RECORD OF DECISION

AREA OF CONCERN 55D –
WETLAND AREA NORTH OF TROTTER ROAD

NAVAL AIR STATION SOUTH WEYMOUTH
WEYMOUTH, MASSACHUSETTS

BRAC PMO NORTHEAST
U.S. NAVY

DECEMBER 2007

Record of Decision
Naval Air Station South Weymouth
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PART 1—DECLARATION

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Naval Air Station (NAS) South Weymouth
1134 Main Street
Weymouth, Massachusetts 02190
NPL No. MA2170022022
Area of Concern (AOC) 55D – Wetland Area North of Trotter Road

II. STATEMENT OF BASIS AND PURPOSE

This Record of Decision (ROD) presents the No Action decision for surface water and sediments at AOC 55D (Wetland Area North of Trotter Road) (the Site) at the former NAS South Weymouth, Weymouth, Massachusetts. Groundwater at the site is addressed as part of AOC 55B. The decision was made in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC § 9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300 *et seq.*, as amended. The regulatory program performed under the context of these combined laws and regulations is commonly referred to as "Superfund."

This decision is based on the Administrative Record, which has been developed in accordance with Section 113(k) of CERCLA, and which is available for review at the Navy's Caretaker Site Office (CSO) located at NAS South Weymouth, Weymouth, Massachusetts. Local to the Site, public information repositories are also maintained at the Tufts Library in Weymouth, Massachusetts; the Abington Public Library in Abington, Massachusetts; the Hingham Public Library in Hingham, Massachusetts; and the Rockland Memorial Library in Rockland, Massachusetts. The Administrative Record Index (Appendix D) identifies each of the items comprising the Administrative Record upon which the selection of this decision is based.

This decision had been selected by the U.S. Navy and the U.S. Environmental Protection Agency (EPA). The Massachusetts Department of Environmental Protection (MassDEP) statement on the selected remedy is presented in Appendix A.

III. DESCRIPTION OF THE SELECTED DECISION

This ROD sets forth the No Action decision for surface water and sediments at AOC 55D (Wetland Area North of Trotter Road), at the former NAS South Weymouth. Groundwater at the site is addressed as part of AOC 55B.

The No Action decision for AOC 55D is based on the results of the Navy's streamlined human health and ecological risk assessments for the Site. In 2004, the Navy used site sampling data to assess the potential risks to human and ecological receptors associated with exposure to the Site's environmental media (sediment, surface water). Based on the results of the risk assessments, the Navy has determined that the Site does not pose an unacceptable risk to human health or the environment.

AOC 55D is 1 of 18 AOCs currently on record at NAS South Weymouth. These AOCs have been addressed independently from the rest of NAS South Weymouth and, therefore, the Navy can proceed with closure of these sites as soon as they have met the requirements of the Superfund process. The signing of this No Action ROD by the Navy and EPA Region 1 authorizes the completion of the Superfund

process for AOC 55D. The No Action decision for AOC 55D is not expected to have any impact on the strategy or progress for the other environmental investigations at NAS South Weymouth.

IV. STATUTORY DETERMINATIONS

No cleanup actions under CERCLA are necessary for surface water and sediments at AOC 55D (Wetland Area North of Trotter Road) to ensure the protection of human health and the environment. Groundwater at the site is addressed as part of AOC 55B. Under CERCLA, if no unacceptable risks to human health or the environment are identified, then no further actions, investigations, or monitoring are required. No hazardous substances remain on the Site above levels that allow for unlimited use and unrestricted exposure; therefore, five-year reviews will not be required.

V. AUTHORIZING SIGNATURES

This ROD documents that No Action to clean up surface water and sediments at AOC 55D (Wetland Area North of Trotter Road) at the former NAS South Weymouth is necessary to ensure protection of human health and the environment. Groundwater at the site is addressed as part of AOC 55B. MassDEP's statement on the selected remedy is presented in Appendix A.

Concur and recommended for immediate implementation:

U.S. Department of the Navy

By: _____ Date: 12/19/07

David A. Barney
BRAC Environmental Coordinator
Naval Air Station South Weymouth
U.S. Navy

U.S. Environmental Protection Agency, Region 1

By: _____ Date: 1/16/08

James Owens
Director, Office of Site Remediation and Restoration
Region 1 – New England
U.S. EPA

PART 2—DECISION SUMMARY

I. SITE NAME, LOCATION, AND DESCRIPTION

The former NAS South Weymouth (the Base) was placed on the National Priorities List (NPL) in May 1994 by EPA pursuant to CERCLA. During its operational period (1940s to 1996), NAS South Weymouth was owned by the U.S. Government, and was operated by the Department of the Navy. The Base is located primarily in the Town of Weymouth, Massachusetts (Figure 2-1). Portions of NAS South Weymouth extend into the adjacent Towns of Abington and Rockland, Massachusetts.

The Department of the Navy is the lead agency, and EPA is the lead regulatory agency, for CERCLA activities at NAS South Weymouth. The U.S. Department of Defense (DoD) is the sole source of cleanup funding for the property. There are several operable units within the NAS South Weymouth NPL site (MA2170022022) that the Navy is addressing under CERCLA. This ROD pertains to AOC 55D - Wetland Area North of Trotter Road (the Site).

AOC 55D is located in the Town of Weymouth near the western boundary of the Base at the end of a dirt road, just east of where an active railroad crosses under Route 18 (Figure 2-1). The Site is comprised of a 0.44-acre wetland. The wetland is an oblong-shaped depression roughly 200 feet by 70 feet, with a narrow extension, roughly 100 feet by 40 feet, off the west side (Figure 2-2). The wetland is surrounded by woods. Wildlife, including deer, coyote, and hawks, have been observed in the area. There are no vernal pool breeding areas at AOC 55D (Normandeau Associates, 2001a).

II. SITE HISTORY AND ENFORCEMENT ACTIVITIES

A. Site History

NAS South Weymouth was constructed during the 1940s as an aircraft facility for dirigibles used to patrol the North Atlantic during World War II. The facility was closed at the end of the war and reopened in 1953 as a Naval Air Station for aviation training. NAS South Weymouth was in continuous use since that time as a Naval Air Reserve training facility until it was operationally closed on September 30, 1996 as part of the Base Realignment and Closure (BRAC) program. Administrative closure was completed in September 1997.

AOC 55D (Wetland Area North of Trotter Road) originally was part of AOC 55B (Debris Area North of Trotter Road), which contained miscellaneous construction, household, and other debris. Due to differences in potential ecological risks, the Navy and EPA decided in 2002 to address the wetland area, thereafter designated as AOC 55D, separately from the upland area, AOC 55B. This ROD addresses AOC 55D (wetland area) only.

B. History of Site Investigations

The following sections provide an overview of the completed investigations at AOC 55D. Full details regarding the environmental investigations are available for review in the Phase II Environmental Baseline Survey (EBS) Decision Document RIA 55B (Stone & Webster, 2001); the Phase II EBS Field Report RIA 55B (Stone & Webster, 2002a); the Streamlined Human Health Risk Assessment (HHRA) AOC 55B/D (EA, 2002); the Streamlined Ecological Risk Assessment (ERA) AOC 55B/D (Stone & Webster, 2002c); the Phase II EBS Field Report AOC 55D (Stone & Webster, 2004a); the Streamlined HHRA AOC 55D (EA, 2004); and the Streamlined ERA AOC 55D (Stone & Webster, 2004b). These investigations are summarized below in chronological order.

Phase I Environmental Baseline Survey – 1995

In 1995, the Navy performed a Phase I EBS (Stone & Webster, 1996, 1997) to assess the environmental conditions of the Base property. Areas that were believed to require further investigation for potential contamination were designated as Review Item Areas (RIAs). During the Phase I EBS, the Site area that is the subject of this ROD initially was considered to be part of RIA 55B (Debris Area North of Trotter Road).

Phase II Environmental Baseline Survey at RIA 55B – 1998

The Navy conducted a Phase II EBS investigation to evaluate the RIAs identified during the Phase I EBS. The RIAs were investigated as separate sites during the Phase II EBS and each RIA was sampled for potential contaminants. The results of the Phase II EBS investigation, including the comparisons of sampling data to screening benchmarks and background values were presented in Decision Documents for each RIA. Phase II EBS results for RIA 55B were included in the *Draft Phase II EBS Decision Document for RIA 55B* (Stone & Webster, 2001). RIA 55B was investigated due to the presence of surficial debris, including 55-gallon drums, tires, shoes, and other household and automotive debris. The EBS Phase II investigation included excavation of test pits and collection of surface soil, subsurface soil, groundwater, and surface water samples. The surficial debris was removed in 1999.

In 1998/1999, the Navy collected samples throughout RIA 55B, including two sediment samples (SD15-011 and SD15-012) and one surface water sample (SW15-011) from the wetland area that is the subject of this ROD. Samples were analyzed for a wide range of compounds because the exact disposal processes and materials disposed at the Site were unknown. The samples were analyzed for Target Compound List (TCL)-volatile organic compounds (VOCs), TCL-semivolatile organic compounds (SVOCs), TCL-pesticides and polychlorinated biphenyls (PCBs), Target Analyte List (TAL) metals, extractable petroleum hydrocarbons (EPH), and total organic carbon (TOC). The surface water sample was also analyzed for water quality hardness. Data results were compared to ecological risk benchmarks and NAS South Weymouth background concentrations.

In the wetland area, VOCs were detected in sediment and surface water samples at trace/low concentrations below benchmark screening levels. Pesticides were detected above benchmark screening levels in sediment and surface water. Some metals were detected in surface water (aluminum, barium, copper, iron, lead, manganese, zinc) and sediment (lead, zinc) that exceeded applicable benchmark screening levels; however, metals concentrations in sediment that exceeded benchmark screening levels were within background levels for this area. In surface water, copper, lead, and zinc concentrations exceeded background levels. PCBs were not detected in surface water or sediment; however, the detection limit for PCBs in sediment samples exceeded the benchmark screening levels. SVOCs did not exceed benchmark screening levels in sediment or surface water. Petroleum hydrocarbons were not detected in sediment or surface water.

For some analytes, the laboratory reporting limits were higher than the specified ecological benchmarks. These analytes were either not previously identified in the Quality Assurance Project Plan (QAPP) or were identified in the QAPP but with a lower Method Detection Limit (MDL) than achieved in the following samples. For screening purposes, detection limits of such analytes were compared to twice the benchmark value to demonstrate that these detection limits were not problematic. From this screening, it was noted that the detection limits of 2-methylnaphthalene, acetone, Aroclor-1260, and methyl n-butyl ketone exceeded twice the benchmark value in sediment and, thereby, warranted further sampling at RIA 55B.

At NAS South Weymouth, RIAs containing chemical concentrations that exceed either risk benchmarks or background values for more than one hazardous substance are designated as CERCLA AOCs. Accordingly, RIA 55B was designated as AOC 55B.

Supplemental Investigation at AOC 55B – 2001

During May-June 2001, the Navy conducted a supplemental investigation at AOC 55B that included the collection of two co-located sediment samples (SD15-211 and SD15-212) and two surface water samples (SW15-211 and SW15-212) in the wetland area in an effort to provide sufficient data for ecological risk assessment (Stone & Webster, 2002a). The samples were analyzed for TCL/TAL parameters, polycyclic aromatic hydrocarbons (PAHs), and TOC. The sediment samples were also analyzed for grain size, moisture content, and acid volatile sulfide/simultaneously extracted metals (AVS/SEM). The surface water samples also were analyzed for cyanide and hardness.

VOCs were not detected in the surface water samples. One VOC (acetone) detected in sediment exceeded benchmark screening levels. SVOCs did not exceed benchmark screening levels in sediment. One SVOC (bis(2-ethylhexyl)phthalate) in surface water exceeded benchmark screening levels. Pesticides were not detected in surface water. Three pesticides (4,4'-DDD, 4,4'-DDE, 4,4'-DDT) were detected above benchmark screening levels in each of the two sediment samples. Aluminum, barium, iron, and manganese concentrations exceeded applicable benchmark screening levels in the two surface water samples; one sample also exceeded the lead screening level. Antimony, arsenic, copper, iron, lead, manganese, nickel, and zinc concentrations exceeded applicable benchmark screening levels in one sediment sample; and in the second sediment sample, only lead exceeded the screening level. PCBs were not detected in surface water. One PCB congener (Aroclor-1260) exceeded benchmark screening levels in sediment.

Streamlined Risk Assessments for AOC 55B/55D – 2002

In 2002, the Navy used the results from the 1998/1999 and 2001 sampling events to calculate risks posed to human and ecological receptors. The findings were documented in the Streamlined ERA (Stone & Webster, 2002c) and the Streamlined HHRA (EA, 2002).

The Streamlined HHRA identified potential human receptors for AOC 55D to include commercial workers, resident adults, and resident children[1]. Exposure pathways included ingestion and dermal contact with surface water and sediment. Risk estimates were presented for the Reasonable Maximum Exposure (RME) scenario only. Non-cancer risks for surface water and sediment did not exceed EPA's risk target Hazard Index (HI) of 1.0 and there were no cumulative cancer risks that exceeded EPA's acceptable risk range of 10^{-6} to 10^{-4}. Therefore, no unacceptable risks to human health were identified at AOC 55D.

The Streamlined ERA indicated that, without additional sampling, a determination of "no significant risk" could not be reached for aquatic life and wetland vertebrate wildlife receptors in sediment and surface water at AOC 55D. Therefore, additional sampling was recommended to determine the extent of the potentially impacted wetland and to provide sufficient data to further evaluate risk to human health and the environment. Since the ERA for AOC 55B had indicated higher ecological risks in the wetland area, the wetland area was separated from AOC 55B and was designated as AOC 55D. Environmental media of concern at AOC 55D included sediment and surface water only. There were no soil samples associated with AOC 55D because it was characterized as a wetland area. Groundwater was addressed under AOC 55B.

Supplemental Investigation at AOC 55D – 2002/2003

In 2002-2003, the Navy collected eight additional sediment samples (SD15-301 through -304 and SD15-319 through -322) and three additional surface water samples (SW15-301 through -303) to further

[1] Under conditions agreed to by the Navy, EPA, and MassDEP for the streamlined risk assessments, the only receptors that are required to be evaluated are potential future residential adults and children for exposures to media of concern, on the basis that these are the most sensitive potential receptors at the site. However, the Navy elected to evaluate additional potential receptors on a site-by-site basis based on realistic future use of the site.

characterize the conditions at AOC 55D. The samples were analyzed for TCL/TAL parameters, PAHs (sediment only), TOC, grain size (sediment only), moisture content (sediment only), AVS/SEM (sediment only), hardness (surface water only), and cyanide (surface water only).

