Land Use Control Remedial Design for Site 19 - Former Derecktor Shipyard Operable Units 5 and 12

Naval Station Newport Middletown/Newport, Rhode Island



Naval Facilities Engineering Command Mid-Atlantic

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LAND USE CONTROL REMEDIAL DESIGN FOR SITE 19 - FORMER DERECKTOR SHIPYARD OPERABLE UNITS 5 AND 12

NAVAL STATION NEWPORT MIDDLETOWN/NEWPORT, RHODE ISLAND

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1.0 INTRODUCTION

This document constitutes the Land Use Control (LUC) Remedial Design (RD) for Site 19 – the Former Derecktor Shipyard, an industrial port at Naval Station (NAVSTA) Newport located in Middletown and Newport, Rhode Island. Site 19 includes two operable units (OUs) associated with the Former Derecktor Shipyard: OU5, which is the marine sediment associated with the Former Derecktor Shipyard; and OU12, which is the on-shore area of the Former Derecktor Shipyard, including soil and groundwater.

This document was prepared by the Department of the Navy's Naval Facilities Engineering Command (NAVFAC) Mid-Atlantic, the lead agency conducting the evaluation and cleanup of NAVSTA Newport. NAVSTA Newport was formerly identified as the Naval Education and Training Center (NETC). It was placed on the U.S. Environmental Protection Agency (EPA) National Priorities List on November 21, 1989, and assigned EPA ID Number RI6170085470. The LUC RD was developed as part of the RD for Site 19 (the Site) to address LUC implementation actions in accordance with the Record of Decision (ROD) for Site 19, Former Derecktor Shipyard Marine Sediment OU5 (Navy, 2014a), the ROD for Site 19 On-shore Derecktor Shipyard (OU12) Soil and Groundwater (Navy, 2014b), the Memorandum To Site File for Non-Significant Change to the Record of Decision Dated September 2014 (Navy, 2016) and the NAVSTA Newport Federal Facilities Agreement (FFA). This document is considered a primary document in accordance with the FFA and has been prepared in accordance with the Navy Principles and Procedures for Specifying, Monitoring and Enforcement of Land Use Controls and Other Post-ROD Actions (the Navy Principles) as agreed between the U.S. Environmental Protection Agency (EPA) and the Department of Defense (2003).

2.0 SITE 19 - FORMER DERECKTOR SHIPYARD - BACKGROUND AND DESCRIPTION

NAVSTA Newport is located approximately 25 miles south of Providence, Rhode Island, primarily on Aquidneck Island. The facility occupies approximately 1,000 acres, with portions of the facility located in the City of Newport and the Towns of Middletown, Portsmouth, and Jamestown, Rhode Island. With the exception of Gould Island, which is located in Narragansett Bay, the western boundary of NAVSTA Newport follows the western shoreline of Aquidneck Island for nearly 6 miles, facing the eastern passage of the bay (Figure 1). The major commands currently located at NAVSTA Newport include the Surface Warfare Officers School (SWOS) Command, Naval Undersea Warfare Center (NUWC), and Naval War College. Research, development, and training are the primary activities at NAVSTA Newport.

Site 19, the Former Derecktor Shipyard, is located at Coddington Cove in the central portion of NAVSTA Newport, as illustrated on Figure 1, and occupies land primarily within Middletown and also in Newport. As shown on Figure 2, Site 19 comprises approximately 151 acres: 41 acres of shoreline land and

improvements (OU12: On-Shore Soil and Groundwater) and 110 acres in the adjacent deep-water industrial port in Coddington Cove (OU5: Marine Sediment) that were formerly leased to Robert E. Derecktor Shipyards of Rhode Island, Inc. The land and improvements, piers, and appurtenances are owned by the U.S. Government and controlled by the Navy. The off-shore area in Coddington Cove is owned by the State of Rhode Island, but Navy has access and control, per agreement with the state.

2.1 Operable Unit 5 - Marine Sediment - Background and Description

The marine sediment off-shore investigation area of Site 19, OU5 - Marine Sediment, comprises approximately 110 acres of Coddington Cove, which is part of Narragansett Bay and is approximately 400 acres in area. The cove is protected to the north by the Coddington Cove breakwater. To the south, the cove is bounded by a combination of natural and altered shorelines characterized by a gravel and stone beach. Site 19 is located in the central portion of Coddington Cove. Figure 2 includes the locations of primary site features of OU5. Physical features of the industrial port include two piers (Piers 1 and 2), each extending approximately 1,500 feet into Coddington Cove, and south of the piers, an "L"-shaped stone breakwater and a T-wharf that extends approximately 800 feet into the cove. Together, the breakwater and T-wharf form a protected small-boat anchorage in this area south of Piers 1 and 2. A sheet pile wall defines the shoreline along the shipyard property, deep-water port area, and T-wharf. The two 1,500-foot-long piers are constructed of concrete decking supported by concrete piles with steel jackets.

Currently, both Pier 1 and Pier 2 have limited use and restricted load capacity. The sole use of Pier 1 was as a moorage for the aircraft carrier ex-Saratoga. However, the ex-Saratoga was moved from Pier 1 on August 21, 2014, and no future use of Pier 1 has been formally identified. Pier 2 is in active use for limited purposes by the Navy, United States Coast Guard (USCG), and National Oceanic and Atmospheric Administration (NOAA). Pier 2 is a temporary homeport for three USCG ocean buoy tenders, a USCG maintenance team, the USCG pursuit vessel Tigershark, and one NOAA fisheries research vessel. Pier 2 is also occasionally used by visiting U.S. Navy and foreign Navy ships, and such use is anticipated to continue. There are currently no homeported Navy ships at NAVSTA Newport.

Historical activities at Derecktor Shipyard have resulted in polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and lead in sediment at concentrations exceeding acceptable risk levels and/or state regulatory standards. Robert E. Derecktor Shipyards of Rhode Island, Inc. was cited for multiple infractions and violations of both RIDEM and EPA environmental regulations. In 1987, Derecktor Shipyards pled guilty to criminal violations of the Toxic Substances Control Act (TSCA), Comprehensive Environmental Response Compensation and Liability Act (CERCLA), Clean Water Act (CWA), Resource Conservation and Recovery Act (RCRA), Clean Air Act, and Hazardous Transportation Act, for illegal disposal activities, including the discharge of over 4,000 tons of pollutants into the bay.

The Navy conducted various investigations including initial sediment sampling in 1993, a marine ecological risk assessment (ERA) and human health risk assessment (HHRA), a Supplemental Sediment Investigation (SSI) in 2012, and a Feasibility Study (FS) in 2014. Based on these studies, it was determined that chemical contaminants were discharged from the on-shore and pier-based shipyard operation areas to the marine sediment along the bulkhead areas of Coddington Cove and around Pier 1. Contaminants have also been found in marine sediment beneath and around Pier 2. The primary routes of contaminant transport from shipyard operations to marine sediment were likely overland runoff of paints, thinners, used sandblast grit, caustics and PCBs discharging to Coddington Cove through the storm drainage system and direct release of contaminated materials into the cove from the shoreline, former floating dry-docks, and former Greenport Ferry. Additional contaminants concentrated under and around Pier 2 may have migrated there from shipyard operations (painting, welding, sandblasting, and other ship building and maintenance activities).

A CERCLA action is required because the HHRA determined that concentrations of benzo(a)pyrene in shellfish pose unacceptable risk to hypothetical future subsistence fishermen. Additionally, the marine ERA identified concentrations of high molecular weight (HMW) PAHs, PCBs, and lead in sediment posing unacceptable risk to environmental receptors at multiple locations within OU5. Asbestos is also present in some sediment, and while there is no current risk associated with asbestos in sediment, there may be a potential future risk if the associated sediment were to be dredged and allowed to dry out, possibly resulting in inhalation of associated dust. Therefore, the response action will include safeguards to protect potential future receptors from this potential.

A construction project was completed in 2015 to improve the marginal wharf area (the bulkhead waterfront between Piers 1 and 2) to accommodate berthing of the three USCG ocean buoy tenders. This project included removal of a piling-supported waterfront platform, and removal of underlying stone and substrate from the surrounding area. This activity could have had localized impact to sediment conditions at the shoreline adjacent to the site as mapped during the investigations conducted for OU5, and described in the ROD. Contaminants in sediment were identified during past environmental assessments at the Former Derecktor Shipyard and were attributed to previous activities, mainly those activities undertaken by Robert E. Derecktor Shipyards of Rhode Island, Inc., mainly during their lease period from 1979 through 1992. Specifically, contaminants have been identified in sediment surrounding and beneath Piers 1 and 2 and in sediment south of the T-wharf.

