promote development of small animal habitats.

The removal area consisted of nineteen 1,000-square foot sections in a grid pattern. The vernal pool was sealed off with a berm of clean soil during the excavation. All soils in the target area were initially excavated to a depth of 2 feet below ground surface (bgs). Confirmation samples were collected at the floor of each grid and the sidewalls of the excavation. Grids associated with confirmation samples that exceeded cleanup goals were re-excavated until floor confirmation sample results met the cleanup goals.

The one exception was a single PAH exceedance at the floor of a grid that was excavated to 3.5 feet bgs; for this location, the regulatory agencies agreed that the concentration was not likely to pose unacceptable risk because of the sample depth and the relatively low concentration. The maximum excavation depth was 6 feet.

Approximately 1,620 cubic yards of soil and sediment were removed and placed beneath the cap of the West Gate Landfill. This change from off-site disposal of the excavated materials as described in the EE/CA was documented in an Explanation of Significant Differences signed by Navy in August 2010, and EPA in September 2010. After excavation was completed, clean soil was brought in to backfill the excavation. The excavated areas were backfilled with a topsoil mixture containing approximately 50 to 75 percent topsoil mixed with 25 to 50 percent organic compost to achieve a minimum organic content of 12 percent (Figure 3). The area was then graded to promote a viable wetland habitat. The area was replanted with native vegetation, including a mix of grasses, shrubs, and trees as described in the AOC 55C restoration plan. The work was documented in a removal action completion report.



Figure 3 – 2010 Removal Action at AOC 55C

The restored wetland areas will be monitored and invasive species controlled as needed, consistent with the restoration plan and invasive species management plan. Inspections of the restored wetlands will be conducted during late spring and late summer of the first two full growing seasons. The inspections will determine whether invasive species control measures are needed.

2010 Groundwater Investigation

Five piezometers were installed at AOC 55C in June 2010 to measure water levels and collect

groundwater samples to determine if the debris and associated soil had affected groundwater quality.

Investigation results indicated that groundwater flow was toward the east-southeast. No VOCs, PAHs, or PCBs were detected. Concentrations of three metals (cobalt, iron, and manganese) exceeded screening criteria but were below levels generally detected in the South Weymouth area. Three pesticides were detected; one concentration (dieldrin) exceeded its screening criterion. Since the proposed future use for the site is to remain as open space wetland with no residential use, the tapwater screening level for dieldrin in drinking water was conservatively adjusted higher by one order of magnitude to represent the much lower groundwater exposure associated with recreational contact/incidental ingestion compared with residential use. The measured dieldrin concentration did not exceed this adjusted screening level. Based on this risk evaluation and the other groundwater results, the investigation report concluded that no further action for groundwater is necessarv.

Conclusions

The Navy concludes that the risks documented in the HHRA and the ERA have been mitigated by the 2010 removal action and that groundwater has not been significantly impacted by the debris or associated contamination. Therefore, the site does not pose an unacceptable risk to human health or the environment, as documented in the removal action completion report and groundwater investigation report.

Rationale for the No Further Action Proposal

The Navy has concluded that No Further Action is appropriate for AOC 55C for the following reasons:

- Areas where concentrations of contaminants were found to exceed clean up goals were excavated and disposed off-site.
- A groundwater investigation indicated no significant impact to groundwater at the Site.
- Comparison of post-excavation soil sample results to cleanup goals concluded that no unacceptable risks remain at AOC 55C.

Under CERCLA, if no unacceptable risks to human health or the environment are identified, then no further action is required.

As noted above, the restored wetland areas will be inspected in the spring and fall. While this Proposed Plan recommends No Further Action to address site contamination, the Navy will ensure that the wetland is restored, monitor its progress, and control any invasive species.