VOCs in surface water did not exceed benchmark screening levels. One VOC (acetone) detected in sediment exceeded its benchmark screening level. SVOCs were not detected in surface water at concentrations above benchmark screening levels. Several SVOCs (benzo(b)fluoranthene, benzo(g,h,i)perylene, indeno(1,2,3-c,d)pyrene, benzo(a)pyrene, and dibenzo(a,h)anthracene) in one sediment sample exceeded benchmark screening levels. Pesticides exceeded benchmark screening levels in both sediment (4,4'-DDD and 4,4'-DDE) and surface water (4,4'-DDT). Several metals exceeded applicable benchmark screening levels in both sediment (antimony, arsenic, cadmium, copper, lead, mercury, and zinc) and surface water (aluminum, iron, lead, manganese, mercury, and zinc). PCBs were not detected in surface water samples but did exceed benchmark screening levels in sediment (Aroclor-1260).

Risk Assessments for AOC 55D – 2004

In 2004, the Navy incorporated the additional sampling data from 2002-2003 to re-evaluate risks to human and ecological receptors at AOC 55D (EA, 2004 and Stone & Webster, 2004b, respectively). The results of the risk assessments are presented in Section VII, Summary of Potential Site Risks. The findings indicated that there were no unacceptable risks to human health or the environment at AOC 55D.

C. History of CERCLA Enforcement Activities

In May 1994, NAS South Weymouth was listed on EPA's NPL, indicating that the NAS South Weymouth property was a priority for environmental investigation and cleanup. The Navy has conducted environmental studies and activities at the Base in accordance with CERCLA and the NCP. Based on the designation of NAS South Weymouth property as an NPL site, a Federal Facility Agreement was executed by the Navy and EPA, which became effective in April 2000. This agreement establishes the Navy as the lead agency for the investigation and cleanup of designated sites within NAS South Weymouth property, with EPA providing oversight. MassDEP is not a party to the Federal Facility Agreement but, in accordance with CERCLA and the NCP, MassDEP has participated in ongoing discussions and strategy sessions, and provides oversight and guidance through their review of the Navy's Installation Restoration (IR) Program documents.

III. COMMUNITY PARTICIPATION

The Navy has worked to keep the community involved throughout the investigation process. The Navy has informed the community and other interested parties of NAS South Weymouth environmental activities through informational meetings, fact sheets, press releases, public meetings, regular contact with local officials, and a public website. Also, the Navy meets on a regular basis to discuss the status and progress of the environmental programs with the Restoration Advisory Board (RAB), which is comprised of community leaders, government agency representatives, and local citizens who gather to discuss the progress of the environmental programs at NAS South Weymouth. Representatives from the Navy, EPA Region 1, MassDEP, and local government have attended the public meetings and hearings. The following is a brief chronology of public outreach efforts for AOC 55D:

- In September 1995, the Navy initiated a series of public meetings, at which the RAB process was explained and community members were asked to join the RAB. A sufficient number of volunteers assembled, and RAB meetings began in March 1996. Since that time, RAB meetings have been held on a monthly or bi-monthly basis to keep the RAB and local community informed of the progress of the environmental investigations. The Navy has prepared and distributed

minutes from each of the RAB meetings. Meeting minutes are available to the public on the Navy's public website for environmental activities at the former NAS South Weymouth (http://nas-southweymouth.navy-env.com/).

- In March 1996, the EPA awarded the North and South Rivers Watershed Association (NSRWA) a Technical Advisory Grant (TAG). This TAG had allowed the NSRWA to hire a Technical Advisor to review documents, attend meetings, and prepare evaluation reports. The Technical Advisor attended most RAB meetings and technical project meetings when the TAG was active.

- In July 1998, the Navy released a community relations plan that outlined a program to address community concerns and keep citizens informed about and involved in remedial activities.

- In May 1999, the DoD gave the RAB for NAS South Weymouth a Technical Assistance for Public Participation (TAPP) grant. This grant had allowed the RAB to obtain technical assistance from experts in the environmental field to help them understand the environmental cleanup programs at the Base.

- The Navy has distributed technical documents directly to the RAB members, including the EBS Decision Documents and field reports. Technical documents are also available at the information repositories listed below.

- The Navy provided periodic updates on the status of the sites during various public RAB meetings.

- The Navy published a legal notice of the Proposed Plan for AOC 55D in the Patriot Ledger (July 2, 2007), the Abington-Rockland Mariner (July 6, 2007), and the Weymouth News (July 4, 2007). The notice announced the public comment period and the meeting date for the public information session and public hearing. Announcements about the meeting were posted at the Weymouth Town Hall. The Navy distributed copies of the Proposed Plan to a mailing list of nearly 400 community members. In addition, the Navy made the Proposed Plan available to the public at several established Information Repositories (listed below) and the Navy's public website for environmental activities at the former NAS South Weymouth (http://nas-southweymouth.navy-env.com/).

- From July 2, 2007 to August 1, 2007, the Navy offered the Proposed Plan for public comment, in accordance with the requirements of the NCP and the CERCLA program at NAS South Weymouth. No written comments were received regarding AOC 55D during the public comment period.

- On July 19, 2007, the Navy held an informational meeting to present the Navy's Proposed Plan to the public. At this meeting, representatives from the Navy discussed the Proposed Plan and answered questions from the public. In addition, the Navy held a public hearing to accept oral comments on the Proposed Plan. A transcript of comments received at the public hearing is included as Appendix E.

- The Navy has provided responses to comments received at the public hearing and during the comment period in the Responsiveness Summary, which is included in Part 3 of this ROD.

In addition, the Navy has provided an index of the Administrative Record available for public review at several locations. Information repositories have been established at the Tufts Library in Weymouth, Massachusetts; the Abington Public Library in Abington, Massachusetts; the Hingham Public Library in Hingham, Massachusetts; the Rockland Memorial Library in Rockland, Massachusetts; and the Navy's

CSO at NAS South Weymouth, Weymouth, Massachusetts. The Administrative Record Index is included as Appendix D to this ROD.

IV. SCOPE AND ROLE OF OPERABLE UNIT OR RESPONSE ACTION

In addition to several CERCLA Operable Units, AOC 55D is 1 of 18 CERCLA AOCs identified at NAS South Weymouth (Table 2-1). In general, the Operable Units and AOCs at NAS South Weymouth progress through the CERCLA cleanup process independent of one another.

AOC 55D originally was identified in the Phase I EBS Report as part of RIA 55B. An RIA is an area identified during the EBS that was deemed to require further evaluation due to the potential for environmental contamination. If environmental impacts were found from site sampling, then the Navy addressed an RIA under the appropriate program. At NAS South Weymouth, the Navy has designated EBS RIAs as CERCLA AOCs when one or more CERCLA hazardous substances were present in excess of human health or ecological risk benchmarks and background values. The Navy then conducted either streamlined risk assessments or removal actions at the various AOCs. At AOC 55D (currently being addressed separately from AOC 55B), the Navy conducted streamlined risk assessments which identified no unacceptable risks to human health or the environment.

The ROD for AOC 55D is one component of the Superfund program at NAS South Weymouth. AOC 55D has proceeded on an independent track from the other Operable Units and AOCs to enable the Navy to expedite site closure and property transfer. The signing of this ROD by the Navy and EPA Region 1 indicates the completion of the Superfund process for AOC 55D. No additional actions or investigations of AOC 55D are required under CERCLA. The selected No Action decision for AOC 55D is not expected to have an impact on the strategy or progress for the remaining environmental investigation sites at NAS South Weymouth. Additional details on the strategy and schedule for the remediation of the other Operable Units and a schedule for AOC activities at NAS South Weymouth are available in the Navy's Site Management Plan (Tetra Tech NUS, 2007).

V. SITE CHARACTERISTICS

AOC 55D is located near the western boundary of the Base at the end of a dirt road, just east of where an active railroad crosses under Route 18 (Figure 2-1). The Site is north of Trotter Road in the Town of Weymouth and is comprised of a 0.44-acre wetland. The wetland is an oblong-shaped depression roughly 200 feet by 70 feet, with a narrow extension, roughly 100 feet by 40 feet, off the west side (Figure 2-2). The wetland is surrounded by woods. A wooded wetland also extends north from the depression, but AOC 55D appears to be hydrologically isolated from other wetlands in the vicinity, with only seasonal ponding within the depression (Rizzo, 2001). It is estimated that the depression could hold water to a depth of 2 to 3 feet. Wildlife, including deer, coyote, and hawks, have been observed in the area. There are no vernal pool breeding areas at AOC 55D (Normandeau Associates, 2001a). There are no known federally-listed or proposed threatened or endangered species at NAS South Weymouth. Six state-listed species have been observed at NAS South Weymouth, but none have been observed within the AOC 55D area.

AOC 55D (Wetland Area North of Trotter Road) originally was part of AOC 55B (Debris Area North of Trotter Road). During Phase I EBS activities in 1995, the Navy identified a debris disposal area (miscellaneous construction, household, and other debris) located in the woods north of Trotter Road as a potential source of contamination and designated the area as RIA 55B. During Phase II EBS activities in 1998, the Navy collected soil and groundwater samples from RIA 55B, as well as surface water and sediment samples from a small, wooded wetland area in the northwest portion of the RIA. Based on the results of the 1998 Phase II EBS sampling, RIA 55B was designated as AOC 55B. Due to differences in

potential ecological risks, the Navy and EPA decided in 2002 to address the wetland area, designated as AOC 55D, separately from the upland area, AOC 55B.

Surface water and sediment samples were collected from the area of AOC 55D during the 1998 Phase II EBS sampling and the supplemental investigations (2001-2003). Sample locations from the various investigations at AOC 55D are shown in Figure 2-3. Samples were analyzed for a wide range of potential contaminants, including VOCs, SVOCs, pesticides, PCBs, EPH, and metals.

Utilizing the available data, the Navy conducted a Streamlined HHRA and a Streamlined ERA for AOC 55D in 2002. No unacceptable risks to human health were identified at AOC 55D. The ERA concluded that, without additional sampling, a determination of "no significant risk" could not be reached for aquatic life and wetland vertebrate wildlife receptors in sediment and surface water at AOC 55D. Therefore, in 2002-2003, the Navy collected additional sediment samples and surface water samples at AOC 55D.

In 2004, the Navy incorporated the additional sampling data from 2002-2003 to further evaluate risks posed to human and ecological receptors. The Conceptual Site Models (CSMs) for the HHRA and ERA, as well as the results of the risk assessments, are presented in Section VII, Summary of Potential Site Risks. The findings of the Navy's revised Streamlined HHRA and Streamlined ERA indicated that there are no unacceptable risks to human health or the environment at AOC 55D.

VI. CURRENT AND POTENTIAL FUTURE SITE RESOURCE USES

NAS South Weymouth was operationally closed on September 30, 1996, and administratively closed on September 30, 1997. As such, historical operations conducted at the Base are no longer occurring. The Base is located within a residential/light commercial area.

Under current use of the former NAS South Weymouth, there are no regular activities occurring at AOC 55D. Human activity in the vicinity of AOC 55D is limited to brush clearing; thus, there is limited potential for current worker exposure. This wetland area remains undeveloped open space.

The anticipated future use of the AOC 55D property is based on the zoning prescribed in the *Zoning and Land Use By-Laws for the Naval Air Station South Weymouth* (SSTTDC, 2005a), which has been approved by the Towns of Weymouth, Abington, and Rockland. AOC 55D is zoned as open space in the approved reuse plan. The open space zoning is intended for the preservation of large, contiguous wetland areas and open space for park land, active and passive recreation, reservations, community gardens, rivers and streams, and similar uses. The open space zoning district may also encompass wetland resource areas, open space, and recreational areas where there are important public health, safety, and welfare interests in watershed and flood potential protection, preservation of wildlife habitat, and conservation of recreational land for resident use and enjoyment (SSTTDC, 2005a). No residential use is permitted under the open space zoning.

Groundwater at AOC 55D is within a state-mapped, potentially productive, medium-yield aquifer zone. Therefore, groundwater at AOC 55D is considered to be part of a Potential Drinking Water Source Area. Groundwater at AOC 55D is being addressed separately as part of the CERCLA investigation for AOC 55B.

VII. SUMMARY OF POTENTIAL SITE RISKS

Streamlined risk assessments were performed to estimate the probability and magnitude of potential adverse human health and environmental (ecological) effects from exposure to the Site assuming no

remedial action was taken. Should unacceptable risks be determined, these assessments provide the basis for taking action and identify the contaminants and exposure pathways that need to be addressed by the remedial action. Based on the lack of unacceptable risks, remedial action is not necessary as discussed below in the streamlined human health and ecological risk assessment summaries.

At AOC 55D, the Navy performed streamlined risk assessments using the data collected from environmental investigations at the Site. Surface water samples collected in 2002 and sediment samples from 1998, 2001, 2002, and 2003 were used to calculate the risks to human and ecological receptors.

A. Human Health Risk Assessment

A Streamlined HHRA was completed (EA, 2004) to estimate the probability and magnitude of potential adverse human health effects from exposure to chemicals of potential concern (COPCs) associated with sediment and surface water at AOC 55D, assuming no remedial action were to be taken.

The Streamlined HHRA was conducted in accordance with the Final Streamlined HHRA Work Plan (EA, 2001) and was designed to be consistent with the IR Program Phase II Remedial Investigation (RI) Work Plan. EPA Region I Risk Updates (USEPA, 1994, 1995, 1996, 1999) were consulted to ensure consistency in approach across the Base. The Streamlined HHRA was completed using methodologies that are consistent with CERCLA and Massachusetts Contingency Plan (MCP) guidance. The methodology and exposure assumptions used were based on the 1999 Phase II RI Work Plan for NAS South Weymouth (ENSR, 1999). The results of the HHRA were used to determine that the risks calculated for receptors at the Site did not exceed EPA's benchmarks for acceptable cancer or non-cancer risks at AOC 55D.

The HHRA, which supports the No Action decision, followed a 4-step process: (1) contaminant identification that identified those hazardous substances which, given the specifics of the Site, were of potential concern; (2) exposure assessment that identified actual or potential exposure pathways, characterized the potentially exposed populations, and determined the extent of possible exposure; (3) toxicity assessment that considered the types and magnitude of adverse health effects associated with exposure to hazardous substances; and (4) risk characterization that integrated the three earlier steps to summarize the potential and actual risks posed by hazardous substances at the Site, including carcinogenic and non-carcinogenic risks.

COPCs were determined in the screening assessment portion of the HHRA (step one of the process described above) based on toxicity, concentration, and comparison to background concentrations. For the residential scenario, EPA Region IX Preliminary Remediation Goals (PRGs) for residential soil were employed for the screening analysis for sediment and EPA Region IX PRGs for residential tap water were employed for the screening analysis for surface water. For the commercial worker scenario, EPA Region IX PRGs for industrial soil were employed for the screening analysis for sediment and EPA Region IX PRGs for residential tap water were employed for the screening analysis for surface water. Analytes present above screening levels, but below background levels were eliminated as COPCs. The results of this two-step screening are shown in Tables 3-1 through 3-3 of the Streamlined HHRA report (EA, 2004). The following COPCs were identified in the HHRA (maximum detected concentrations are shown in parentheses): sediment – Aroclor-1254 (0.34 mg/kg), aluminum (23,000 mg/kg), antimony (13 mg/kg), arsenic (12 mg/kg), and vanadium (64 mg/kg); surface water – benzo(a)pyrene (0.073 µg/L), Aroclor-1260 (0.64 µg/L), aluminum (3,800 µg/L), arsenic (3.2 µg/L), lead (58 µg/L), and manganese (1,250 µg/L).