In August 2014, the Navy conducted necessary but unanticipated repairs on Pier 2, which included the removal and replacement of damaged wooden fender pilings, which are affixed to the outboard sides of the pier and embedded vertically into the sediment. Some of the fender pilings were reported to have asbestoscontaining materials (ACM) attached to them. This operation included removal of 64 broken or damaged fender pilings and installation of replacements as needed. This activity potentially impacted sediment

contaminant distribution adjacent to Pier 2 as mapped in 2011 and 2012. Therefore, additional sediment sampling was conducted prior to implementation of the remedial action. The requirements for this pre-remedial design sampling are included as a component of the selected remedy.

The selected remedy for OU5 at the Former Derecktor Shipyard includes the following components (Navy 2014a):

- Conduct additional sediment sampling (i.e., Pre-Remedial Design [PRD] Sediment Sampling) prior to implementation of the remedial action to assess localized contaminant re-distribution resulting from the disruption of the sea floor by Navy construction projects conducted before finalizing the ROD, and within the footprint of the former location of the ex-Saratoga. The areas requiring dredging as part of the OU5 remedy may be revised depending on the sampling results. Details of the PRD Sediment Sampling will be included in a PRD SAP.
- Targeted open water dredging and off-site disposal of dredged sediment to reduce contaminant volume while meeting cleanup goals on a surface-area weighted average basis.
- Confirmation sampling after dredging activities to ensure that surface-area weighted averages (SWACs) have reached cleanup goals.
- Installation of an engineered cap under portions of Pier 2 to provide protection from contaminants under the pier without demolition of the pier.
- Implementation of LUCs, including 1) Short-term LUCs (i.e., Base Instruction and signage) to notify persons that shellfish should not be taken from within OU5 until the dredging and capping components of the remedy are completed; 2) Permanent LUCs prohibiting unauthorized disturbance of the engineered sand/gravel cap installed at the target sub-pier area; any future proposed work to demolish or restore the pier below the water line or over the capped area that could undermine the cap's integrity would require prior Navy, EPA, and RIDEM concurrence to avoid compromising the cap; and 3) Permanent LUCs to minimize the potential for exposure to asbestos potentially present in dredged sediment through development of documented precautionary measures and safe work practices.
- Monitoring to ensure the cap under Pier 2 remains intact and protective.
- Establishing a dewatering area on shore and/or on barges, and treating water from the dewatering process.

• Five-year reviews to assess the protectiveness of the cap component of the remedy and the LUCs established to protect the cap and to address potential asbestos in sediments.

The additional PRD sediment sampling was conducted as part of remedial design process and resulted in the revision (increase) of the areas requiring dredging as part of the OU5 remedy.

The selected remedy also includes long-term monitoring (annual sampling and analysis of sediment around the cap). The selected remedy eliminates potential unacceptable exposure of human and environmental receptors to contaminated sediment through a combination of: removal (dredging) and off-site disposal; construction of an engineered cap for under-pier areas; and LUCs and monitoring of the capped under-pier areas. Remedial actions for OU5 are not expected to adversely impact the current and reasonably anticipated future land use, which, for the shoreline and piers is industrial, and for the navigable waters, is commercial or recreational fishing. Implementation of this remedy will allow for continued industrial use of the Site, which is consistent with current use and the overall cleanup strategy for NAVSTA Newport of restoring sites to support base operations.

2.2 Operable Unit 12 - On-Shore Soil and Groundwater - Background and Description

The soil and groundwater investigation area of Site 19 - On-Shore Soil and Groundwater (OU12), is bounded to the north by Pier 2, to the east and south by Defense Highway, and to the west by Coddington Cove (including the Marine Sediment OU5 as shown in Figure 2). The on-shore portion of the Site consists of undeveloped areas, relic foundations of former buildings (former Building 234), parking areas, storage areas utilized by the USCG for buoy maintenance, one major building (Building 6), and ongoing construction and improvement projects. A paved road provides access to the central and northern portions of the Site from Defense Highway. The northern portion of the Site (Northern Area) is the location of a USCG waterfront improvement and building construction project, a buoy maintenance yard (not shown on Figure 2). The central portion of the Site (Central Area) is a mixture of paved and unpaved areas with building foundations, roads, and parking lots including a satellite parking area. A paved exercise path is present in the southern part of the Central Area. Part of the Central Area is the relic concrete slab foundation of former Building 234. An active liquefied natural gas peak shaving facility is located on a portion of the foundation. The most southern portion of the Site (Southern Area) consists of undeveloped vegetated land.

Contaminants in soil and groundwater were identified during past environmental assessments and were attributed to previous activities, mainly those undertaken by Robert E. Derecktor Shipyards of Rhode Island, Inc., a commercial ship building and refurbishing company, during their lease period from 1979 through 1992. Shipyard operations included sand blasting, painting, chemical and waste storage and transfer, and other common shipyard practices. Ship repair, maintenance, and construction operations were

concentrated in the Former Building 234 Area. It is believed that the chemicals and wastes produced by these operations are sources of residual contamination. The shipyard had a history of violations of environmental statutes for the improper management and disposal of wastes. Results of the environmental investigations indicated that elevated concentrations of metals, PAHs, and PCBs were present in soil, and that elevated concentrations of volatile organic compounds (VOCs) and metals were present in groundwater at the Site.

Much of the soil contamination was addressed through multiple removal actions conducted between 1997 and 2008. Between 2011 and 2013, the Navy conducted a data gaps investigation of soil, groundwater and soil gas. The data collected indicate that there are no remaining specific source areas at the Site; however, residual contamination is present at the Site at levels that may pose health risks. The results of the data gaps investigation were used to refine soil and groundwater characterization results and update the baseline HHRA.

Unacceptable risks and state criteria exceedances were identified in soil and groundwater at OU12, including unacceptable cancer and non-cancer risk associated with exposure to PAHs and metals in soil, VOCs and metals in groundwater, and potentially VOCs by vapor intrusion from groundwater and soil gas. Because unacceptable risks were identified under current and/or future use scenarios, the response action selected in the ROD is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment. In addition, state criteria exceedances will be addressed by the response action (Navy, 2014b).

Navy and USCG construction project activities (Fender Pile Replacement Project, Marginal Wharf Project, and Buoy Tender Project) within the Northern Area potentially released asbestos from excavated/stockpiled debris and soil containing ACM. In addition, excavated sediments and soils were stockpiled in this area which potentially contaminated the site. As a part of the construction activities, soil sampling was conducted to determine if changes were needed for the selected remedy. The requirement for this additional soil sampling is included as a component of the selected remedy.

The selected remedy for OU12 includes the following components (Navy 2014b):

• Conduct PRD soil sampling before the completion of the RD to assess potential site contamination within the Northern Area. After publication of the Proposed Plan, improvement construction project activities within the Northern Area potentially released asbestos from excavated/stockpiled debris and soil containing ACM. In addition, excavated sediments and soils were stockpiled that potentially contaminated the site. The remedy may need to be modified based on the PRD sampling results following finalization of the ROD. Short-term protective measures will be implemented to restrict

exposure to ACM in debris/soil and potentially contaminated sediment until they are removed from the Site. These measures will include containment of the existing stockpiles and management of erosion and storm water runoff.

- Covers to prevent exposure to chemicals of concern (COCs) in soil.
- LUCs and operation and maintenance (O&M) activities to ensure protection of the covers and to establish protective measures to prevent non-industrial use or development. There will be annual inspections of the cover to confirm the continued protectiveness of the remedy. Restricted recreational use will be allowed in the southernmost portion of the Central Area, where a paved exercise path ends. Additionally, short-term LUCs in the form of a Base Instruction have been implemented to restrict exposure to the site soils that may have been impacted from the excavation/demolition and stockpiling of these soils/debris and sediments until the results of the PRD soil sampling determines whether remedial action of these soils is necessary. These controls include maintenance of the existing fencing to prevent uncontrolled access and the restriction of unauthorized excavation of the soils in the Northern Area.

Short-term protective measures were implemented to restrict exposure to ACM in soil and debris/soil and potentially contaminated sediment stockpiles in the Northern Area until they were removed. The stockpiled soil and debris were removed during the course of construction from the signing of the ROD in September 2014 through July 2015. After these stockpiles were removed, and in some cases, after some of the soils beneath these stockpiles were removed as well, sampling was conducted to assess whether associated contaminants were removed.