Next Steps

Community review of and comment on this Proposed Plan is the next step in the CERCLA process for AOC 55C. The Navy encourages the public to review this plan and to submit comments. The Navy will accept written comments on the Proposed Plan during the public comment period, from April 11, 2011 to May 11, 2011. The Navy will accept oral comments during a Public Hearing that will follow a Public Meeting to be held on April 25, 2011 at the New England Wildlife Center, Weymouth, Massachusetts.

Once the communities have commented on this Proposed Plan, the Navy and EPA will consider all comments received. The Navy's no further action proposal could change based on community comments. The Navy will provide written responses to formal comments received on the Proposed Plan. These responses will be provided in a document called the Responsiveness Summary that will be part of the Record of Decision (ROD) for the Site.

The ROD will contain the rationale for the Navy's and EPA's decision for the Site. The Navy and EPA anticipate that all comments will be reviewed and the ROD will be signed by September 2011. The document will then be made available to the public at the Information Repositories listed at the end of this document. Also, the Navy will announce the

availability of the ROD through the local news media and the community mailing list.

Commitment to the Communities

The Navy is committed to informing the communities about the environmental cleanup programs at NAS South Weymouth. A Restoration Advisory Board (RAB), composed of the community leaders, government agency representatives, and local citizens, meets regularly to discuss the environmental cleanup program at NAS South Weymouth. At these meetings, you can learn about and offer suggestions for the Navy's program activities. RAB meetings are held on the second Thursday of every other month. Upcoming RAB meetings are publicized in local news media and are open to the public. Past meeting minutes are available on the NAS South Weymouth website: http://www.bracpmo.navy.mil.

The Navy also maintains a community mailing list for distributing information about the environmental cleanup program. If you would like to be added to the mailing list, please contact Mr. Brian Helland at the address or email provided on the first page of this Proposed Plan. Details of the information summarized in this Proposed Plan are available for review at the information repositories listed at the end of this document.

Important Dates

Public Comment Period April 11, 2011 to May 11, 2011

Public Meeting and Public Hearing April 25, 2011

Your Questions and Comments Are Important

Formal comments are used to improve the decision-making process. The Navy will accept written comments from the public during the 30-day comment period and will hold a public meeting and hearing to receive oral comments (see page 1 regarding how to submit formal comments to the Navy).



Your formal comments during this time will become part of the official record for AOC 55C. The Navy will consider the comments received during the comment period before making the final decisions for the Site. The public is encouraged to participate during this period. You do not have to be a technical expert to take part in the process.

COMMENT SHEET – Proposed Plan for AOC 55C

Use this space to write your comments or to be added to the mailing list

The Navy encourages your written comments on AOC 55C, Naval Air Station South Weymouth, Wassachusetts. You can use the form below to send written comments. If you have questions about how to comment, please call Brian Helland at (215) 897-4912 or via email at brian.helland@navy.mil.

This form is provided for your convenience. Please mail this form or additional sheets of written comments, postmarked no later than May 11, 2011, to the address shown below:

Mr. Brian Helland Remedial Project Manager BRAC Program Management Office, Northeast 4911 South Broad Street Philadelphia, PA 19112

Philadelphia, PA 19112
Comment Submitted by:
Address:

 Affix Postage
Postage

Mr. Brian Helland Remedial Project Manager
BRAC Program Management Office, Northeast
4911 South Broad Street
Philadelphia, PA 19112

(Fold on dotted line, staple, stamp, and mail)

GLOSSARY OF TERMS

Analyte: A substance or chemical constituent that is determined in an analytical procedure.

Area of Concern (AOC): Former Environmental Baseline Survey Review Item Area currently being investigated under CERCLA. These sites required removal actions and/or risk assessments to address site conditions.

Background Level: Chemicals or concentrations of chemicals present in the environment due to naturally occurring geochemical processes and sources, or to human activities not related to specific point sources or source releases.

Benchmark: Concentration of a chemical considered to be protective of human health or the environment.

Chemicals of Concern (COCs): Chemicals of concern are chemicals identified in the risk assessments as the primary drivers of unacceptable risks.