Conceptual Site Model

Potential human health effects associated with COPCs were estimated quantitatively through the development of several hypothetical exposure pathways. These pathways were developed to reflect the potential for exposure to COPCs based on the present uses, potential future uses, and location of the

Site. A human health CSM which depicts these pathways is provided in Figure 2-4. Specific sources of COPCs, release mechanisms, exposure pathways to receptors, and site-specific factors have been presented in the Streamlined HHRA report (EA, 2004). Human health risks were calculated for exposures to COPCs identified in sediment and surface water at the Site. The following receptor scenarios were evaluated: future residential (adult and child), future recreational children, and future commercial workers. Exposure pathways included incidental ingestion of sediment, dermal contact with sediment, incidental ingestion of surface water, and dermal contact with surface water.

Specific pathways evaluated for each receptor are delineated in the CSM (Figure 2-4). These pathways were developed to reflect the potential for exposure to hazardous substances based on the present use, potential future uses, and location of the Site. Risks were calculated using RME assumptions. The RME scenario uses maximum values for exposure parameters. The RME scenario is intended to provide an upper bound of the possible risk. The RME is conceptually the "high end" exposure, above the 90^{th} percentile of the population distribution, but not higher than the individual in the population with the highest exposure. Since the RME scenario represents a "reasonable worst case" exposure scenario, further discussions of risks in this ROD focus on the RME scenario. Tables 3-1 through 3-3 of the Streamlined HHRA show a summary of the COPCs and Exposure Point Concentrations (EPCs) used to evaluate the RME scenario. Exposure assumptions are presented in Tables 4-1 through 4-8 of the Streamlined HHRA (EA, 2004).

Excess lifetime cancer risks were determined for each exposure pathway by multiplying a daily intake level with the chemical-specific cancer potency factor. Cancer potency factors have been developed by EPA from epidemiological or animal studies to reflect a conservative "upper bound" of the risk posed by potentially carcinogenic compounds. That is, true risk is unlikely to be greater than the risk predicted. The resulting risk estimates are expressed in scientific notation as a probability (e.g., 1×10^{-6} for 1/1,000,000) and indicate (using this example) that an average individual is not likely to have greater than a one in a million chance of developing cancer over a 70-year lifetime as a result of site-related exposure (as defined) to the compound at the stated concentration.

EPA's generally acceptable risk range for site-related exposure is from 10^{-4} to 10^{-6}. Current EPA practice considers carcinogenic risks to be additive when assessing exposure to a mixture of hazardous substances.

In assessing the potential for adverse health effects other than cancer, a hazard quotient is calculated by dividing the daily intake level by the reference dose or other suitable benchmark. Reference doses have been developed by EPA, and they represent a level to which an individual may be exposed that is not expected to result in any deleterious effect. Reference doses are derived from epidemiological or animal studies and incorporate uncertainty factors to ensure that adverse health effects will not occur. A hazard quotient less than 1.0 indicates that a receptor's dose of a single chemical is less than the reference dose, and that toxic non-carcinogenic effects from that chemical are unlikely. The hazard index (HI) is generated by adding the hazard quotients for all COPCs that affect the same target organ (e.g., liver) within or across all media to which a given individual may reasonably be exposed. An HI less than 1.0 indicates that toxic non-carcinogenic effects are not likely.

Because of the uncertainties in the dose-response relationship between exposures to lead and biological effects, there is no EPA-derived reference dose for lead. Therefore, the Integrated Exposure Uptake Biokenetic (IEUBK) model was used to evaluate future residential child exposures to lead in surface water. The model estimates the percent of the population predicted to exceed EPA's blood lead "level of concern" of 10 µg/dL. An exceedance probability of 5% has been used by EPA in evaluating the potential need for cleanup actions.

Human Health Risk Assessment Results

RME risk results for all receptors across all media of concern at the Site are presented in Tables 7-1 through 7-3 from the Streamlined HHRA report (EA, 2004). Table 2-2 of this ROD summarizes the HHRA results for potential future use corresponding to the RME scenario at AOC 55D. The results of the risk assessment conducted to evaluate potential human health risks resulting from potential exposures at AOC 55D indicate:

- Cumulative non-cancer HIs did not exceed EPA's risk target of HI = 1.0 for all receptors.
- Cumulative cancer risk estimates for all receptors were below or within EPA's "acceptable risk range" of 10^{-6} to 10^{-4}.
- Predicted blood lead levels did not exceed EPA's "level of concern" in approximately 100 percent of exposed children.

Since no unacceptable risks were identified from exposure to carcinogens or non-carcinogens in any medium at the Site, no remedial action is necessary for protection of human health at AOC 55D.

B. Ecological Risk Assessment

The Streamlined ERA (Stone & Webster, 2004) evaluated potential risks to ecological receptors that may occur in the presence of chemical stressors in environmental media. The ERA was completed in three steps: (1) problem formulation, (2) risk analysis, and (3) risk characterization.

Problem Formulation

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), the COPCs, and the potential exposure pathways. Ecological COPCs were based on exceedances of benchmark screening values. The following COPCs were identified in the Streamlined ERA (maximum detected concentrations are shown in parentheses):

- Sediment – 4-methylphenol (0.049 mg/kg), benzo(a)pyrene (0.38 mg/kg), benzo(b)fluoranthene (0.32 mg/kg), benzo(g,h,i)perylene (0.18 mg/kg), dibenzo(a,h)anthracene (0.063 mg/kg), indeno(1,2,3-cd)pyrene (0.21 mg/kg), pentachlorophenol (0.20 mg/kg), 4,4'-DDE (0.39 mg/kg), 4,4'-DDD (0.23 mg/kg) 4,4'-DDT (0.11 mg/kg), delta-BHC (0.044 mg/kg), Aroclor-1254 (0.34 mg/kg), Aroclor-1260 (0.071 mg/kg), aluminum (23,000 mg/kg), antimony (13 mg/kg), arsenic (12 mg/kg), barium (100 mg/kg), beryllium (1.4 mg/kg), cadmium (0.72 mg/kg), cobalt (15 mg/kg), copper (47 mg/kg), iron (57,000 mg/kg), lead (320 mg/kg), manganese (730 mg/kg), mercury (0.52 mg/kg), nickel (21 mg/kg), selenium (0.65 mg/kg), vanadium (64 mg/kg), and zinc (220 mg/kg).
- Surface Water – styrene (0.24 µg/L), 4-methylphenol (5.8 µg/L), benzo(a)anthracene (0.056 µg/L), benzo(a)pyrene (0.096 µg/L), benzo(b)fluoranthene (0.076 µg/L), benzo(g,h,i)perylene (0.066 µg/L), benzo(k)fluoranthene (0.056 µg/L), dibenzo(a,h)anthracene (0.056 µg/L), indeno(1,2,3-c,d)pyrene (0.071 µg/L), total PAH (0.24 µg/L), 4,4'-DDT (0.035 µg/L), Aroclor-1260 (0.19 µg/L), dissolved aluminum (720 µg/L), dissolved iron (6,900 µg/L), dissolved lead (21 µg/L), dissolved manganese (1,300 µg/L), and dissolved zinc (210 µg/L).

The ecological receptor groups evaluated included wetland and aquatic plants and animals. The following receptor groups were evaluated in the ERA:

- Wetland Plants
- Aquatic Life (including invertebrates, plants, and amphibians)
- Wetlands Vertebrate Wildlife

The ecological exposure pathways evaluated included direct exposure to sediment for wetland plants and aquatic life, direct exposure to surface water for aquatic life, ingestion of sediment and surface water by wetland vertebrate wildlife, and ingestion of food items (e.g., biota) that may contain accumulated chemicals from the sediment/hydric soil by wetland vertebrate wildlife. The exposure pathways used in the ERA are presented in Table 2-3. The Carolina wren and the star-nosed mole were selected as representative wildlife species for evaluation at AOC 55D. The ERA CSM is depicted in Figure 2-5.

Risk Analysis

The Navy evaluated the possible harmful effects to the ecological receptors from the COPCs. The chemical concentrations to which the ecological receptors might be exposed were determined by sampling surface water and sediment. These concentrations were used directly to determine risk to wetland plants, aquatic receptors, and wetland vertebrates. Potential exposure for wetland vertebrates also included estimates of COPC exposure via ingestion of plant and animal tissue. These biota concentrations were extrapolated from concentrations in abiotic media using bioaccumulation factors cited in technical references.

For wetland plants and aquatic life, the estimated or measured concentrations of each COPC in each environmental medium were compared to literature-derived toxicity benchmark screening values. Exposure estimates for wetland vertebrate wildlife were compared to literature toxicity values for birds or mammals.

Risk Characterization

The results from the risk analysis were used to determine the probability of adverse effects to the ecological receptors at the Site. The result of an ERA is based on an interpretation of the overall weight of evidence collected from the Site.

The ecological risk screening step of the ERA noted that sediment EPCs exceeded soil screening benchmarks for wetland plants and Hazard Quotients (HQs) were greater than 1.0 for aquatic life and wetland vertebrate wildlife. An HQ greater than 1.0 indicates potential unacceptable risk. Therefore, in accordance with Navy ERA policy, the risk was evaluated further in the ERA refinement step to determine which COPCs contribute to potentially unacceptable levels of ecological risk, and to eliminate from further consideration those COPCs that were retained because of the use of very conservative exposure scenarios. This allowed the ERA to focus on those chemicals that are considered risk drivers for the Site, if any remained after the refinement.

The risk characterization, or refinement step, showed that the average concentrations of aluminum, lead, vanadium, and zinc in sediment exceeded terrestrial plant benchmark values. However, because the benchmark screening values were developed for protection of terrestrial plants, there are uncertainties associated with their use in the ERA as a screening tool for wetland plants. Due to these uncertainties, further action at this AOC was not recommended based on the refinement step exceedances.

The average concentrations of 4,4'-DDT, Aroclor-1260, aluminum, lead, and zinc in surface water exceeded the chronic screening values for aquatic life. The average zinc concentration also exceeded the acute screening value. However, the surface water samples were collected from a wetland that generally does not support "true" aquatic communities (i.e., fish and aquatic invertebrates adapted to the permanent or seasonally-predominant presence of standing or flowing water). Because the wetland only contains surface water during certain times of the year, aquatic receptors such as fish do not exist at the

site, and the aquatic communities are ephemeral. The aquatic communities also are exposed to additional stressors other than chemical stressors, such as greater water temperature fluctuations and lower dissolved oxygen concentrations that often occur in stagnant wetlands, as well as the stress on the organisms when the wetlands dry out. Therefore, the aquatic life benchmark screening conducted at this Site resulted in an increased level of uncertainty about risk to wetland receptors. Also, while the surface water concentrations of these analytes exceeded water quality screening values, there was no concern with the concentrations in sediment in co-located samples. Therefore, the potential risk to aquatic receptors from exposure to chemicals in surface water was not considered significant.

The average concentrations of 4,4'-DDD, 4,4'-DDE, Aroclor-1260, antimony, copper, lead, and zinc in sediment exceeded the low effect screening value for aquatic life. However, none of the average concentrations exceeded the severe effect screening values. As discussed above for surface water, the sediment samples were collected from a wetland that generally does not support "true" aquatic communities. Therefore, the use of aquatic life benchmark screening values for wetland receptors increases the level of uncertainty about risk to wetland receptors. Also, based on various considerations including laboratory toxicity tests conducted for similar chemicals at other sites at the Base, low HQs, results of an analysis of metals' bioavailability, and concentrations of pesticides consistent with normal legal application of pesticides, the potential risk to benthic receptors from chemicals in sediment was not considered significant.

In order to assess whether or not inorganic substances in sediments are bioavailable, acid volatile sulfide (AVS) and simultaneously extracted metal (SEM) data were collected at this AOC. The results indicated that Site sediments are not a concern with regard to the divalent metals (copper, lead, cadmium, zinc, and nickel).

For wetland vertebrate wildlife exposed to chemicals in sediment, HQs were greater than 1.0 for the mole (for aluminum, antimony, cobalt, and vanadium) and wren (for 4,4'-DDD, 4,4'-DDE, aluminum, iron, lead, mercury, and zinc). However, the potential risk to wetland vertebrate wildlife receptors was not considered significant based on the relatively low HQs, the concentrations of pesticides that were consistent with normal/legal applications of pesticides, the bioavailability of the chemicals, and the conservative effect levels.

The results of the ERA indicated that the conditions at the Site pose no significant risks to ecological receptors. Refer to Section 4.0 of the Streamlined ERA (Stone & Webster, 2004) for a more comprehensive ecological risk summary.

C. Summary

The risk assessments did not identify potential human health or ecological risks (i.e., risks to the environment) associated with AOC 55D in excess of regulatory thresholds.

Based on the results of the Final Streamlined HHRA (EA, 2004) and the Final Streamlined ERA (Stone & Webster, 2004), the Navy and EPA have concluded that sediment and surface water at the AOC 55D Site does not pose an unacceptable risk to human health or the environment; therefore, no additional investigations or remedial measures are required for AOC 55D. Sediment and surface water conditions at AOC 55D are acceptable for unrestricted use (including residential). In accordance with the current reuse plan (SSTTDC, 2005b), the AOC 55D area is zoned for open space and, therefore, would be available for some recreational use. No additional measures are required for AOC 55D to ensure protection of human health and the environment under the current or anticipated future uses.

VIII. DOCUMENTATION OF NO SIGNIFICANT CHANGES

The Navy issued a Proposed Plan for No Action for AOC 55D on July 2, 2007 for a 30-day public comment period. A public information session and a public hearing were held on July 19, 2007. The Navy reviewed the comments submitted during the public comment period (Appendix E). As summarized in the Responsiveness Summary (Part 3), it was determined that no significant changes to the decision, as originally identified in the Proposed Plan, were necessary. Therefore, No Action for AOC 55D will be implemented.

IX. STATE ROLE

MassDEP has reviewed the relevant site information to determine if the selected remedy is in compliance with applicable or relevant and appropriate state environmental and facility siting laws and regulations. MassDEP's statement on the selected remedy in this ROD is presented in Appendix A.