The Non-Significant Change to the Record of Decision Dated September 2014 (Navy, 2016) extended the OU12 Land Use Control boundary to include the soil in the Northern Area where remaining sections of an underground duct bank containing asbestos, and some minor quantity of asbestos assumed to remain within the soil at an approximate depth of 4 to 5 feet below the ground surface where other sections of the duct bank were removed. These areas have been back-filled to grade and the ground surface has been covered with concrete pavement as a work surface for the port activities. In accordance with the Site 19 ROD, precautionary measures are required to ensure awareness of the presence of this material and protect workers from exposure to the buried conduit and potential asbestos that may remain in the soil.

The selected remedy for soil will be protective of human health and the environment because soil and asphalt/concrete covers (barriers) over surface soil that exceeds industrial cleanup goals will be constructed and maintained; and LUCs to prevent industrial exposure to subsurface soil COCs that exceed industrial cleanup levels and to prevent residential exposure to surface and subsurface soil COCs that exceed

residential cleanup levels will be implemented. The non-significant change to the ROD prevents uncontrolled excavation of soil which may contain asbestos or of utilities that may contain asbestos.

The selected remedy for groundwater also will allow for the planned continued use of OU12 and includes the following components:

- Monitored Natural Attenuation (MNA) to monitor decreases in COC concentrations due to natural attenuation.
- LUCs and O&M to prevent exposure to COCs in groundwater and protect the monitoring well network.

The LUC component also provides for future protection against exposure to COCs in groundwater through vapor intrusion issues (i.e., if exposure conditions change due to new building construction, conduct vapor intrusion evaluation and/or mitigation, if necessary) until respective volatile COCs in groundwater are addressed. The selected remedy for groundwater will be protective of human health through the reduction of COC concentrations in site groundwater through MNA and the maintenance of LUCs until all groundwater cleanup levels are met.

3.0 LAND USE CONTROLS

LUCs are used at sites where contaminants are left in place at levels that do not allow for unlimited use and unrestricted exposure. The LUCs ensure that any remaining contaminants do not pose an unacceptable risk to human health and the environment. LUCs can consist of institutional controls and/or engineering controls. Institutional controls, such as restrictions, notifications, etc., are typically legal documents in the form of deed restrictions, easements, and restrictive covenants. In the case of an active military base, they can also consist of Base Instructions, notations on installation land use plans, or similar instruments. In the form of a legal document, the institutional controls will run with the land. Engineering controls are typically barriers, such as a fence or engineered cap.

3.1 Operable Unit 5 - Marine Sediment - Land Use Controls

The ROD selected LUCs including institutional controls and engineering controls as components of the final remedy for OU5, to control or restrict certain types of property uses (Navy, 2014a). The LUCs included in the selected remedy will be maintained until concentrations of the CERCLA COCs have been reduced to clean up goals (on a surface-area weighted average) that allow for unlimited use and unrestricted exposure in the Site 19 OU5 Marine Sediment LUC Area. Also, the Navy will implement precautionary measures in the form of LUCs, to prevent potential exposure to asbestos that could potentially be present in dredged OU5 sediments. Institutional controls and engineering controls will be implemented to ensure that the LUC

performance objectives described below are met. The 2014 OU5 ROD approximated the areas over which the LUCs would apply. These areas will be referred to as the "Site 19 OU5 Marine Sediment LUC Area" and the "Engineered Cap Under Pier 2 LUC Area" in this LUC RD, as shown on Figure 3.

The performance objectives of the OU5 LUCs are as follows:

- Mitigate potential exposure to contaminants in shellfish by discouraging shellfishing in the Marine Sediment LUC Area until dredging and capping components of the remedy have been completed.
- Prevent any unauthorized disturbance of the engineered cap that will be installed under Pier 2 as part
 of the remedy.
- Mitigate/minimize exposure to asbestos that is potentially present in dredged sediment during remedy implementation and any authorized future dredging within the Marine Sediment LUC Area.

The LUCs established for the Site 19 OU 5 Marine Sediment LUC Area and the Engineered Cap Under Pier 2 LUC Area include the set of restrictions defined below. Following EPA and RIDEM approval of this LUC RD, the restrictions will be imposed on the Site property to ensure the LUC performance objectives are met.

The following activities and uses are inconsistent with the LUC performance objectives and are prohibited:

- Taking of shellfish from the Site 19 OU5 Marine Sediment LUC Area until dredging and capping components of the remedy have been completed.
- Activities that could disturb the engineered cap in the Engineered Cap Under Pier 2 LUC Area shown
 on Figure 3 and compromise the integrity of the remedy including, but not limited to, shellfishing or
 anchoring within the capped area under Pier 2; or construction, restoration, alteration, or demolition of
 Pier 2 below the waterline or over the capped area without prior concurrence by EPA Region 1 in
 consultation with RIDEM.
- Dredging or management of dredged sediment without development and implementation of precautionary measures and safe work practices to mitigate potential for exposure to asbestos that may be present in sediment.

The following activities and uses are consistent with the LUC objectives and will be allowed in the Site 19 OU5 Marine Sediment LUC Area (shown on Figure 3):

- Activities in accordance with COMNAVREG MIDLANT INSTRUCTION 11011.11A (Site Approval Process) dated 14 Feb 2011, and activities in accordance with NAVSTA NEWPORT INSTRUCTION (NAVSTANPTINST) 5090.15C dated 18 May 2015 (or subsequent revisions) (see Appendix A). Site approval is required for actions that affect or may affect facilities or land located on Navy-controlled land holdings. The site approval process includes determining if the proposed action is compatible with Environmental Restoration LUCs and requires NAVFAC MIDLANT Environmental to identify all environmental compliance requirements. The NAVSTA Installation Restoration (IR) Program Manager will provide notice and coordinate project review with the EPA and the State of Rhode Island for projects that could impact the remedy. Based on the outcome of this coordination, the IR Program Manager will provide guidance for projects to ensure consistency with the site remedy. The IR Program Manager will provide specific requirements for the project, detail waste management procedures, and establish standards for protecting remedial infrastructure and restoration of the project site.
- Construction, restoration, alteration, or demolition of Pier 2 below the waterline or over the capped area with prior concurrence by EPA Region 1 in consultation with RIDEM.
- Installation and maintenance of signage warning against fishing and shellfishing (until dredging activities are completed) and against disturbance of the engineered cap under Pier 2.
- Shellfishing within the Site 19 OU5 Marine Sediment LUC area after the Navy has completed dredging and capping and confirmation sampling, and the remedy is in place.
- LUC compliance monitoring activities (inspections and maintenance of the engineered cap) and longterm monitoring of sediment in the engineered cap area in accordance with the LUC RD and the Long-Term Management Plan (to be developed).
- Dredging and management of dredged sediment using precautionary measures and safe work practices for all future work to prevent exposure to asbestos potentially present in sediment.

Implementation actions to be taken to ensure that the LUC objectives are met are discussed in Section 4. Section 4.0 also defines the required notifications and authorizations, and the roles and responsibilities for the implementation actions.

3.2 Operable Unit 12 - On-Shore Soil and Groundwater - Land Use Controls

The ROD selected LUCs including institutional controls and engineering controls as components of the final remedy for OU12 to control or restrict certain types of property uses (Navy, 2014a). The LUCs included in the selected remedy will be maintained until concentrations of the COCs have been reduced to levels that allow for unlimited use and unrestricted exposure in the LUC Areas; the 2014 ROD for OU12 approximated the areas over which the LUCs would apply. These areas are referred to as the "Site 19 OU12 Soil LUC Area" and the "Site 19 OU12 Groundwater LUC Area" in this LUC RD, as shown on Figures 4 and 5, respectively.

In addition, the OU12 ROD established short-term LUCs in the Northern Area to address stockpiled soil, debris and sediment and potential contamination resulting from these stockpiles. The short-term protective measures to restrict exposure to ACM in stockpiled debris/soil and potentially contaminated sediment in the Northern Area were in place until the stockpiles were removed from the Site by July 2015.

The non-significant change to the ROD expanded the LUC boundary to include the Northern Area. It also added asbestos-specific warnings for both the Central and Northern Area to ensure workers are aware of this issue prior to conducting intrusive activities in these areas, and acknowledged that asbestos-related planning, training, and management requirements for any soil excavation applies to the Northern and Central Areas and will be included in excavation project documentation.

The performance objectives of OU12 LUCs are as follows:

Soil LUC Area (Figure 4):

- Prohibit any land uses resulting in unauthorized disturbance of the soil remedy components (including new and existing soil covers or pavement/concrete covers, and fencing) that prevent exposure to soil containing COCs exceeding industrial cleanup levels.
- Prohibit residential land use and development, and limit recreational use to the area along the paved exercise path shown in Figure 4.
- Prohibit excavation unless precautionary measures are established to ensure awareness of the
 presence of ACM and protect workers from exposure to the buried conduit and potential asbestos that
 may remain in the soil.