Chemicals of Potential Concern (COPCs):

Chemicals of potential concern are chemicals found at the Site at concentrations above federal and state risk-screening levels and therefore are included in the risk assessment evaluations.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law passed in 1980 and amended in 1986 by the Superfund Amendments and Reauthorization Act (SARA). These laws created a system and funding mechanism for investigating and cleaning up abandoned and/or uncontrolled hazardous waste sites. The Navy's cleanup of sites regulated by CERCLA/SARA is funded by the Department of Defense under the Defense Environmental Restoration Fund.

Engineering Evaluation and Cost Analysis (EE/CA) — A description and engineering study of potential cleanup alternatives, e.g., removal actions, for a site.

Environmental Baseline Survey: An environmental assessment conducted by the Navy at bases that have been closed under the Base Realignment and Closure (BRAC) Act.

Groundwater: Water found beneath the earth's surface that fills pores and cracks between such materials as sand, soil, gravel, or rock.

No Further Action: Under CERCLA, if some remediation has been conducted and "no unacceptable risks" to human health or the environment remain at a site, no further action is required.

Operable Unit: A site or sites being addressed collectively under the CERCLA process.

Piezometer: A piezometer is drilled at a specific location on or off a waste site. Measurements can be collected to determine water levels and quantities of chemicals present in groundwater.

Proposed Plan: A document that summarizes the Navy's preferred cleanup remedy for a site and provides the public with information on how they can participate in the remedy selection process.

Record of Decision (ROD): A legal, technical and public document that explains the rationale and final cleanup decision for a site. It contains a summary of the public's involvement in the cleanup decision.

Removal Action— A type of short-term cleanup that can be conducted at any time during the CERCLA process to address threats to human health or the environment. Typically, "time critical" removal actions are conducted when it is determined that less than 6 months are available before site activities must be initiated and when the site has less complex or less extensive contamination than sites that would require long-term cleanup. An Action Memorandum is prepared to outline the removal action.

Responsiveness Summary: A document containing the responses to the formal comments submitted by the public regarding the Proposed Plan. This summary is issued as an appendix to the ROD.

Streamlined Risk Assessment: An ecological or human health risk assessment using a limited number of conservative exposure pathways, receptors, and exposure assumptions agreed upon in advance with the regulatory agencies. Results indicating acceptable risk under the most conservative approach (for example, the residential scenario) would therefore indicate acceptable risk under all other scenarios.

For More Information...

Contacts

If you have questions or comments about this Proposed Plan, or any other questions about AOC 55C, please contact us:

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Mr. David Chaffin MADEP Project Manager (617) 348-4005 david.chaffin@state.ma.us

Information Repositories

Documents relating to environmental cleanup activities for the NAS South Weymouth property are available for public review at the following information repositories:

Tufts Library 46 Broad Street Weymouth, MA 02188 (781) 337-1402 Monday-Thursday: 9:00 – 9:00 Friday, Saturday: 9:00 – 5:00 Sunday: Closed

Abington Public Library 600 Gliniewicz Way Abington, MA 02351 (781) 982-2139 Monday, Wednesday: 10:00 – 5:00 Tuesday, Thursday: 10:00 – 8:30 Saturday: 10:00 – 3:30 Friday, Sunday: Closed

Department of the Navy Caretaker Site Office c/o David Barney 1134 Main Street, Building 11 South Weymouth, MA 02190 Monday-Friday: 10:00 – 4:00 Hingham Public Library 66 Leavitt Street Hingham, MA 02043 (781) 741-1406 Monday-Thursday: 10:00 – 9:00 Friday: Closed Saturday: 9:00 – 5:00 Sunday: 1:00 – 5:00

Rockland Memorial Library 20 Belmont Street Rockland, MA 02370 (781) 878-1236 Monday: 10:00 – 5:00 Tuesday, Wednesday: 10:00 – 8:00 Thursday-Friday: 10:00 – 5:00 Saturday-Sunday: Closed