TABLE 2-1

**SUMMARY OF OPERABLE UNITS AND AREAS OF CONCERN
AREA OF CONCERN 55D – WETLAND AREA NORTH OF TROTTER ROAD
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS
PAGE 1 OF 4**

Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of September 2007
West Gate Landfill	IR Program Site 1	1	WGL	Disposal area used for a variety of construction and demolition debris, municipal, and other waste materials.	PA, SI, RI, FS, PRAP, and ROD (including construction of a soil cover over the landfill, long-term monitoring, and institutional controls) completed.
Rubble Disposal Area (Upland)	IR Program Site 2	2	RDA	Disposal area used for primarily building demolition debris.	PA, SI, RI, FS, PRAP, ROD, Remedial Design, Remedial Action including excavation and offsite disposal of PCB-impacted material, construction of a soil cap for the landfill material, long-term monitoring, and institutional controls is completed and long-term monitoring is underway.
Small Landfill	IR Program Site 3	3	SL	Disposal area used primarily for concrete, metal, and wood.	PA, SI, RI, PRAP, and ROD (No Action with groundwater monitoring) completed. Monitoring program completed. Closure under MA Solid Waste Regulations is underway.
Fire Fighting Training Area	IR Program Site 4	4	FFTA	Area designated for dispensing fuels for igniting and extinguishing fires.	PA, SI, and RI completed. No FS required. Completed PRAP and No Action ROD. Further assessment is being conducted in accordance with the MCP (310 CMR 40.0000).
Tile Leach Field	IR Program Site 5	5	TLF	Sand bed used to receive and distribute treated industrial wastewater.	PA, SI, and RI completed. No FS required. PRAP and No Action ROD completed.
Fuel Farm	IR Program Site 6	Not applicable (no longer CERCLA)	None	Tank farm and fuel dispensing area.	Site was transferred into the MCP program based on exhibiting only fuel-related issues.
Sewage Treatment Plant	IR Program Site 7	7	STP	Wastewater treatment plant used primarily for domestic wastewater.	PA, SI, RI, and FS completed. PRAP issued August 2007. Preparing ROD.
Abandoned Bladder Tank Fuel Storage Area	IR Program Site 8	8	ABTFSA	Area in which aboveground tanks temporarily were stored in support of aircraft refueling training operations.	Closed. PA, SI, and RI completed. No FS necessary. Completed No Action PRAP and ROD.
Rubble Disposal Area	IR Program Site 2	9	RDA	Steep sloping area adjacent to the RDA.	Combined with Operable Unit 2. No separate actions being performed.

TABLE 2-1

**SUMMARY OF OPERABLE UNITS AND AREAS OF CONCERN
AREA OF CONCERN 55D – WETLAND AREA NORTH OF TROTTER ROAD
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS
PAGE 2 OF 4**

Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of September 2007
Building 81	IR Program Site 9	10	None	Release of solvents from former motor pool.	Former MCP site moved to CERCLA program. Conducted *in situ* chemical oxidation pilot study for groundwater. RI sampling completed. Preparing RI report.
Building 82	IR Program Site 10	11	None	Release of solvents from former aircraft hangar operations.	Former MCP site moved to CERCLA program. RI sampling completed. Preparing RI report.
Solvent Release Area	IR Program Site 11	12	SRA	Release of solvents from unidentified source.	Former EBS background location moved to the CERCLA Program. Preparing RI report.
Hangar 1 Main Bay	AOC Hangar 1	None	None	Main building floor drains	Various Removal Action/TCRAs completed. Preparing PRAP.
Suspected TACAN Disposal Area	AOC 3	None	None	Pile of rubble, soil, and metal debris containing PAHs and polychlorinated biphenyls (PCBs).	EBS Phase I, EBS Phase II. TCRA completed in Fall 2001 for the removal of 51 tons of soil and debris. PRAP completed. Completed No Further Action ROD.
ATC abandoned septic system	AOC 4A	None	None	Alleged liquid and solid waste disposal to a septic system. Arsenic in adjacent forested wetland hydric soil (sediment) was detected at levels above background.	EBS Phase I, EBS Phase II. Conducted streamlined HHRA and ERA. Completed No Action PRAP and ROD.
Wyoming St. Area – Building 70	AOC 8	None	None	Remnants of Building 70 demolition. Building housed radar electronics. Elevated PCB concentrations in soil.	EBS Phase I, EBS Phase II. TCRA, and CRAM completed. Completed No Further Action PRAP and ROD.
Supply Warehouse	AOC 13	None	None	Former railroad loading and unloading area. PAHs and pesticides in soil.	EBS Phase I, EBS Phase II. Conducted HHRA on soil. Removal action completed in September 2001 (8 tons of soil containing PAHs removed). PRAP completed. Completed No Further Action ROD.
Water Tower Staining	AOC 14	None	None	Staining between Hortensphere and Water Tower. Former drum storage area. Chromium, lead, and PAHs in soil.	EBS Phase I, Phase II. Conducted HHRA. Preparing No Action PRAP.

TABLE 2-1

**SUMMARY OF OPERABLE UNITS AND AREAS OF CONCERN
AREA OF CONCERN 55D – WETLAND AREA NORTH OF TROTTER ROAD
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS
PAGE 3 OF 4**

Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of September 2007
Water Tower	AOC 15	None	None	Possible lead paint in soil (paint chips from sandblasting of tower).	EBS Phase I, EBS Phase II. June 2000 TCRA addressed lead in soil (280 tons of soil removed). Additional removal in March 2002 (104 tons of soil) addressed elevated lead reported from adjacent AOC 14 sample. PRAP completed. Completed No Further Action ROD.
Pistol Range	AOC 35	None	None	Small arms ammunition rounds at historic Pistol Range.	EBS Phase I. EBS Phase II. Completed TCRA for lead in soil. Removed the de-armament embankment. Completed No Further Action PRAP and ROD.
Former Radio Transmitter Building Area	AOC 53	None	None	Alleged disposal area. Mainly PAHs and some inorganic constituents detected in sediment.	EBS Phase I, EBS Phase II, removal actions. and CRAM completed. Completed No Further Action PRAP and ROD.
Area North of Trotter Road - Antennae Field	AOC 55A	None	None	Seven antenna poles and associated copper cables.	Phase I EBS, Phase II EBS. Removal action in September 2002 removed antenna poles, platforms, grounding wires, and adjacent soil (840 tons of soil) to lower ecological risk. Completed No Further Action PRAP and ROD.
Area North of Trotter Road - Debris Area	AOC 55B	None	None	Solid waste disposal over a large, heavily wooded area.	Phase I EBS, Phase II EBS. Debris removal in 1999. Completed No Action PRAP and ROD.
Area North of Trotter Road - Pond Area	AOC 55C	None	None	Metallic debris in heavily wooded area and pond. Metals in soil and sediment.	Phase II EBS. Removal action may be conducted. Pending PRAP/ROD.
Area North of Trotter Road - Wetland Area	AOC 55D	None	None	Metals, PCBs exceed ecological benchmarks in surface water and sediment.	Formerly part of AOC 55B. Completed streamlined HHRA and ERA. Completed No Action PRAP and ROD.
East Mat Drainage Ditch	AOC 60	None	None	Discolored water and solid waste identified in drainage ditch.	Phase I EBS, Phase II EBS. Removal action conducted in December 2002 on the western portion of ditch as part of AOC 61 removal action. Further work underway.

TABLE 2-1

**SUMMARY OF OPERABLE UNITS AND AREAS OF CONCERN
AREA OF CONCERN 55D – WETLAND AREA NORTH OF TROTTER ROAD
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS
PAGE 4 OF 4**

Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of September 2007
TACAN Ditch	AOC 61	None	None	Discolored water in drainage ditch.	EBS Phase I, EBS Phase II. Completed Removal Action to address the TACAN Outfall drainage system, associated ditches, drainage swales, storm sewer lines, and catch basins in other areas at the Base. Cleaned the 60-in. storm drains and removed sediment in the TACAN ditch. Further work underway. Pending PRAP/ROD.
Hazardous Waste Storage Area	AOC 83	None	None	RCRA Closure. PCB in subsurface soil.	EBS Phase I, EBS Phase II. Completed HHRA. No Action PRAP in progress.
East Street Gate Area	AOC 100	None	None	Debris disposal area. Various inorganics exceeded background and ecological benchmarks for surface soil.	EBS Phase I, EBS Phase II. Removal action completed in Fall 2001 (1,194 tons of soil and debris). PRAP completed. Completed No Further Action ROD.

NOTES:

PA = Preliminary Assessment
SI = Site Inspection
RI = Remedial Investigation (Phase I and II)
FS = Feasibility Study
PRAP = Proposed Remedial Action Plan (or Proposed Plan)
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
ROD = Record of Decision
MCP = Massachusetts Contingency Plan
TCRA = Time Critical Removal Action
AOC = Area of Concern.
CMR = Code of Massachusetts Regulations.
CRAM = Closeout Removal Action Memoranda
RCRA = Resource Conservation and Recovery Act
EBS = Environmental Baseline Survey
HHRA = Human Health Risk Assessment
ERA = Ecological Risk Assessment
TACAN = Tactical Air Navigation

TABLE 2-2

**SUMMARY OF HUMAN HEALTH RISK ASSESSMENT RESULTS
AREA OF CONCERN 55D – WETLAND AREA NORTH OF TROTTER ROAD
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS**

Scenario Evaluated	Media	Total Carcinogenic Risk (Statistical Chance)	Total Non-Carcinogenic Risk (Hazard Index)
FUTURE RESIDENT			
Ingestion/Dermal Contact	Surface Water	6.7E-06	0.1
	Sediment	1.5E-06	0.079
Future Resident Total		8.2E-06	0.18
FUTURE RECREATIONAL CHILD (1-6 YEARS OLD)			
Ingestion/Dermal Contact	Surface Water	6.0E-06	0.1
	Sediment	1.4E-06	0.079
Future Recreational Child (1-6 years old) Total		7.4E-06	0.18
FUTURE COMMERCIAL WORKER			
Ingestion/Dermal Contact	Surface Water	5.6E-05	0.22
	Sediment	2.9E-06	0.023
Future Commercial Worker Total		5.9E-05	0.24

SOURCE: Data from the Streamlined HHRA (EA, 2004).

NOTES:
The risk estimates shown are for Reasonable Maximum Exposure (RME) conditions.

TABLE 2-3

**SUMMARY OF ECOLOGICAL RISK ASSESSMENT MEASUREMENT AND ASSESSMENT ENDPOINTS - SURFACE WATER AND SEDIMENT
AREA OF CONCERN 55D – WETLAND AREA NORTH OF TROTTER ROAD
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS**

Potential Receptor	Sensitive Environment (Yes/No)	Sensitive Species (Yes/No)[(a)]	Exposure Route Evaluated	Assessment Endpoints	Measurement Endpoints	Findings
Wetland Plants	No	No	Direct contact with sediment and surface water	Adverse effects on the survival, growth, and reproduction of plant communities.	• Comparison of concentrations of contaminants in the sediment/hydric soil to the literature-reported phytotoxicity screening values in surface soil.	The average EPC for aluminum, lead, vanadium, and zinc in sediment exceeded terrestrial plant benchmark values. Further action at this AOC is not recommended based solely on these benchmark exceedances.
Aquatic Life	No	No	Direct contact with sediment and surface water	Adverse effects on the survival and maintenance of a well-balanced benthic macroinvertebrate, amphibian, and plant community structure and function.	• Comparison of concentrations of contaminants in the surface water to the literature-reported surface water screening values. • Comparison of concentrations of contaminants in the sediment/hydric soil to the literature-reported low and severe effect sediment screening values. • Evaluation of simultaneously extracted metals (SEM)/acid volatile sulfides (AVS) relationships to indicate potential bioavailability of divalent cationic metals in sediment.	Potential risk to aquatic receptors from exposure to chemicals in surface water was not considered significant. Potential risk to benthic receptors from chemicals in sediment was not considered significant. Sediments are not a concern with regard to the divalent metals.
Wetland Vertebrate Wildlife	No	No	Ingestion of soil and sediment Ingestion of prey	Adverse effects on the maintenance of wildlife populations and communities within the habitats present at AOC 55D.	• Comparison of potential dietary exposures, calculated using concentrations of contaminants in the sediment/hydric soil and surface water, to the results of laboratory toxicity studies in the literature that relate the dose of a compound in an oral exposure with an adverse response of a test population (avian or mammalian species).	Potential risk to wetland vertebrate wildlife receptors from COPCs in AOC 55D sediment/hydric soil is not considered to be significant.

SOURCE: Data from the Streamlined ERA (Stone & Webster, 2004).

NOTES:

(a) One state-listed threatened species, the Northern Harrier, occurs at and in the vicinity of the site; however, it is unlikely that they would use the terrestrial upland in and around the site for nesting. Further, it is not anticipated that this site will pose unacceptable ecological risk to this species. Future site activities, however, should adhere to state-mandated avoidance, protection, and mitigation measures based on the potential presence of this species. Two state-listed "species of special concern," the spotted turtle and the eastern box turtle, are known to occur at the Naval Air Station South Weymouth; however, despite extensive surveys, neither species has been located at or in the vicinity of the AOC 55D.

COPC = Chemical of Potential Concern.