Groundwater LUC Area (Figure 5):

- Prohibit residential and industrial exposure to site groundwater until groundwater cleanup goals have been achieved.
- Prohibit disturbance of the groundwater remedy components (monitoring well network).
- Prohibit industrial exposure to vapors that may result from subsurface contaminants by requiring vapor intrusion evaluations and/or mitigation measures (such as installation of vapor barriers) for planned building construction projects, if necessary, until established cleanup goals for volatile organic COCs are met.

Institutional controls and engineering controls will be implemented to ensure that the above LUC performance objectives are met.

The LUCs established for the OU12 Soil and Groundwater LUC Areas include the set of restrictions defined below. Following EPA and RIDEM approval of this LUC RD, the restrictions will be imposed on the Site property to ensure the LUC performance objectives are met.

The following activities and uses are inconsistent with the LUC performance objectives and are prohibited:

Soil LUC Area (Figure 4):

- Any activities or land uses resulting in unauthorized disturbance of the soil remedy components (new and existing soil covers or pavement/concrete covers, fencing) that prevent exposure to soil with COCs exceeding industrial cleanup levels or ACM.
- Any soil excavation without asbestos-related planning, training, management and excavation project documentation.
- Residential use or redevelopment.
- Recreational use, except along the paved exercise path (constructed on existing cover) shown in Figure 4.

Groundwater LUC Area (Figure 5):

- Groundwater use, for any purpose. Activities that could result in exposure to contaminated groundwater (such as dewatering) without authorization.
- Activities that result in damage to or disturbance of monitoring wells.
- New construction without evaluation of potential vapor intrusion issues and/or mitigation.

The following activities and uses are consistent with the LUC objectives and will be allowed in the Soil LUC Area, and in the Groundwater LUC Area, as shown on Figures 4 and 5, respectively:

- Activities in accordance with COMNAVREG MIDLANT INSTRUCTION 11011.11A (Site Approval Process) dated 14 Feb 2011 (Appendix A). Site approval is required for actions that affect or may affect facilities or land located on Navy-controlled land holdings. The site approval process includes determining if the proposed action is compatible with Environmental Restoration LUCs and requires NAVFAC MIDLANT Environmental to identify all environmental compliance requirements. The NAVSTA IR Program Manager will provide notice and coordinate project review with the EPA and the State of Rhode Island for projects that could impact the remedy. Based on the outcome of this coordination, the IR Program Manager will provide guidance for projects to ensure consistency with the site remedy. The IR Program Manager will provide specific requirements for the project, detail waste management procedures, and establish standards for protecting remedial infrastructure and restoration of the project site.
- Monitoring activities including inspections and maintenance of the soil, paved, or concrete/paved
 covers; monitoring well installation, maintenance, abandonment; groundwater or soil sampling; vapor
 intrusion evaluations; and LUC compliance monitoring inspections by authorized personnel in
 accordance with the LUC RD and the Long-Term Management Plan (to be developed).
- Installation and maintenance of warning signs conforming to NAVSTA Newport warning sign standards.
- Recreational activities along the paved exercise path which is within the Soil LUC Area and is shown on Figure 4.
- Building construction for non-residential uses in accordance with applicable Base Instructions, and after evaluation of vapor intrusion issues and/or mitigation, if necessary.

Industrial land uses that comply with LUCs.

Implementation actions to be taken to ensure that the LUC objectives are met are discussed in the following section. Section 4.0 also defines the required notifications and authorizations and the roles and responsibilities for the implementation actions.

4.0 LAND USE CONTROL IMPLEMENTATION ACTIONS

Pursuant to the ROD, the Navy is responsible for implementing, inspecting, reporting, and enforcing the institutional controls in accordance with this LUC RD. For purposes of this LUC RD, the term "implementation actions" means actions to implement, operate, maintain, and enforce the LUC component of the remedy. The Navy will perform all implementation actions at Site 19 in accordance with *The Principles and Procedures for Specifying, Monitoring and Enforcement of Land Use Controls and Other Post-ROD Actions* (2003), the FFA, the RODs, and applicable Navy directives. The Navy may in the future delegate or transfer authority to conduct these actions to another entity as part of property transfer agreements (i.e., deed).

4.1 Operable Unit 5 - Marine Sediment - LUC Implementation Actions

The Navy will submit a copy of Figure 3 of this LUC RD to land record offices of the Town of Middletown, Rhode Island, and a listing of LUCs that have been imposed, for the limited purpose of providing public notice of the environmental conditions of and limitations on the use of property. Additionally, copies of Figure 3 will be provided to EPA and to the State of Rhode Island, which retains ownership of the land under the water.

As set forth in this LUC RD, the following implementation actions will be performed to ensure that the LUC objectives are met in accordance with the FFA and ROD:

1. Prepare a map defining the Site 19 OU5 Marine Sediment LUC Area and the Engineered Cap Under Pier 2 LUC Area boundaries. Depict on this map the location and boundaries of OU5 and the extent of the areas over which the LUCs will apply (Figure 3). Indicate where LUCs have been imposed and annotate LUCs in the Navy Geographic Information System (GIS) database and real estate summary map(s) for the installation. Follow LUC-related procedures pertaining to sediment or engineered cap-disturbing activity and changes in land use, as per NAVSTANPTINST 5090.15C, dated 18 May 2015 (or subsequent revisions), and Commander, Navy Region, Mid-Atlantic Instruction 5090.2, Installation Restoration; Land Use Controls at Navy Region, Mid-Atlantic Installations; Establishment and Maintenance, as amended. The Navy will notify EPA and RIDEM in advance of any changes to these

- internal procedural instructions that would impact the effectiveness of the LUCs. The instructions are provided in Appendix A.
- Incorporate Figure 3 into the Site 19 Long-Term Management Plan (to be developed); additionally, copies will be provided to EPA and RIDEM.
- 3. Monitor compliance with the LUCs. LUC monitoring and inspections will be coordinated with the long-term monitoring program. LUC monitoring will be conducted by the Navy to verify LUCs are being properly implemented and that the LUC performance objectives are being met. The LUC monitoring results will be provided to the EPA Region 1 and RIDEM as part of the long-term monitoring annual report. The LUC implementation actions to be conducted as part of the monitoring for OU5 are summarized in Table 1. LUC compliance inspections will be conducted on an annual basis unless the frequency is reduced by agreement with the Navy, EPA, and RIDEM. A checklist to be used during OU5 LUC inspections is provided as Appendix B.
- 4. Report and notify regulatory agencies. The notification requirements are summarized in Table 1 and include the following:
 - a. Notify EPA Region 1 and RIDEM 45 days in advance of any proposed change in land use that would require modifications to the LUCs to remain consistent with the LUC objectives or the selected remedy. The notice shall describe how the LUCs will be changed and mechanisms by which the new LUCs will be implemented to maintain the protectiveness of the remedy.
 - b. Notify EPA Region 1 and RIDEM by telephone and by e-mail as soon as practicable, but within 10 working days, after discovery of any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs. Notify EPA Region 1 and RIDEM regarding how the breach will be or has been addressed within 10 days of sending EPA Region 1 and RIDEM the discovery notification of the breach activity. For more complex breach situations, a telephone call within this 10-day period among Navy, EPA, and RIDEM to discuss options for addressing the breach will be considered sufficient to meet this notification requirement. Furthermore, any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs will be addressed as soon as practicable, but in no case will the process be initiated later than 10 days after the Navy becomes aware of the breach.
 - c. Notify the EPA Region 1 and RIDEM in writing at least 6 months prior to any anticipated transfer [or sale] of Navy-owned appurtenances or structures that are subject to LUCs out of Navy custody

and control, including any federal-to-federal transfer, so that EPA Region 1 and RIDEM can be involved in discussion with the Navy on the appropriate provisions to be included in the transfer terms and conveyance documents to maintain effective LUCs. If it is not possible for the Navy to notify EPA Region 1 and RIDEM at least 6 months prior, the Navy will make this notification as soon as possible, but no later than 60 days before the transfer or sale of any Navy-owned appurtenances or structures within OU5 subject to LUCs. The Navy shall provide a copy of the executed deed or transfer documents to EPA Region 1 and RIDEM.