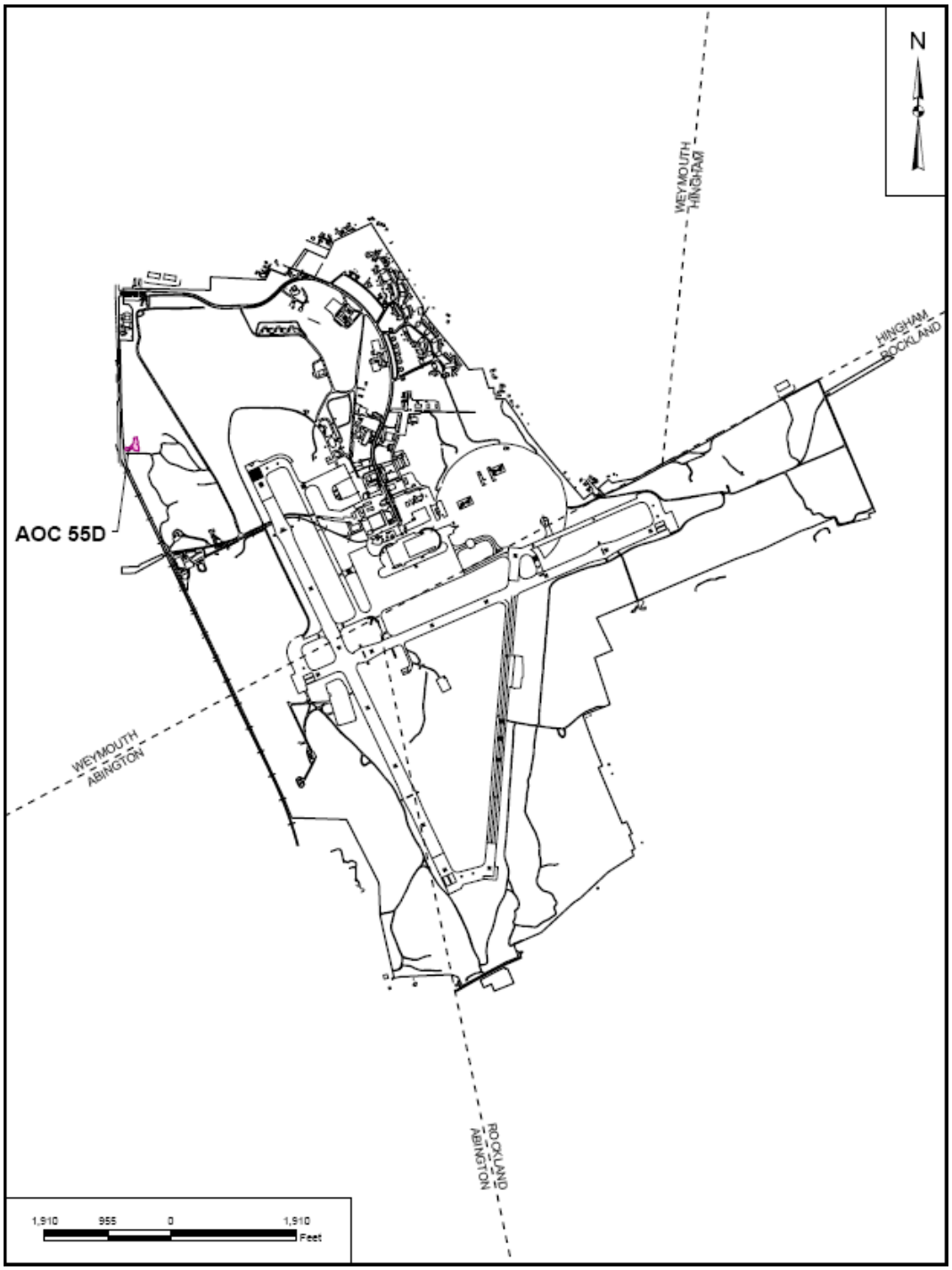


Figure 2-1: Site Location Map

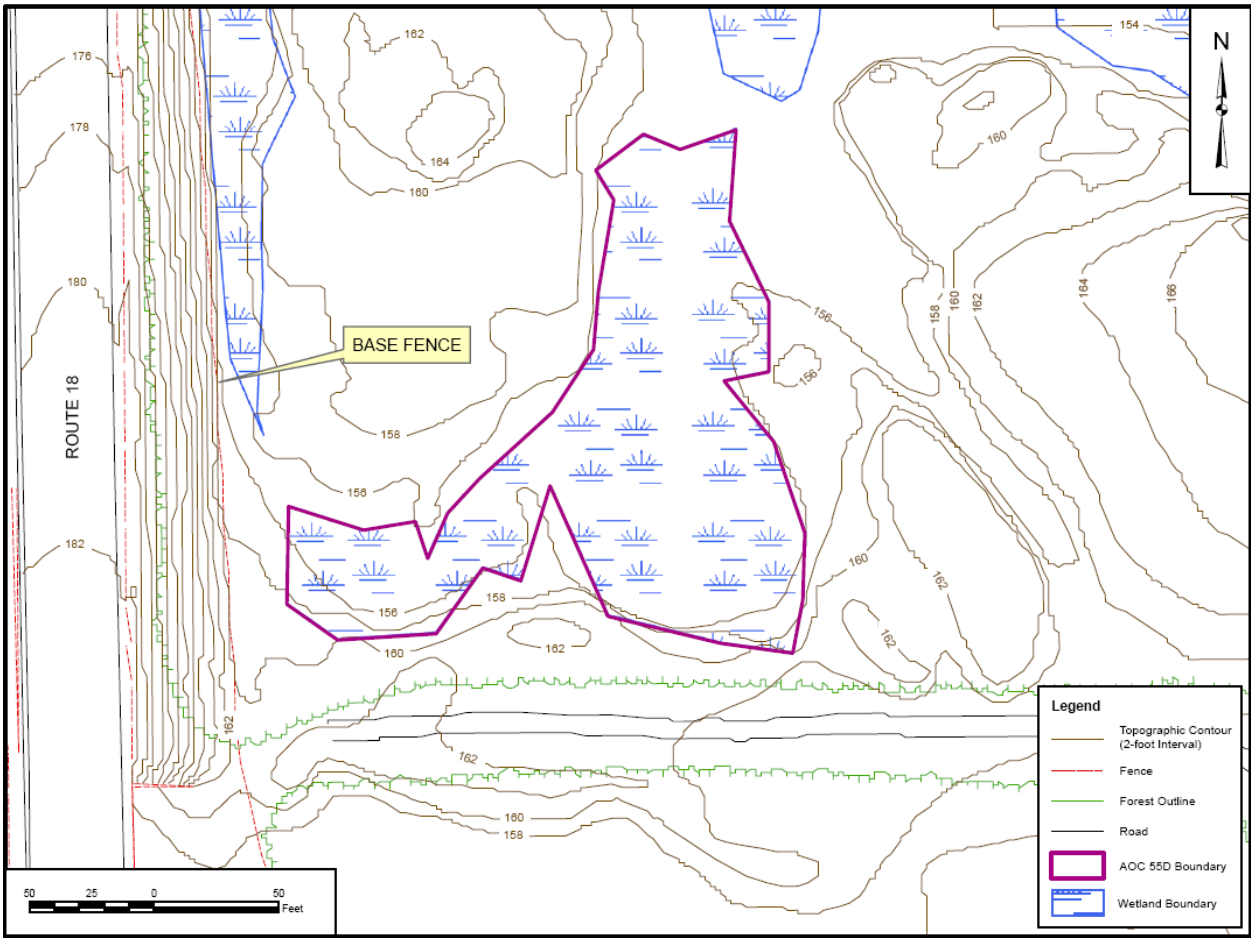


Figure 2-2: Site Map

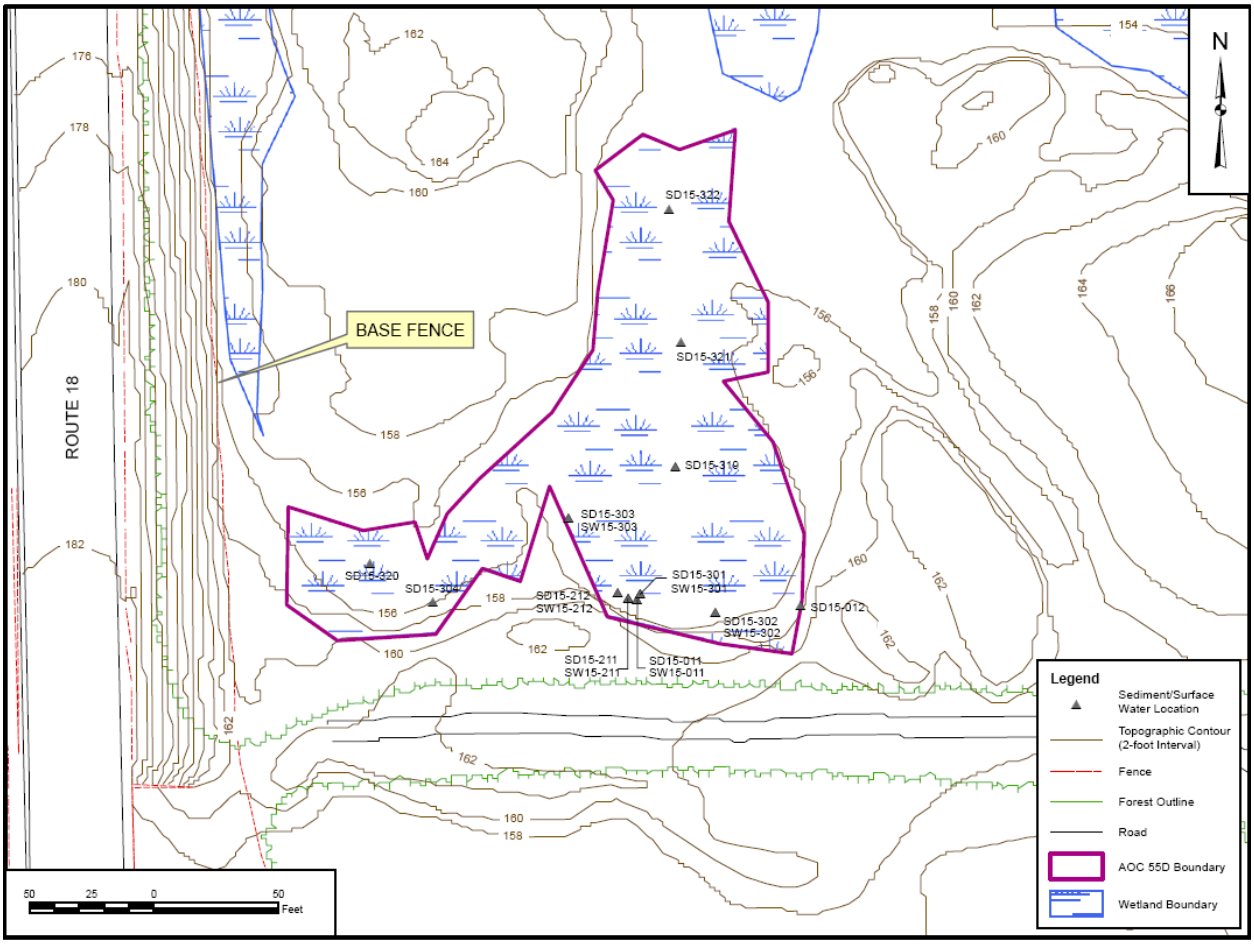


Figure 2-3: Sample Location Map

Figure 2-4: Human Health Conceptual Site Model

Source: Data from the Streamlined HHRA (EA, 2004).

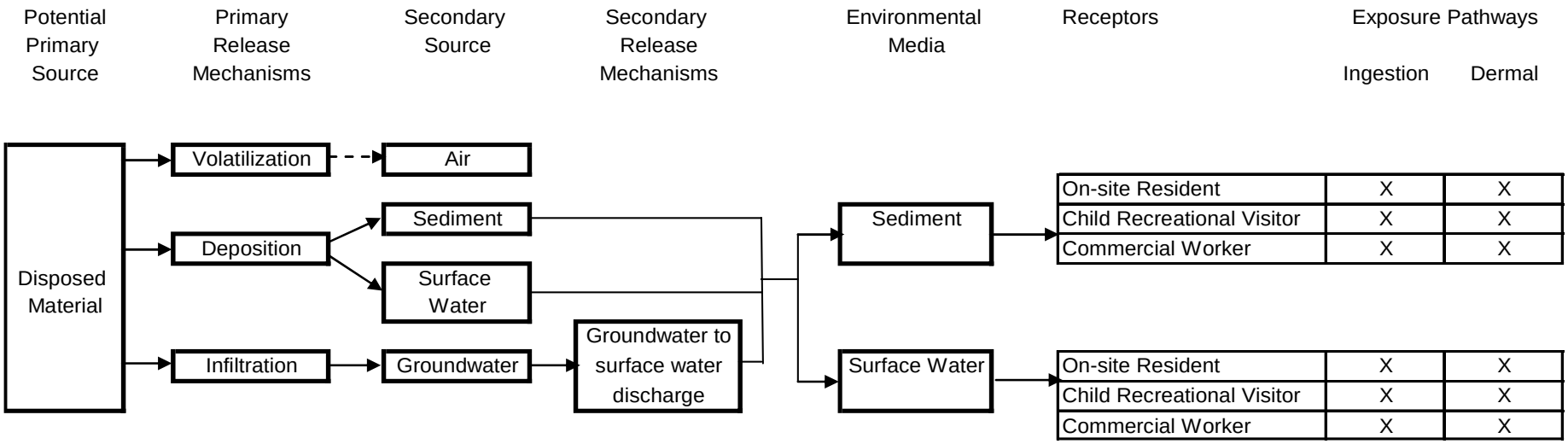
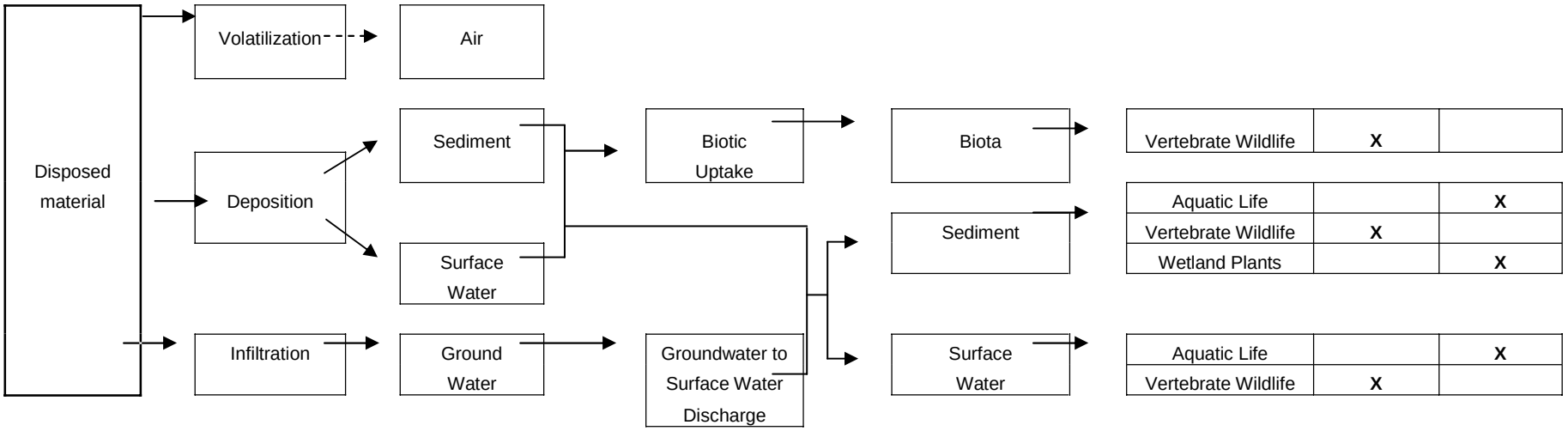


Figure 2-5: Ecological Conceptual Site Model

Source: Data from the Streamlined ERA (Stone & Webster, 2004).



Receptor	Exposure Route: Ingestion	Exposure Route: Direct Exposure
Vertebrate Wildlife	X	
Aquatic Life		X
Vertebrate Wildlife	X	
Wetland Plants		X
Aquatic Life		X
Vertebrate Wildlife	X	

Dashed line indicates insignificant exposure pathway to ecological receptors.

Note: X = Evaluated in the ERA.

PART 3—RESPONSIVENESS SUMMARY

I. STAKEHOLDER ISSUES AND NAVY RESPONSES

The Navy held a joint Public Hearing for two (2) Proposed Plans involving four (4) Areas of Concern (AOCs) on July 19, 2007. Verbal comments were received from several people during the public hearing on the Proposed Plan for AOC 4A (Air Traffic Control Area Abandoned Septic System) and AOC 55D (Wetland Area North of Trotter Road) and the Proposed Plan for AOC 8 (Wyoming Street Area – Building 70) and AOC 53 (Former Radio Transmitter Building Area). A copy of the transcript for the public hearing is provided as Appendix E. Responses to the verbal comments are provided in Section III of this Responsiveness Summary. No written comments concerning AOC 55D were received during the public comment period.

II. TECHNICAL AND LEGAL ISSUES

The Navy has reviewed all comments received and the Navy does not believe that any of the public hearing comments necessitate a change from the No Action proposal for AOC 55D.