- d. Submit reports of annual monitoring for LUC compliance. LUC compliance monitoring shall be conducted annually and the results submitted to the EPA Region 1 and RIDEM. The annual reports will be used in preparation of the Five-Year Review to evaluate the effectiveness of the remedy. The LUCs portion of the annual report will evaluate the status of the LUCs and how any LUCs deficiencies or inconsistent uses have been addressed. The LUCs portion of the annual report will also address whether Navy instructions remain current in regards to LUC enforcement, and whether use of the property has conformed with such restrictions and controls.
- 5. Obtain EPA Region 1 concurrence, in consultation with RIDEM, prior to modifying or terminating the LUCs or implementation actions. The Navy or other entity shall seek prior concurrence from EPA Region 1, in consultation with RIDEM, before taking any anticipated action that may disrupt the effectiveness of the LUCs or before taking any action that may alter or negate the need for LUCs.
- 6. Evaluate effectiveness of LUCs as part of each five-year review. Site remedy reviews are required by CERCLA and the National Contingency Plan as specified in the Site 19 OU5 Marine Sediment ROD. The third five-year review for NAVSTA Newport was completed in December 2014 (Navy, 2014c); the subsequent five-year review to be completed in 2019 will include an evaluation of the Site 19 remedy. The five-year reviews will be submitted to EPA Region 1 and RIDEM for review per the FFA.

Should the Navy fail to complete a required LUC implementation action, EPA and/or RIDEM shall notify the Navy Remedial Project Manager (RPM) and seek immediate action. If the Navy fails to complete a required LUC implementation action within a reasonable time of being so notified, EPA and/or RIDEM may notify the Deputy Assistant Secretary of the Navy (Environment), who will ensure that necessary action is taken.

Should a subsequent owner of or a third party at the Site 19 OU5 Marine Sediment structures or appurtenances fail to complete a required LUC implementation action for which such owner or party is responsible, EPA, RIDEM, and the Navy will consult on the appropriate enforcement action. If, after the structures or appurtenances within Site 19 OU5 Marine Sediment have been transferred, the Navy fails to complete a required LUC implementation for which it is responsible, EPA and/or RIDEM will notify the Navy

RPM or designated project manager in accordance with Section VIII in the NAVSTA Newport FFA. If necessary, EPA and /or RIDEM may notify the Deputy Assistant Secretary of the Navy (Environment), who will ensure that necessary corrective action is taken.

4.2 Operable Unit 12 - On-Shore Soil and Groundwater - LUC Implementation Actions

The Navy will submit a copy of Figures 4 and 5 of this LUC RD to the land record offices of the Cities of Middletown and Newport, Rhode Island, and a listing of LUCs that have been imposed, for the limited purpose of providing public notice of the environmental conditions of and limitations on the use of property. Additionally, copies of Figure 4 and Figure 5 will be provided to EPA and RIDEM.

As set forth in this LUC RD, the following implementation actions will be performed to ensure that the LUC objectives for OU12 are met, in accordance with the FFA and ROD:

- 1. Prepare maps defining the Site 19 OU12 Soil LUC Area boundaries and Groundwater LUC Area boundaries. Depict on these maps the location and boundaries of Site 19 OU12 Soil LUC Area and Groundwater LUC Area and the extent of the areas over which the LUCs will apply (Figures 4 and 5). Indicate where LUCs have been imposed and annotate LUCs in the Navy GIS database and real estate summary map(s) for the installation. Follow LUC-related procedures pertaining to ground-disturbing activity, changes in land use, or groundwater use, as per NAVSTANPTINST 5090.15C, dated 18 May 2015, (or subsequent revisions), and Commander, Navy Region, Mid-Atlantic Instruction 5090.2, Installation Restoration; Land Use Controls at Navy Region, Mid-Atlantic Installations; Establishment and Maintenance, as amended. The Navy will notify EPA and RIDEM in advance of any changes to these internal procedural instructions that would impact the effectiveness of the LUCs. The instructions are provided in Appendix A.
- 2. Incorporate Figures 4 and 5 into the Site 19 Long-Term Management Plan (to be developed); additionally, copies will be provided to EPA and RIDEM.
- 3. Monitor compliance with the LUCs. LUC monitoring will be coordinated with the Long-Term Management program. LUC monitoring will be conducted by the Navy to verify LUCs are being properly implemented and that the LUC performance objectives are being met. The LUC monitoring results will be provided to the EPA Region 1 and RIDEM as part of the Long-Term Management annual report. The LUC implementation actions to be conducted as part of the monitoring for OU12 are summarized in Table 2. LUC compliance inspections will be conducted on an annual basis unless the frequency is reduced by agreement with the Navy, EPA, and RIDEM. A checklist to be used for OU12 LUC inspections is provided as Appendix C.

- 4. Report and notify regulatory agencies. The notification requirements for OU12 are summarized in Table 2 and include the following:
 - a. Notify EPA Region 1 and RIDEM 45 days in advance of any proposed change in land use that would require modifications to the LUCs to remain consistent with the LUC objectives or the selected remedy. The notification shall describe how the LUCs will be changed and mechanisms by which the new LUCs will be implemented to maintain the protectiveness of the remedy.
 - b. Notify EPA Region 1 and RIDEM by telephone and by e-mail as soon as practicable, but within 10 working days, after discovery of any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs. Notify EPA Region 1 and RIDEM regarding how the breach will be or has been addressed within 10 days of sending EPA Region 1 and RIDEM the discovery notification of the breach activity. For more complex breach situations, a telephone call within this 10-day period among Navy, EPA, and RIDEM to discuss options for addressing the breach will be considered sufficient to meet this notification requirement. Furthermore, any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs will be addressed as soon as practicable, but in no case will the process be initiated later than 10 days after the Navy becomes aware of the breach.
 - c. Notify the EPA Region 1 and RIDEM in writing at least 6 months prior to any anticipated transfer [or sale] of the property subject to LUCs out of Navy custody and control, including any federal-to-federal transfer, so that EPA Region 1 and RIDEM can be involved in discussion with the Navy on the appropriate provisions to be included in the transfer terms and conveyance documents to maintain effective LUCs. If it is not possible for the Navy to notify EPA Region 1 and RIDEM at least 6 months prior, the Navy will make this notification as soon as possible, but no later than 60 days before the transfer or sale of any property subject to LUCs. The Navy shall provide a copy of the executed deed or transfer documents to EPA Region 1 and RIDEM.
 - d. Submit reports of annual monitoring for LUC compliance. LUC compliance monitoring shall be conducted annually and the results submitted to the EPA Region 1 and RIDEM. The annual reports will be used in preparation of the Five-Year Review to evaluate the effectiveness of the remedy. The LUCs portion of the annual report will evaluate the status of the LUCs and how any LUCs deficiencies or inconsistent uses have been addressed. The LUCs portion of the annual report will also address whether Navy instructions remain current in regards to LUC enforcement, and whether use of the property has conformed with such restrictions and controls.

- 5. Obtain EPA Region 1 concurrence, in consultation with RIDEM, prior to modifying or terminating the LUCs or implementation actions. The Navy or other entity shall seek prior concurrence from EPA Region 1, in consultation with RIDEM, before taking any anticipated action that may disrupt the effectiveness of the LUCs or before taking any action that may alter or negate the need for LUCs.
- 6. Evaluate effectiveness of LUCs as part of each five-year review. Site remedy reviews are required by the CERCLA and the National Contingency Plan as specified in the Site 19 (OU12) On-Shore Soil and Groundwater ROD. The third five-year review for NAVSTA Newport was completed in December 2014 (Navy, 2014c); the subsequent five-year review to be completed in 2019 will include an evaluation of the Site 19 remedy. Five-year reviews will be submitted to EPA Region 1 and RIDEM for review, in accordance with the FFA.

Should the Navy fail to complete a required LUC implementation action, EPA and/or RIDEM shall notify the Navy RPM and seek immediate action. If the Navy fails to complete a required LUC implementation action within a reasonable time of being so notified, EPA and/or RIDEM may notify the Deputy Assistant Secretary of the Navy (Environment), who will ensure that necessary action is taken.

Should a subsequent owner of or a third party at the Site 19 On-shore Derecktor Shipyard (OU12) property fail to complete a required LUC implementation action for which such owner or party is responsible, EPA, RIDEM, and the Navy will consult on the appropriate enforcement action. If, after the property has been transferred, the Navy fails to complete a required LUC implementation for which it is responsible, EPA and/or RIDEM will notify the Navy RPM or designated project manager, in accordance with Section VIII in the NAVSTA Newport FFA. If necessary, EPA and /or RIDEM may notify the Deputy Assistant Secretary of the Navy (Environment), who will ensure that necessary corrective action is taken.

5.0 REFERENCES

DoD (Department of Defense), 2003. The Principles and Procedures for Specifying, Monitoring and Enforcement of Land Use Controls and Other Post-ROD Actions.

EPA (United States Environmental Protection Agency), State of Rhode Island, and Navy (Department of the Navy), 1992. Federal Facility Agreement Under CERCLA 120, In the Matter of the U.S. Department of the Navy, Naval Station Newport, Newport, Rhode Island. March.

Navy, 2003. Commander, Navy Region (COMNAVREG), Mid-Atlantic (MIDLANT) Instruction 5090.2. Installation Restoration; Land Use Controls at Navy Region, Mid-Atlantic Installations; Establishment and Maintenance. May.

Navy, 2011. Commander, Navy Region (COMNAVREG), Mid-Atlantic (MIDLANT) Instruction 11011.11A. Site Approval Process. February 14.

Navy, 2014a. Record of Decision for Site 19. Former Derecktor Shipyard Marine Sediment, Operable Unit 5, Naval Station Newport, Middletown/Newport, Rhode Island. September.

Navy, 2014b. Record of Decision for Site 19. On-Shore Derecktor Shipyard Soil and Groundwater, (Operable Unit 12), Naval Station Newport, Middletown/Newport, Rhode Island. September.

Navy, 2014c. Third Five-Year Review, Naval Station Newport, Newport, Rhode Island. December.

Navy, 2015. Naval Station Newport Instruction (NAVSTANPTINST) 5090.15C. Land Use Restrictions for Installation Restoration (IR) Sites and Other Contaminated Properties. May 18.

Navy, 2016. Non-Significant Change to the Record of Decision Dated September 2014, Operable Unit 12, Soil and Groundwater at Site 19, On-Shore Derecktor Shipyard, Naval Station Newport, Newport Rhode Island. March.



SUMMARY OF LAND USE CONTROL (LUC) IMPLEMENTATION ACTIONS - OU5 - MARINE SEDIMENT LAND USE CONTROL REMEDIAL DESIGN FOR SITE 19 – FORMER DERECKTOR SHIPYARD NAVAL STATION NEWPORT, MIDDLETOWN/NEWPORT, RHODE ISLAND PAGE 1 of 2

DESCRIPTION OF LUC REQUIREMENT	FREQUENCY		
INSTITUTIONAL CONTROLS			
Issue final LUC RD	One time		
Prepare Long-Term Management (LTMgt) Plan incorporating Figure 3 of this LUC RD, and submit to EPA and RIDEM.	One time		
Submit to the Town of Middletown, which abuts OU5, to RIDEM, which retains ownership of the land under the water, and to EPA, a copy of the Site 19 OU5 LUC Area figure (Figure 3 of this LUC RD) and a listing of LUCs that have been imposed, for the limited purpose of providing public notice of environmental conditions of and limitations on the use of property.	One time		
Provide copy of the LUC RD Plan, including attachments and updates, to tenants or other non-Navy entities using the Pier as needed for all new lease agreements.	One time		
Annotate OU5 LUC Area boundaries in Navy GIS database and real estate summary maps for installation.	One time		
Conduct OU5 LUC compliance monitoring/ inspections	Annually		
Monitor integrity of engineered cap in accordance with the LTMgt Plan	Annually		
Issue LUC Inspection Report / completed Inspection Checklist to EPA and RIDEM	Annually		
Direct the security patrols to enforce all posted activity restrictions, as depicted in Figure 3.	As observed		
Evaluate effectiveness of LUCs as part of each five-year review.	Once every 5 years		
ENGINEERING CONTROLS			
Install and maintain warning signs on the piers or in the waters of the LUC Area: 1) short-term signage to notify persons that shellfish should not be taken from within OU5 until the dredging and capping components of the remedy are completed; 2) permanent signage to prevent disturbance of the engineered sand/gravel cap installed at the target sub-pier area under Pier 2; it would also prohibit setting anchors in such a way that may impact the engineered cap.	Installation - one time Maintenance - as necessary (and with removal of the "short-term" signage following completion of dredging and capping)		
Prepare a summary of mandated precautionary measures and safe work practices for managing dredged sediment that potentially contains asbestos. These precautionary measures and safe work practices are for use in any construction operations that involve removal of sediment in bulk, and for any future work to demolish or restore the pier.	One time		

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SUMMARY OF LAND USE CONTROL (LUC) IMPLEMENTATION ACTIONS - OU5 - MARINE SEDIMENT LAND USE CONTROL REMEDIAL DESIGN FOR SITE 19 – FORMER DERECKTOR SHIPYARD NAVAL STATION NEWPORT, MIDDLETOWN/NEWPORT, RHODE ISLAND PAGE 2 of 2

DESCRIPTION OF LUC REQUIREMENT	FREQUENCY
NOTIFICATION REQUIREMENTS	
The Navy will notify EPA Region 1 and RIDEM in advance of any proposed change in land use that would require modifications to the LUCs, to remain consistent with the LUC objectives or the selected remedy.	Per event, 45 days in advance
The Navy will notify EPA Region 1 and RIDEM by telephone and by e-mail after discovery of any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs.	Per event, as soon as practicable, but within 10 days after discovery
The Navy will notify EPA Region 1 and RIDEM regarding how the discovered activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs, will be or has been addressed. For more complex inconsistencies or potential interferences, a telephone call within 10 days of the event, among Navy, EPA, and the RIDEM to discuss options for addressing the breach will be considered sufficient to meet this notification requirement. Furthermore, any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs will be addressed as soon as practicable, but in no case will the process be initiated later than 10 days after the Navy becomes aware of the breach.	Per event, as soon as practicable, but within 10 days after notice of breach
The Navy will notify the EPA Region 1 and RIDEM in writing of any anticipated transfer or sale of Navy-owned appurtenances or structures within OU5 subject to LUCs out of Navy custody and control, including any federal-to-federal transfer. If it is not possible for the Navy to notify EPA Region 1 and the RIDEM at least 6 months prior, the Navy will make this notification as soon as possible, but no later than 60 days before the transfer or sale of these appurtenances or structures within OU5 property subject to LUCs.	Per event, 6 months advance notice, but not less than 60 days

Notes:

EPA – U.S. Environmental Protection Agency RIDEM – Rhode Island Department of Environmental Management

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SUMMARY OF LAND USE CONTROL (LUC) IMPLEMENTATION ACTIONS - OU12 - ON-SHORE SOIL AND GROUNDWATER LAND USE CONTROL REMEDIAL DESIGN FOR SITE 19 – FORMER DERECKTOR SHIPYARD NAVAL STATION NEWPORT, MIDDLETOWN/NEWPORT, RHODE ISLAND PAGE 1 of 2

DESCRIPTION OF LUC REQUIREMENT	FREQUENCY
INSTITUTIONAL CONTROLS	
Issue final LUC RD	One time
Prepare Long-Term Management Plan incorporating Figures 4 and 5 of this LUC RD and submit to EPA and RIDEM.	One time
Submit to the Land Record Offices of the Town of Middletown and the City of Newport and to EPA and RIDEM, copies of the Site 19 Land Use Control Area Figures (Figures 4 and 5 of this LUC RD) and a listing of LUCs that have been imposed, for the limited purpose of providing public notice of environmental conditions of and limitations on the use of property.	One time
Annotate LUCs boundaries in Navy GIS database and real estate summary maps for installation.	One time
Conduct LUC compliance monitoring/inspections	Annually
Issue LUC Inspection Report / completed Inspection Checklist to EPA and RIDEM	Annually
Conduct inspection of asphalt/soil cover areas	Annually
Prohibit excavation unless precautionary measures are established to ensure awareness of the presence of ACM and protect workers from exposure to the buried conduit and potential asbestos that may remain in the soil.	As needed for excavation
Evaluate effectiveness of LUCs as part of each five-year review.	Once every 5 years
ENGINEERING CONTROLS	
Contain stockpiled soil and debris in the Northern Area (Short-Term Soil LUC Area) until removal, and maintain existing fencing until soil sampling results are available and a determination is made regarding further remedial action.	No longer applicable based on removal of soil stockpiles
Conduct MNA groundwater monitoring	In accordance with the Long-Term Management Plan to be developed
Prepare and issue MNA Groundwater Monitoring Report	In accordance with the Long-Term Management Plan to be developed