Therefore, the Navy and EPA believe that there is sufficient technical basis to proceed with the No Action ROD for AOC 55D. By proceeding with this ROD, the Navy has completed all required CERCLA actions/investigations at AOC 55D.

III. COMMENT RESPONSES

Verbal Comments and Response

Note that the following verbal comments are paraphrased. Refer to the hearing transcript (Appendix E) for the complete version of the comments recorded during the public hearing held on July 19, 2007.

1. Comment from Harvey Welch, Weymouth—Mr. Welch asked why testing the effects of combinations of chemicals on mice is only now underway. He wondered how decisions about health impacts on children and adults can be made without knowing the effects of combinations of chemicals.

Response—The Navy's human health risk assessments follow a process developed in conjunction with EPA and MassDEP for AOCs at NAS South Weymouth. This process is based on the EPA CERCLA human health risk assessment approach, which currently sums the risks calculated for individual chemicals of concern at a site to get a total risk number. This risk assessment approach is conservative because it adds the risks from all contaminants, rather than adding risks from a subset of contaminants that target the same organ. To date, the science supporting risk assessments has been based on studies of individual chemicals, but not on synergistic effects from combinations of chemicals. EPA has noted that studies on mice using combinations of chemicals are now being conducted. The risk assessment process may be modified in the future should there be a scientifically-supported basis demonstrating significantly different synergistic risks resulting from combinations of chemicals, but it is likely that this is several years out. It is important to note that while many chemicals appear frequently at sites, the actual chemicals of concern can vary based on the known or assumed source(s) of contamination.

2. Comment from James Cunningham, Weymouth—Mr. Cunningham expressed a concern about all four sites regarding wetlands in general and the possible effect on the flora and fauna in the area. He also noted a concern about possible filling and use of wetland areas by the developer. At AOC 4A, he felt

the presence of the septic tank could be a hazard and have an impact on the wetlands. He suggested that the tank, and the distribution box, should be removed.

Response—The risk assessment process and outcomes summarized in the Proposed Plans for AOCs 4A, 55D, 8, and 53 are designed conservatively to ensure that there is no unacceptable risk to people and wildlife (e.g. flora and fauna). The AOC 4A and 55D streamlined human health and ecological risk assessments were conducted by Navy with input from EPA and MassDEP throughout the process. Both agencies concurred with the results of the risk assessments for AOCs 4A and 55D and Navy's conclusions that No Action is appropriate at AOC 4A and 55D, and No Further Action is appropriate for AOCs 8 and 53. Regarding use of wetland areas by the developer, Navy does not have a role in the redevelopment process. However, the developer's redevelopment activities must comply with all applicable federal, state, and local laws and regulations.

At the time the septic system was inspected in 1999, South Shore Tri-Town Development Corporation (SSTTDC) had indicated a reuse potential for the control tower which the septic system supported. As such, Navy left the septic system in place to allow for its possible rehabilitation by SSTTDC to allow the tower to be reused. The SSTTDC plans have subsequently changed. As noted in the response to Mr. McCormack's written comment, Navy plans to abandon the septic system in place, in accordance with applicable state regulations.

3. Comment from Harvey Welch, Weymouth—Mr. Welch suggested including the roads surrounding the base on maps of the base to help the public orient themselves.

Response—As appropriate, Navy will include roads surrounding the base on maps presented in future Proposed Plans.

4. Comment from Peter Scannell, Weymouth—Mr. Scannell stated that he is uncomfortable hearing about acceptable levels of chemicals and the conclusions leading to no further action. He also acknowledged that the best science available has been used in the risk assessments. However, his concern is the presence of chemicals in these areas, even though they are at levels deemed acceptable by the risk assessments.

Response—Please see the Responses to Comments # 1 and #2 above.

5. Comment from Ann Hilbert, North Weymouth—Ms. Hilbert expressed a concern about the health study and asked why Navy doesn't do their own health assessment.

Response—EPA has listed NAS South Weymouth on the National Priorities List (NPL). Accordingly, the Navy is following the CERCLA process at NAS South Weymouth to evaluate potential risks associated with exposures to concentrations of chemicals present at a site. The CERCLA process does not include an evaluation of public health issues related to historical exposures to chemicals in the environment. Public health and epidemiological studies of historical exposures are the responsibility of the Massachusetts Department of Public Health (MDPH) and the Agency for Toxic Substances and Disease Registry (ATSDR). The MDPH has recently conducted an amyotrophic lateral sclerosis (ALS) and multiple sclerosis (MS) study, and in 1999 ATSDR completed a public health assessment of NAS South Weymouth. While the Navy had no direct involvement with either the MDPH or ATSDR studies, the ATSDR study used Navy environmental data available at the time. The ATSDR study can be found at: http://www.atsdr.cdc.gov/HAC/PHA/weymouth/wey_toc.html.

6. Comment from Joanne Rakers—Ms. Rakers asked how to know if a chemical is toxic or not and at what level a chemical, such as arsenic, is higher than the normal level it should be. She also asked about details of the benchmark screening process and why if a chemical exceeds a level it isn't cleaned up. Ms.

Rakers also indicated a desire to know what is leaking from the Rubble Disposal Area (RDA) into Swamp River. She wants to see things cleaned up.

Response—The Proposed Plans presented at the July 19th public meeting summarized field work performed over many years as well as a large amount of chemical data that are discussed in detail in a number of reports. The documents applicable to each of the four AOCs are listed in a table at the end of each Proposed Plan and are available at the information repositories listed on the final page of each Proposed Plan. Details regarding the benchmark screening process conducted for AOCs 4A and 55D are in the streamlined human health risk assessments (HHRA) and streamlined ecological risk assessments (ERA) for each AOC. Site data were compared to screening benchmarks (guideline concentrations) to determine whether potential health effects were possible and if further assessment and/or remediation were required. The benchmarks are a preliminary screen and are not intended to be regulatory standards. Specific risk-based cleanup levels (concentrations) were developed for sites where it was determined that cleanup was warranted (e.g., AOCs 8 and 53). The specific benchmarks and cleanup levels are available for public review in the risk assessment (and other) documents. The Navy encourages the public to review the investigation reports to gain a better understanding of the environmental activities completed at each site. Consistent with the CERCLA process followed for the AOCs, and with input and review from EPA and MassDEP, chemicals detected in environmental media do not need to be 'cleaned up' if they are determined to be at concentrations that result in no unacceptable risk to human health and the environment or that are within background levels (e.g., many metals such as arsenic can be naturally occurring to some degree based on the site geology).

Navy has closed the RDA consistent with the Record of Decision signed by Navy and EPA in December 2003. The selected remedy included a cover system (landfill cap), which has been completed, and long-term monitoring, which is underway. The long-term monitoring reports are provided to the regulators, RAB town representatives, and the local repositories. Navy encourages the public to review these reports, which include the analytical results of all samples collected, to gain a better understanding of the long-term monitoring process and results.

7. Comment from Michael Smart, Weymouth—Mr. Smart commented that he felt that Navy did a thorough job on the work completed at AOCs 8 and 53. He agreed with Mr. Cunningham that the septic tank at AOC 4A should be removed. In addition, Mr. Smart stated his opinion that all material should be removed regardless of the level, especially the sediments in the wetland areas at AOCs 4A and 55D.

Response—Navy appreciates the acknowledgement of the work completed for AOCs 8 and 53. As noted in the response to Mr. McCormack's written comment, Navy plans to abandon the septic system in place, in accordance with applicable state regulations. As noted in the Response to Comment #6, consistent with the CERCLA process, chemicals detected in environmental media do not need to be "cleaned up" if they are determined to be at concentrations that result in no unacceptable risk to human health and the environment.

8. Comment from Dominic Galluzzo, Weymouth—Mr. Galluzzo noted that with the presentations on the Proposed Plans, the approximately two-thirds of the base that is ready to transfer have few contaminants of concern and little risk to humans. However, he expressed his skepticism as to the cleanliness of the land that will be redeveloped according to the reuse plan.

Response—As Mr. Galluzzo accurately noted, there have been few contaminants of concern found in all the investigations Navy has completed to date in accordance with the CERCLA process. The risk assessments that have been completed have also generally concluded low risks to human health and the environment. As mentioned in the responses above, in particular the Response to Comment #6, the CERCLA process followed by Navy with input and review by EPA and MassDEP, can result in conclusions of no unacceptable risk even though detected chemicals are present. The rigorous risk

assessment process developed by EPA, and followed by Navy, does not require cleanup of a site when there is no unacceptable risk or when concentrations are below background levels.

APPENDIX A: MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION LETTER OF CONCURRENCE

Refer to attached copy.

COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

Mr. James T. Owens, Director
Office of Site Remediation and Restoration
U.S. Environmental Protection Agency
One Congress Street, Suite 1100
Boston, MA 02114-2023

Re: Record of Decision
Area of Concern 55D
Former South Weymouth NAS
MassDEP RTN 4-3002621
January 15, 2008

Dear Mr. Owens:

The Massachusetts Department of Environmental Protection (MassDEP) has reviewed the *Record of Decision, Area of Concern 55D – Wetland Area North of Trotter Road, Naval Air Station South Weymouth*, dated December 2007. The Record of Decision (ROD) summarizes the results from the investigations conducted during the Environmental Baseline Survey (EBS) and the results from the subsequent human health and ecological risk assessments, which did not indicate the presence of a unacceptable risk to human health of the environment, and documents the Navy's rationale for selecting a No Action decision for the site. MassDEP concurs with the selected decision.

If you have any questions or comments, please contact David Chaffin, Project Manager (617-348-4005), or Anne Malewicz, Federal Facilities Section Chief (617-292-5659).

Sincerely,

Janine Commerford
Assistant Commissioner

cc: D. Barney, USN-S. Weymouth
K. Keckler, USEPA
Executive Director, SSTTDC
RAB Members
J. Felix, MADEP-Boston
J. Naparstek, MADEP-Boston

APPENDIX B: REFERENCES

EA Engineering, Science, and Technology (EA), 2001. *Final Streamlined Human Health Risk Assessment Work Plan, Areas of Concern at NAS South Weymouth, South Weymouth, Massachusetts*. September 2001.

EA, 2002. *Final Streamlined Human Health Risk Assessment, Area of Concern 55B/D, Naval Air Station South Weymouth, MA*. December 13, 2002.

EA, 2004. *Final Streamlined Human Health Risk Assessment, Area of Concern 55D, Area North of Trotter Road – Wetland, Naval Air Station South Weymouth, MA*. September 2004.

ENSR, 1999. *Phase II Remedial Investigation Work Plan, South Weymouth Naval Air Station, Weymouth, Massachusetts.* April 1999.

Normandeau Associates, Inc. 2001. *Vernal Pool Breeding Areas at the Former Naval Air Station, Weymouth, Abington and Rockland, Massachusetts*. August 2001.

Rizzo Associates, Inc. 2001. *Abbreviated Notice of Resource Area Delineation. Naval Air Station, Weymouth, Massachusetts*. Submitted to Weymouth Conservation Commission. June 1, 2001.

South Shore Tri-Town Development Corporation (SSTTDC), 2005a. *Zoning and Land Use By-Laws for the Naval Air Station South Weymouth*. May 5, 2005.

SSTTDC, 2005b. *Reuse Plan for Naval Air Station South Weymouth*. May 5, 2005.

Stone & Webster Environmental Technology & Services (Stone & Webster), 1996. *Final Report, Phase I Environmental Baseline Survey, Naval Air Station, South Weymouth, Massachusetts*. November 18, 1996.

Stone & Webster, 1997. *Phase I Environmental Baseline Survey Report Errata for Naval Air Station South Weymouth, MA.* November 10, 1997.

Stone & Webster, 2001. *Draft Phase II Environmental Baseline Survey Decision Document, Review Item Area 55B – Area North of Trotter Road – Disposal Area, Naval Air Station, South Weymouth, MA*. July 2001.

Stone & Webster, 2002a. *Final Phase II EBS Field Report, Review Item Area 55B, NAS South Weymouth.* March 12, 2002.

Stone & Webster, 2002c. *Final Streamlined Ecological Risk Assessment, Area of Concern 55B/D, Naval Air Station South Weymouth, MA*. November 14, 2002.

Stone & Webster, 2004a. *Final Phase II EBS Field Report, Review Item Area 55D, NAS South Weymouth.* January 2004.

Stone & Webster, 2004b. *AOC 55D, Area North of Trotter Road – Wetland Area, Streamlined Ecological Risk Assessment at Naval Air Station South Weymouth, MA*. October 25, 2004.

Tetra Tech NUS, 2007. Site Management Plan, Revision 7.0, Naval Air Station South Weymouth, Massachusetts. September 2007.

APPENDIX C: GLOSSARY

Area of Concern (AOC)—An area initially identified during the Environmental Baseline Survey as a Review Item Area (RIA) and currently being investigated under CERCLA. These sites require either removal actions or risk assessments to identify the potential current and future effects on human health and the environment.

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 site releases.

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

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. The Act created a special tax that goes into a Trust Fund, commonly known as Superfund, to investigate and clean up abandoned or uncontrolled hazardous waste sites. Navy compliance with CERCLA/Superfund Amendments and Reauthorization Act (see Installation Restoration Program definition) is funded by the Department of Defense under the Defense Environmental Restoration Act.

Chemical of Potential Concern (COPC)—A compound or element identified as a possible source of risk, based upon a comparison between the chemical concentration and established screening levels.

Environmental Baseline Survey (EBS)—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 in soil pore spaces and fractures in geologic formations. When formations yield water in sufficient quantity and quality (i.e., an aquifer), groundwater is often used as a water supply.

National Priorities List (NPL)—U.S. Environmental Protection Agency's list of sites for priority cleanup under the Superfund program.

No Action/No Further Action—Under CERCLA, if there are no unacceptable risks to human health or the environment at a site, then "no action" is required (i.e., no remediation, monitoring, or land use restrictions, etc.). If remediation is conducted in order to achieve the condition of no unacceptable risk, then the site requires "no further action" under CERCLA.

Polycyclic Aromatic Hydrocarbons—Chemical compounds such as benzo(a)pyrene, naphthalene, anthracene, and phenanthrene, which are usually byproducts of incomplete combustion. PAHs can occur naturally (e.g., from forest fires) and as the consequence of human activities.

Proposed Plan—A CERCLA document that summarizes the lead agency's (in this case, 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 under CERCLA that explains the rationale and final cleanup decision for a site. It contains a summary of the public's involvement in the cleanup decision.

Responsiveness Summary—A CERCLA 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.

Review Item Area (RIA)—A site identified during a Phase I EBS that requires further study for potential contamination.

APPENDIX D: ADMINISTRATIVE RECORD INDEX

File No.	Vol.	Document No.	Document Type[(a)]	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
1.0 SITE ASSESSMENT									
1.8 Environmental Baseline Survey									
1.8		1.8-1	R	Phase I Environmental Baseline Survey	11/96	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide
1.8		1.8-2	R	Phase I EBS Report Errata	11/10/97	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide
1.8		1.8-3	R	Draft Phase II EBS Decision Document for Review Item Area 55B – Area North of Trotter Road – Disposal Area.	1/16/01	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D
1.8		1.8-4	L	Comments on the Draft Decision Document for RIA 55B (RTN 3-2621)	1/31/01	MassDEP	U.S. Department of the Navy	A.R. File	55B/55D
1.8		1.8-5	R	EBS Meeting Minutes	5/4/01	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D
1.8		1.8-6	L	Response to January 31, 2001 DEP Comments on Draft Decision Document for RIA 55B, Former South Weymouth Naval Air Station (RTN 3-2621)	5/16/01	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D
1.8		1.8-7	L	Response EPA Comments on Draft Decision Document for RIA 55B, Former South Weymouth Naval Air Station	5/16/01	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D
1.8		1.8-8	L	Phase II Environmental Baseline Summary Decision Document for RIA 55B, North of Trotter Road Disposal Area, Naval Air Station South Weymouth.	5/01	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D
1.8		1.8-9	R	Draft Phase II Environmental Baseline Survey Decision Document for Review Item Area 55B – Area North of Trotter Road – Disposal Area, Naval Air Station South Weymouth.	1/01	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D
1.8		1.8-10	R	Final Field Report, RIA 55B, NAS South Weymouth.	3/12/02	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D
1.8		1.8-11	R	Phase II EBS Field Report, Review Item Area 55D - Area North of Trotter Road – Wetland Area	1/04	Stone & Webster	U.S. Department of the Navy	A.R. File	55D
1.9 Work Plans									
1.9		1.9-1	R	Final Phase II Environmental Baseline Survey Sampling Work Plan (Rev. 1)	10/13/98	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide
1.9		1.9-2	R	Meeting notes re: Final Phase II Environmental Baseline Survey Sampling Work Plan (Rev. 1)	11/14/98	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide
1.9		1.9-3	R	Quality Assurance Project Plan, Phase II Environmental Baseline Survey	12/99	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide

APPENDIX D: ADMINISTRATIVE RECORD INDEX (cont.)

File No.	Vol.	Document No.	Document Type[(a)]	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
1.9 Work Plans (cont.)									
1.9		1.9-4	L	Meeting Minutes Streamlined Risk Assessment Process South Weymouth Naval Air Station.	9/00	EA Engineering, Science, and Technology (EA)	U.S. Department of the Navy	A.R. File	Basewide
1.9		1.9-5	L	Comments on the Draft Work Plan for Review Item Area 55B: North of Trotter Road - Disposal Area, Naval Air Station South Weymouth	3/7/01	EPA	U.S. Department of the Navy	A.R. File	55B/55D
1.9		1.9-6	R	Final Work Plan for Review Item Area 55B, North of Trotter Road – Disposal Area, Naval Air Station South Weymouth, Massachusetts	5/21/01	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D
1.9		1.9-7	R	Final Streamlined Human Health Risk Assessment Work Plan, Areas of Concern at NAS South Weymouth, South Weymouth, Massachusetts.	9/01	EA	U.S. Department of the Navy	A.R. File	Basewide
1.9		1.9-8	R	Final (Revision 1) Streamlined Ecological Risk Assessment Work Plan, Areas of Concern at Naval Air Station South Weymouth, South Weymouth, MA	4/30/02	Stone & Webster	U.S. Department of the Navy	A.R. File	4A, 4B, 9B, 53, 55A, 55B/D, 55C, 60, 84, 101
1.9		1.9-9	R	Draft Work Plan for Review Item Area 55D, Wetland Adjacent to Trotter Road Disposal Area, Naval Air Station south Weymouth, MA	9/5/02	Stone & Webster	U.S. Department of the Navy	A.R. File	55D
1.9		1.9-10	L	Meeting Notes from October 1, 2002.	2002	Stone & Webster	U.S. Department of the Navy	A.R. File	55D
1.9		1.9-11	L	Meeting Notes from November 14, 2002.	2002	Stone & Webster	U.S. Department of the Navy	A.R. File	55D
1.9		1.9-12	R	Site Specific Field Manual for Mobilization 3	10/10/02	Stone & Webster	U.S. Department of the Navy	A.R. File	55D
3.0 REMEDIAL INVESTIGATION									
3.2 Sampling and Analysis Data									
3.2		3.2-1	R	Final Summary Report of Background Data Summary Statistics for Naval Air Station South Weymouth	2/24/00	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide
3.2		3.2-2	R	Errata to the Final Summary Report of Background Data Summary Statistics	3/8/00	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide

APPENDIX D: ADMINISTRATIVE RECORD INDEX (cont.)

File No.	Vol.	Document No.	Document Type[(a)]	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
3.2 Sampling and Analysis Data (cont.)									
3.2		3.2-3	R	Abbreviated Notice of Resource Area Delineation. Naval Air Station, Weymouth, Massachusetts.	6/1/01	Rizzo Associates, Inc.	Weymouth Conservation Commission	A.R. File	Basewide
3.2		3.2-4	R	Vernal Pool Breeding Areas at the Former Naval Air Station, Weymouth, Abington and Rockland, Massachusetts.	8/01	Normandeau Associates, Inc.	U.S. Department of the Navy	A.R. File	Basewide
3.2		3.2-5	R	Rare Species Aquatic Macroinvertebrate Survey of Northwest Quadrant, Former Naval Air Station, Weymouth, Massachusetts.	8/01	Normandeau Associates, Inc.	U.S. Department of the Navy	A.R. File	Basewide
3.2		3.2-6	R	Supplement to Final Summary Report of the Background data Summary Statistics for NAS South Weymouth	11/08/02	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide
3.6 Remedial Investigation Reports									
3.6		3.6-1	R	Final Phase I Remedial Investigation, Naval Air Station, South Weymouth, MA.	7/7/98	Tetra Tech NUS (ENSR)	U.S. Department of the Navy	A.R. File	Basewide
3.6		3.6-2	R	Final Focused Groundwater Flow Direction Report	7/14/00	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide
3.6		3.6-3	R	Basewide Groundwater Flow Assessment Phase II Remedial Investigation	12/00	Tetra Tech NUS (ENSR)	U.S. Department of the Navy	A.R. File	Basewide
3.6		3.6-4	R	Turtle Investigation Report for CY 2000	4/01	Tetra Tech NUS (ENSR)	U.S. Department of the Navy	A.R. File	Basewide
3.6		3.6-5	L	Comments on Draft Streamlined Ecological Risk Assessment – AOC 55B	5/20/02	MassDEP	U.S. Department of the Navy	A.R. File	55B/D
3.6		3.6-6	R	Turtle Investigation Report for CY 2001	6/02	Tetra Tech NUS (ENSR)	U.S. Department of the Navy	A.R. File	Basewide
3.6		3.6-7	L	Comments on Draft Streamlined Ecological Risk Assessment – AOC 55B	6/12/02	EPA	U.S. Department of the Navy	A.R. File	55B/D
3.6		3.6-8	L	Response to May 20, 2002 DEP Comments on Draft Streamlined Ecological Risk Assessment – AOC 55B	7/10/02	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/D
3.6		3.6-9	L	Response to June 12, 2002 EPA Comments on Draft Streamlined Ecological Risk Assessment – AOC 55B	7/10/02	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/D
3.6		3.6-10	R	Final AOC 55B, Area North of Trotter Road – Disposal Area, AOC 55D, Area North of Trotter Road – Wetland Area, Streamlined Ecological Risk Assessment at Naval Air Station South Weymouth, MA	11/14/02	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D

APPENDIX D: ADMINISTRATIVE RECORD INDEX (cont.)

File No.	Vol.	Document No.	Document Type[(a)]	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
3.6 Remedial Investigation Reports (cont.)									
3.6		3.6-11	R	Final Streamlined Ecological Risk Assessment, Area of Concern 55B/D, Naval Air Station South Weymouth, MA	11/14/02	Stone & Webster	U.S. Department of the Navy	A.R. File	55B/55D
3.6		3.6-12	R	Final Streamlined Human Health Risk Assessment, Area of Concern 55B – Area North of Trotter Road – Disposal Area and Area of Concern 55D - Area North of Trotter Road – Wetland Area, Naval Air Station South Weymouth, MA	12/13/02	EA	U.S. Department of the Navy	A.R. File	55B/55D
3.6		3.6-13	R	Phase II EBS Field Report, Review Item Area 55D – Area North of Trotter Road – Wetland Area.	1/27/04	Stone & Webster	U.S. Department of the Navy	A.R. File	55D
3.6		3.6-14	L	Comments on Draft Streamlined Human Health Risk Assessment - AOC 55D – Area North of Trotter Road – Wetland Area	7/2/04	MassDEP	U.S. Department of the Navy	A.R. File	55D
3.6		3.6-15	L	Comments on Draft Streamlined Ecological Risk Assessment AOC 55D – Area North of Trotter Road – Wetland Area	7/21/04	MassDEP	U.S. Department of the Navy	A.R. File	55D
3.6		3.6-16	L	Comments on Draft Streamlined Ecological Risk Assessment AOC 55D – Area North of Trotter Road – Wetland Area	8/6/04	EPA	U.S. Department of the Navy	A.R. File	55D
3.6		3.6-17	R	Final Streamlined Human Health Risk Assessment, Area of Concern 55D, Area North of Trotter Road – Wetland, Naval Air Station South Weymouth, MA [includes responses to comments on the draft]	9/04	EA	U.S. Department of the Navy	A.R. File	55D
3.6		3.6-18	L	Responses to August 6, 2004 EPA Comments on Draft Streamlined Ecological Risk Assessment - AOC 55D – Area North of Trotter Road – Wetland Area	9/17/04	Stone & Webster	U.S. Department of the Navy	A.R. File	55D
3.6		3.6-19	L	Responses to July 21, 2004 MassDEP Comments on Draft Streamlined Ecological Risk Assessment AOC 55D – Area North of Trotter Road – Wetland Area	9/17/04	Stone & Webster	U.S. Department of the Navy	A.R. File	55D
3.6		3.6-20	R	Final AOC 55D, Area North of Trotter Road – Wetland Area, Streamlined Ecological Risk Assessment at Naval Air Station South Weymouth, MA	10/25/04	Stone & Webster	U.S. Department of the Navy	A.R. File	55D
3.6		3.6-21	L	Comments on Draft Streamlined Human Health Risk Assessment - AOC 55D – Area North of Trotter Road – Wetland Area	8/6/04	EPA	U.S. Department of the Navy	A.R. File	55D
3.6		3.6-22	L	[Concurrence on the] Final Streamlined Ecological Risk Assessment AOC 55D – Area North of Trotter Road - Wetland Area, Naval Air Station South Weymouth, Massachusetts	12/7/04	EPA	U.S. Department of the Navy	A.R. File	55D

APPENDIX D: ADMINISTRATIVE RECORD INDEX (cont.)

File No.	Vol.	Document No.	Document Type[(a)]	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
4.0 FEASIBILITY STUDY									
4.8 Proposed Plans for Selected Remedial Action									
4.8		4.8-1	R	Final Proposed Plan, AOC 4A and 55D, Naval Air Station South Weymouth, Weymouth, Massachusetts	6/07	U.S. Department of the Navy	Public	A.R. File	4A, 55D
5.0 RECORD OF DECISION									
5.3 Responsiveness Summaries									
5.3		5.3-1	R	Transcript of the Public Hearing on the Proposed Plan for the AOCs 4A and 55D (included as Appendix E of the Record of Decision)	7/19/07	Public	U.S. Department of the Navy	A.R. File	4A, 55D
5.3		5.3-2	R	Responsiveness Summary (included as Part 3, the Responsiveness Summary, of the Record of Decision)	12/07	U.S. Department of the Navy	Public	A.R. File	55D
5.4 Record of Decision									
5.4		5.4-1	R	Record of Decision (Parts 1 and 2), Area of Concern 55D – Wetland Area North of Trotter Road, Naval Air Station South Weymouth, Massachusetts	12/07	U.S. Department of the Navy and EPA	Public	A.R. File	55D
10.0 ENFORCEMENT/NEGOTIATION									
10.16 Federal Facility Agreements									
10.16		10.16-1	L	Federal Facility Agreement for South Weymouth Naval Air Station National Priorities List Site	4/00	EPA	U.S. Department of the Navy	A.R. File	Basewide
13.0 COMMUNITY RELATIONS									
13.2 Community Relations Plan									
13.2		13.2-1	R	Community Relations Plan Naval Air Station South Weymouth, Massachusetts	7/98	U.S. Department of the Navy	Public	A.R. File	Basewide
13.4 Public Meetings/Hearings									
13.4		13.4-1		Restoration Advisory Board Workshop Guidebook	7/94	EPA	Public	A.R. File	Basewide
13.4		13.4-2		Legal Notice: Availability of the Proposed Plan, and Notification of Public Meeting and Comment Period	7/07	Tetra Tech NUS	Public	A.R. File	55D
13.4		13.4-3		Public Notice: Notification of Restoration Advisory Board Meetings (Monthly)	1995-2007	Tetra Tech NUS and EA	Public	A.R. File	Basewide
13.4		13.4-4		Restoration Advisory Board Meeting Minutes (Monthly)	1995-2007	U.S. Department of the Navy	Public	A.R. File	Basewide

APPENDIX D: ADMINISTRATIVE RECORD INDEX (cont.)

File No.	Vol.	Document No.	Document Type[(a)]	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
13.5 Fact Sheets/Information Updates									
13.5		13.5-1	R	The Former Naval Air Station South Weymouth Environmental Fact Sheet	2/98	EA	Public	A.R. File	Basewide
13.5		13.5-2	L	Public Notice: Public Information and Public Hearing for the AOC 4A and 55D Proposed Plan	7/07	Tetra Tech NUS	Public	A.R. File	4A, 55D
13.5		13.5-3	L	Legal Notice, Record of Decision Available For AOC 55D	12/07	Tetra Tech NUS	Public	A.R. File	55D
13.6 Mailing Lists									
13.6		13.6-1		Community Relations Mailing List: State, Federal and Local Agencies (including Media and Public Libraries)	N/A	U.S. Department of the Navy	N/A	A.R. File	Basewide
13.6		13.6-2		Community Relations Mailing List: Other Parties (e.g., general public) – CONFIDENTIAL (due to potential Privacy Act violations)	N/A	U.S. Department of the Navy	N/A	A.R. File	Basewide
17.0 SITE MANAGEMENT RECORDS									
17.6 Site Management Plans and Reviews									
17.6		17.6-1	R	Site Management Plan Naval Air Station South Weymouth, Massachusetts	10/99	EA	U.S. Department of the Navy	A.R. File	IR Sites
17.6		17.6-2	R	Site Management Plan Revision 1.0 Naval Air Station South Weymouth, Massachusetts	10/00	EA	U.S. Department of the Navy	A.R. File	IR Sites
17.6		17.6-3	R	Site Management Plan Revision 2.0 Naval Air Station Weymouth, Massachusetts	11/01	EA	U.S. Department of the Navy	A.R. File	IR Sites
17.6		17.6-4	R	Site Management Plan Revision 3.0 Naval Air Station South Weymouth, Massachusetts	4/03	EA	U.S. Department of the Navy	A.R. File	IR Sites
17.6		17.6-5	R	Site Management Plan Revision 4.0 Naval Air Station South Weymouth, Massachusetts	12/04	EA	U.S. Department of the Navy	A.R. File	IR Sites
17.6		17.6-6	R	Draft Site Management Plan Revision 5.0 Naval Air Station South Weymouth, Massachusetts	8/05	Tetra Tech NUS	U.S. Department of the Navy	A.R. File	IR Sites
17.6		17.6-7	R	Site Management Plan Revision 6.0 Naval Air Station South Weymouth, Massachusetts	10/31/06	Tetra Tech NUS	U.S. Department of the Navy	A.R. File	IR Sites
17.6		17.6-8	R	Site Management Plan Revision 7.0 Naval Air Station South Weymouth, Massachusetts	09/07	Tetra Tech NUS	U.S. Department of the Navy	A.R. File	IR Sites

APPENDIX D: ADMINISTRATIVE RECORD INDEX (cont.)