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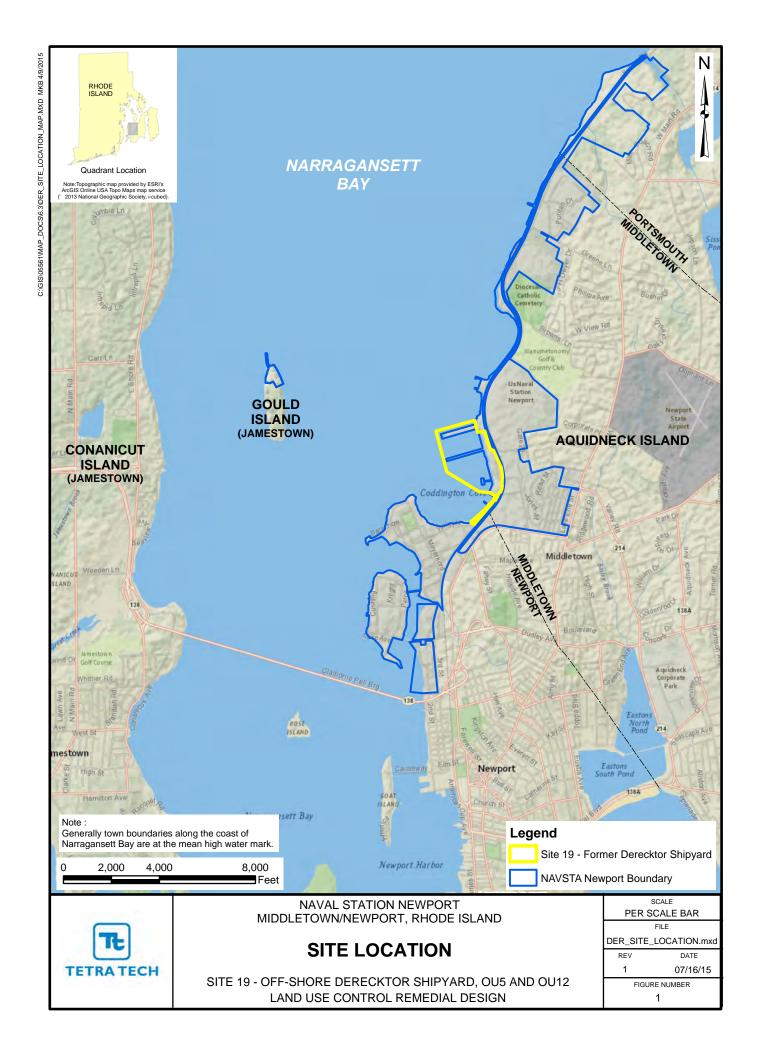
SUMMARY OF LAND USE CONTROL (LUC) IMPLEMENTATION ACTIONS - OU12 - ON-SHORE SOIL AND GROUNDWATER LAND USE CONTROL REMEDIAL DESIGN FOR SITE 19 - FORMER DERECKTOR SHIPYARD NAVAL STATION NEWPORT, MIDDLETOWN/NEWPORT, RHODE ISLAND PAGE 2 of 2

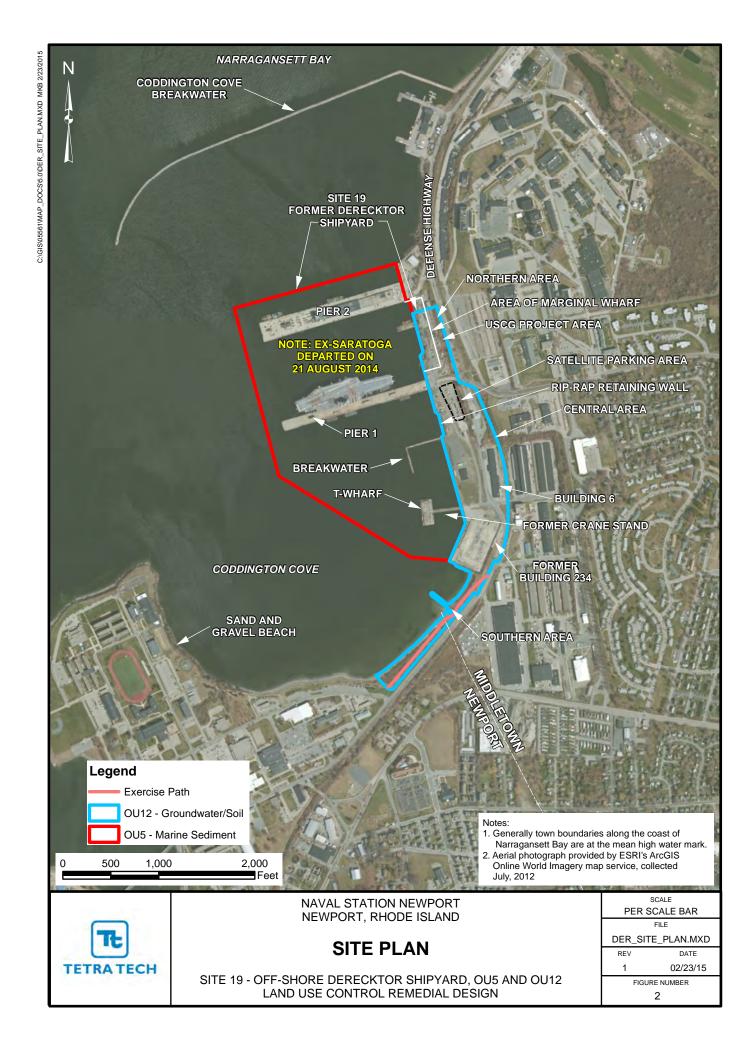
DESCRIPTION OF LUC REQUIREMENT	FREQUENCY
NOTIFICATION REQUIREMENTS	
The Navy will notify EPA Region 1 and RIDEM in advance of any proposed change in land use that would require modifications to the LUCs to remain consistent with the LUC objectives or the selected remedy.	Per event, 45 days in advance
The Navy will notify EPA Region 1 and RIDEM by telephone and by e-mail after discovery of any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs.	Per event, as soon as practicable but within 10 days after discovery
The Navy will notify EPA Region 1 and RIDEM regarding how the discovered activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs, will be or has been addressed. For more complex inconsistencies or potential interferences, a telephone call within 10 days of the event, among Navy, EPA, and RIDEM to discuss options for addressing the breach will be considered sufficient to meet this notification requirement. Furthermore, any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs will be addressed as soon as practicable, but in no case will the process be initiated later than 10 days after the Navy becomes aware of the breach.	Per event, as soon as practicable but within 10 days after notice of breach
The Navy will notify the EPA Region 1 and RIDEM in writing of any anticipated transfer or sale of the property subject to LUCs out of Navy custody and control, including any federal-to-federal transfer. If it is not possible for the Navy to notify EPA Region 1 and RIDEM at least 6 months prior, the Navy will make this notification as soon as possible, but no later than 60 days before the transfer or sale of any property subject to LUCs.	Per event, 6 months advance notice, but not less than 60 days

Notes: EPA – U.S. Environmental Protection Agency RIDEM – Rhode Island Department of Environmental Management