NOTES:

(a) R = Report; L = Letter.

AOC	=	Area of Concern
A.R. File	=	Administrative Record File
EBS	=	Environmental Baseline Survey
EPA	=	(U.S.) Environmental Protection Agency (Region 1)
MassDEP	=	Massachusetts Department of Environmental Protection
N/A	=	Not Applicable
NAS	=	Naval Air Station
RIA	=	Review Item Area

APPENDIX E: TRANSCRIPT OF PUBLIC HEARING ON THE PROPOSED PLAN FOR AOC 55D

Refer to attached copy.

PUBLIC HEARING

Area of Concern 4 A

Area of Concern 55D

Area of Concern 8

Area of Concern 53

Naval Air Station South Weymouth

Weymouth, MA

July 19, 2007

8 p.m.

NAS South Weymouth, MA

P R O C E E D I N G S

MS. ROBERTS: We are officially going to begin with the public hearing. And just so that people know how this process runs, this is the formal process. So what will happen is this is an opportunity for you to make your comments, ask questions, and they will be formally recorded in the record. Those will appear in the Responsiveness Summary that is part of the Record of Decision.

So when you have your comment, we're going to take you one at a time, just say your name and then your comment or your question. They'll be recorded. Just keep in mind that during public hearings your questions are not answered. Your answers will be part of the Responsiveness Summary.

VOICE: Will we all get a responsiveness summary of who gave questions or comments?

MR. BARNEY: Yes. Everybody who makes a written or an oral comment will get a copy of the Responsiveness Summary.

MS. ROBERTS: Just so that we're clear, the comments or the questions are related to the

floor presentation. So we'd like to stay on topic.

MR. GALLUZZO: Before we start, what is the timeframe from this process to a response?

MS. ROBERTS: Great question. Does somebody want to answer that?

MR. BARNEY: I'll go through the structure of the process. Roughly 30 days after the close of the comment period we'll submit a draft Record of Decision to the agencies for review. They'll have 30 days to review that, send us our comments or send us their comments. We'll work to resolve those comments and send them a draft final Record of Decision, and the Responsiveness Summary is a part of that. They'll look at those for a period of time and hopefully we can reconcile within 30 to 60 days and furnish a final Record of Decision.

So did you add up all those 30s?

VOICE: Looks like February.

MS. CALL: I think it's December we expect, we hope.

MR. BARNEY: Between 4 and 6 months.

MS. ROBERTS: Harvey.

MR. WELCH: So that would be about 4 or 6 months for that West Gate Landfill from now? If it was closed July 6th, comment period.

MR. BARNEY: If it takes us that many iterations to get through, perhaps we can cut down the iteration effect between the Navy, the agencies, on the elements of the Record of Decision.

MR. CHAFFIN: Maybe briefly mention the comment period for these as proposed.

MR. BARNEY: Yes. The period closes August 1st.

MR. CHAFFIN: You can write your comments, if you're not comfortable doing it orally tonight, there is a place in the Proposed Plan, a form you can use.

MS. ROBERTS: Yes, you can do both. If there is something you remember after tonight's forum, always go ahead and submit them in writing as well.

MR. BARNEY: It closes August 1st. We usually wait 3 to 4 days after that for the mail to come in.

MS. ROBERTS: So who would like to

start? Dave, do you have anything you would like to start with?

MR. BARNEY: I would like to thank everyone for coming, and I appreciate the comments we heard earlier, and if I hadn't addressed any of those sufficiently, please readdress those here tonight and compel us to come back with a new response or alternate response.

MS. ROBERTS: Harvey.

MR. WELCH: Harvey Welch from Weymouth. I would like to know why they are just starting to test what you said on mice these combinations of toxic chemicals to get an accurate assessment of how it's affecting children and adults, people. How can you make a good judgment decision when -- what amazes me, you're just starting this now, and how can you make a good judgment decision on these sites with the cocktail of chemicals that are on there when you really don't know what this -- I know you talk about adding up things, but I'm talking about literally doing tests with these toxic chemicals on mice which you said they just supposedly started doing, which is amazing to me. In other words how

can you make a good judgment on not doing those tests? That's my question.

MS. ROBERTS: All right.

MR. CUNNINGHAM: James Cunningham from Weymouth. First of all I would like to know if you're taking these, first the Area 4 A and so forth and then later Area 8 and 53, or are you taking them all at one time?

MR. BARNEY: All at one time.

MR. CUNNINGHAM: On the Area 4 A, the abandoned septic system, I have concerns with the words, the only area of potential unaccessible -- unacceptable risk at AOC 4 A was the wetland west of the site. That word potential to me is kind of a weasel word, and I'm really concerned about the welfare of animals and the environment. And I'm concerned that the animals may be subject to some sort of pollution that will harm them.

I'm also concerned that the developer will probably fill in some wetlands and use these places for buildings and that they may be contaminated then. So I'm concerned about wetlands in general. In all of these four sites I am

concerned about the wetlands and the possible effect on the animals and flora and fauna in the area.

Also on Site 4 A the septic tank, I'm concerned that it is possible that the septic tank could rot out and become a sink hole or become some sort of a hazard and could fill up with some kind of water and become just another little sewage pond. So I believe that the septic tank should be removed, especially when you consider the requirements under Title V. And perhaps also the distribution box. And I am concerned that it's so close to the wetlands and that materials from the septic tank could have gone into the wetlands.

Again, I am concerned about the environmental or natural environment of this area and the animals and plants that it supports. So I would like to see that tank removed, and I would like to make sure that the animals don't get injured and the people who live nearby after the places are built out also don't get any injurious results. Thank you.

MS. ROBERTS: Anyone else. Yes.

MR. WELCH: This has to do with the

actual presentation pamphlet that you handed out. I have been asking this, Dave, I don't know, I know I talked to you about this, of having a map of the base with the roads surrounding the base on it so people can see where they are living, and they can match it up to where they are near the base. Do you understand what I'm saying?

MR. BARNEY: Absolutely.

MR. WELCH: And even in this presentation you look at, you see a block basically which is what we have being looking at since we started, with no streets around it. It's like, always like it's planted here from outer space, and you have no streets around it. It should have streets around it so people can get an idea of where West Gate Landfill is. They could be living up the street from it. They don't know that because it's a blop on a map. You can't picture it if you have no orientation. That's the word I'm looking for, orientation on this map. You can't do that. That makes a big difference. And how come we can't do that? I don't think that's so hard to do. Why can't we do that? Is there a reason?

MS. ROBERTS: Thank you.

MR. WELCH: I'm just asking.

MS. ROBERTS: Can't answer for the public hearing.

MR. WELCH: I'm sorry. That's a question.

MS. ROBERTS: After the hearing is over he might be able to answer that.

MR. SCANNELL: Peter Scannell of Weymouth, Mass. We all feel extremely uncomfortable when we hear about acceptable levels of some of the SVOCs and so forth found, to say that there is no further action will be taking place in areas where PCBs, thallium, benzos and so on so forth, extraordinarily dangerous, in name, exist. And to know very well that not only is no action going to be taken, and because of cost restraints and so forth, and assume public contact with those areas would be minimal or whatever the risk assessment analysis use is acceptable. Again, that is our concern. Pardon me, that is my concern. I know for sure that nobody has to this day said no. As a matter of fact of course we're going to make sure

that people are aware of these various areas and in a historical nature.

I understand it was said tonight that we do not in the Superfund world rely on history. We understand quite well that's because of liability. So these are all the things that deeply concern us tonight, and we understand, again as we've talked, that the carcinogenic risk assessment does not take into consideration MS, soft tissue diseases, and so forth and so on. As this gentleman just said, combinations of elements.

We are just beginning to tackle that science. And it was very succinctly said here tonight that we are using the best science we have available. I absolutely believe that of this board and of the Navy. And I applaud them for using that, and I know it's extraordinarily expensive. At the same token, knowing very well there will be better science in the future and knowing the nature of these particular chemicals in these areas, it's just the part that irks the heck out of me is that we're not addressing that they are here.

How do we live with them? There is no

pamphlet for the people that are going to be lured to Southfield on how to live in a Superfund site or among Superfund sites or remediated Superfund sites. Children, little Johnny going in the water. It was said here tonight that you'd show no precaution to your grandchild or daughter if you decided to go into the wetland looking for turtles knowing very well what is there. I greatly doubt that. I think you'd probably get a little nervous when she was bringing her hand to her mouth repeatedly. And that would be justified. And it's just that knowledge. People deserve to have that knowledge or else nobody would buy it. That is the concern.

So again, full disclosure. The nemesis of firms like LNR, read their history and so forth. That is our concern. Your findings I absolutely applaud the tenacity, perseverance, level of integrity that's been brought and what has been found, and you are hamstrung in that you are given benchmarks and you don't dictate these acceptable levels. These are the things that you're supposed to work within knowing full well that they are not perfect, and that's understandable, but precautions

that are not being taken that are so easy to do and that knowing South Shore Tri Town has never once addressed them and as a matter of fact wants to create an orchard environment to beckon people to this base knowing what is in here is extraordinary. Thank you.

ANN HILBERT: Ann Hilbert, North Weymouth. I'm concerned about what I heard tonight. I asked about the health study, and the Navy is relying on the Department of Environmental Affairs. I have been around a while so I'm familiar with the politics in Massachusetts. Why is the Navy depending on them? Why don't they come in and do their own assessment. This is going to live in infamy if this isn't done right.

MS. RAKERS: Joanne Rakers. I have been coming for many years here and every time you send us something I learn a little more. I was just reading through the AOC, the 55 D, and every time I've ever asked questions about compounds or mixtures, how you know that it's toxic or not. What level, like I asked before, what would arsenic be for in water, arsenic out of water. What would it

be, the level that we can go after and say this level is higher than the normal level that it should be at.

In here I was reading semi-volatile stuff you have in here, and you say they were fine but one sediment example was over the screening level. What is over the screening level? I need to find out exactly what each thing is toxic to or not toxic to. You have tons of it here. It says pesticides exceeded benchmark screening levels in both soil and water. How high was it? I would like to know how to figure it out myself. I mean I go through these, benzene, everything in here that is very toxic. All of a sudden you give us different categories like one of benzo, you said it's 0.056. ug-L. What does that basically mean? It's too high or too low or it's okay, but if it's mixed with another chemical, at which I missed the program this morning, sorry I missed most of it, but every time I go through these it says within the range or over it exceeds. If it over exceeds that means there is something wrong with it. Why isn't it cleaned up all the way?

It can leak. You are capping all these things that do leak. We understand that. But why do we have to wait for it to leak again for you to fix it? It is our kids' lives that are there.

The rubbish disposal area, we know there is all kinds of crap in there running into the Swamp River and into our water system, but nobody has the guts to tell us what it is or what the process is to clean it. We should be able to know what's in it. And you make the statements it's over above the level of DEP's evaluation of it. We have got to know exactly what it was. I would love to find out everything you have in here that gives you the examples of DDT. It's 0.035, ug-L. How high does DDT have to be before it hurts somebody?

I just think you need not to cover this up, just clean it as best you can and let us live half a decent life with our children. If not, I wouldn't let my child come here and sit in a field with a fence around it. I would not and I don't think half of you would too. Jim Cunningham brought this up years ago. Oh, Joanne, it's fine. They're going to put a gate around it. No one is going to

go in it. But would he come with his grandchild and sit in the middle and have a picnic with his kids? No.

And to have this statement and bunch of stuff we're going through all these years, putting a fence is not going to stop a child from climbing over if you put a sign on it. I'd just love to clean it up, clean it so we can start anew in Weymouth. That's all I ask.

MR. SMART: Michael Smart from Weymouth. First I just want to comment on AOC 8 and 53. Just to follow up on one of the comments made earlier, just to thank the Navy for their hard work on those particular two sites with over 3 million pounds of soil removed over a number of years from 2001 right through 2005 in checking it and monitoring it. I think you did a thorough job on those two sites there.

However, on the other two sites on 4 A and 55, I would have to agree with Mr. Cunningham with regard to the septic tank on 4 A with having everything removed, and I as well have been coming here for a number of years and commenting. And Dave

I think you know, my usual take on things that were not here prior to 1940 that everything should be removed with regard to the sediments in the wetland area on 4, 55 and 4 A. PCB levels everything should be removed. In my opinion, I've said it at every single Record of Decision, every single public hearing, all that material should be removed in my opinion regardless of the level. And none of that stuff was here. I understand baseline survey and I understand PCB in the air base from the number of meetings I've been to, but things that were here prior to the Navy taking the property with regard to electrical equipment, transformers, and the antenna field and everything out there, I would think that everything should be removed including the areas in the wetlands on both 4 A and 55. Thank you.

MS. ROBERTS: Yes.

MR. GALLUZZO: Dominic Galluzzo of Weymouth. I have to agree with Mr. Smart's comments. I'm disappointed at this point that after tonight's presentations we come to realize that almost two-thirds or better than two-thirds of this footprint is ready for transfer with so little

contamination of concern and that the risk assessments to humans is so low. This base was active when environmental concerns were primitive compared to today. I just as one individual become increasingly more skeptical as to the cleanliness of the land that the reuse plan says there is going to be a densely populated reuse plan. Thank you.

MS. ROBERTS: Any other comments? This concludes our public hearing. Thank you for coming. Thank you for your time.

Dave, do you want to say anything else before we close?

MR. BARNEY: The sentiment that I appreciate people taking the time out of their busy lives to come here and express their opinions. Thank you.

(The proceedings adjourned at 8:41 p.m.)

C E R T I F I C A T E

STATE OF MASSACHUSETTS)
)
COUNTY OF NORFOLK)

I, *CAROL DiFAZIO*, do certify that I am a Registered Professional Reporter of the State of Massachusetts, that the said proceeding was recorded stenographically by me, thereafter under my direction transcribed into computer-assisted transcription, and that the foregoing transcript constitutes a full, true, and correct report of the proceedings to the best of my ability, which then and there took place.

CAROL DiFAZIO
Registered Professional Reporter