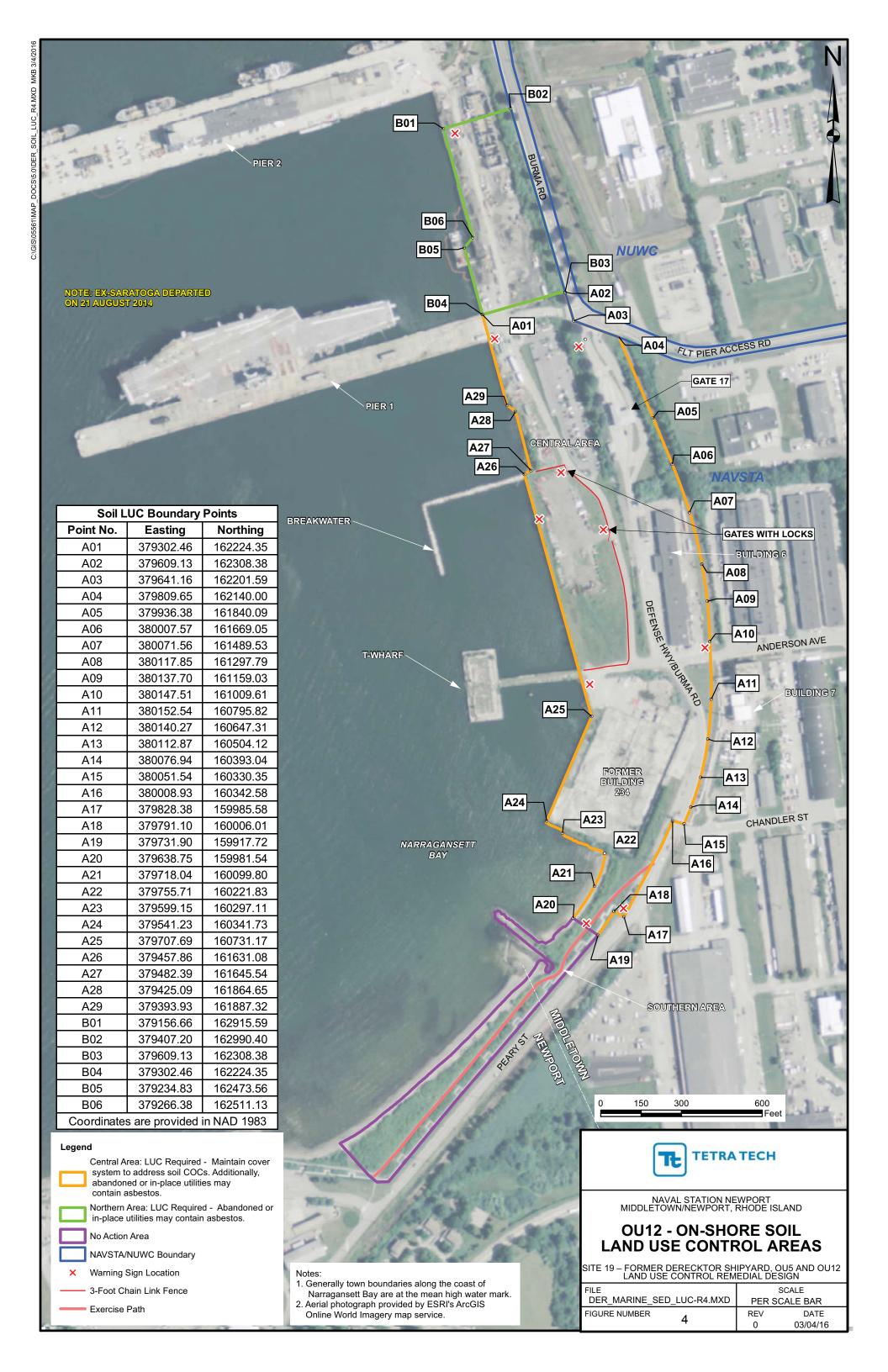
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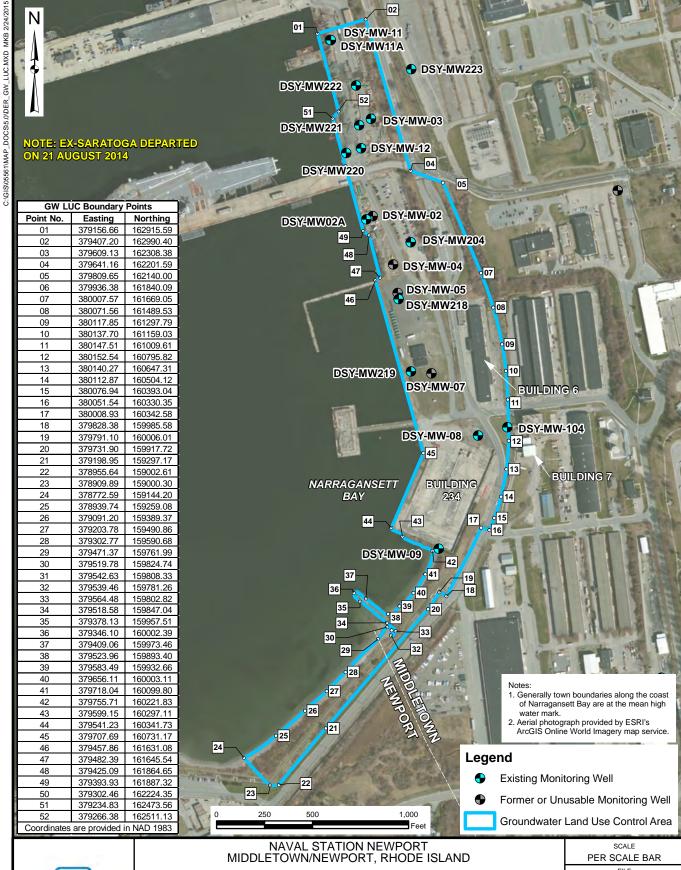














OU12 - GROUNDWATER LAND USE CONTROL AREA

SITE 19 FORMER DERECKTOR SHIPYARD, OU5 AND OU12 LAND USE CONTROL REMEDIAL DESIGN

SCALE		
PER SCALE BAR		
FILE		
DER_GW_LUC.MXD		
REV	DATE	
REV 1	DATE 02/24/15	
1		

APPENDIX A LUC INSTRUCTIONS





DEPARTMENT OF THE NAVY

COMMANDER
NAVY REGION, MID-ATLANTIC
1510 GILBERT ST.
NORFOLK, VA 23511-2737

IN REPLY REFER TO:

COMNAVREGMIDLANTINST 11011.11A N4/ARE 1 4 FEB 2011

COMNAVREG MIDLANT INSTRUCTION 11011.11A

From: Commander, Navy Region, Mid-Atlantic

Subj: SITE APPROVAL REQUIREMENTS AND PROCESS

Ref: (a) OPNAVINST 11000.16A w/CH-1

(b) NAVFACINST 11010.45

(c) COMNAVREGMIDLANTINST 5090.2

(d) NOSSA INST 8020.22

(e) NAVFAC BMS B-2.1.7-B-2.1.10 Site Approval Processes

Encl: (1) Sample Site Approval Request Letter

(2) NAVFAC Site Approval Request Form (NAVFAC 11010/31)

- 1. <u>Purpose</u>. Provide guidance for process and preparation of site approvals in the Navy Region, Mid-Atlantic, Area of Responsibility (AOR).
- 2. Cancellation. COMNAVREGMIDLANTINST 11011.11.
- 3. <u>Background</u>. Per reference (a), Regional Commanders are responsible for management of land and facilities in their Regions. Reference (a) stipulates planning documentation will be prepared and submitted, per reference (b). The site approval process is the review of proposed actions that affect or may affect facilities or land located on Navy-controlled land holdings. The site approval review process includes determining if the proposed action is compatible with Mission requirements, natural and man-made constraints, land use, Installation architecture and appearance, Installation master plan or Shore Infrastructure Plan (SIP), sustainable development principles, Environmental Restoration Land Use Controls per reference (c), and all applicable laws and regulations.
- 4. <u>Policy</u>. Site approval is not required for routine maintenance and routine repair of facilities. Per reference (b), site approval is required for all actions sited on Navy-controlled land holdings, regardless of funding source, for the following situations:
- a. Any project or real estate action that will have explosives safety criteria implications associated with ammunitions and explosives, per reference (d).

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- b. Any project or real estate action that affects, or is affected by, airfield safety criteria.
- c. Any project or real estate action that creates or is proposed to be in an area of electromagnetic illumination, or involves electromagnetic transmission.
- d. Any project, real estate action, or proposed use of property that proposes changing the functional use of a facility or the land use or physical layout of an area.
- e. Any proposed use of property, permanent or temporary, that involves placing or removing a facility or structure.
- 5. <u>Implementation</u>. The Installation Commanding Officer (ICO) will be responsible for implementation of the site approval process under references (b) and (c). The Installation Public Works Department (PWD) will manage this process on behalf of the ICO. The ICO will be the Approving Official but may choose to delegate this authority to the Public Works Officer.
- a. Activities initiating a proposed action will submit a request for site approval cover letter, enclosure (1), signed by the unit commander, or their designated representative, to the responsible ICO (Attn: Public Works Officer). Note: Request Cover Letters are not required if the PWD is self-generating the site approval. The Activity and the PWD Planner will work together to prepare Section A of the Naval Facilities Engineering Command (NAVFAC) Site Approval Request Form, enclosure (2). The PWD will follow the process identified in references (d) and (e). In situations where the Activity does not specify a particular Installation for the site, the request for site approval shall be submitted to the Assistant Regional Engineer (ARE), COMNAVREG MIDLANT. At the discretion of the ARE, site approvals may require review and endorsement by the ARE.
- b. Naval Facilities Engineering Command, Mid-Atlantic (NAVFAC MIDLANT) Environmental will identify all of the environmental and National Environmental Protection Act (NEPA) compliance requirements as described in reference (e). In some situations, permits may be required, or an Environmental Assessment (EA) may be required. Final site approval will not be granted until all required NEPA and Clean Air Act (CAA) documentation is completed.
- c. In some cases, NEPA documentation is still required when site approval is not (e.g., repair of historic facilities).

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- d. The PWD will process, track, and maintain a record of all Activity site approvals except as otherwise described in reference (d) for explosive safety site approvals.
- e. Relocatable facilities (trailers) require separate endorsement via ARE (OPNAVINST 11010.33C) in addition to the site approval process.
- f. Actions involving explosive safety, electromagnetic radiation, waivers to airfield safety criteria, or small arms range surface danger zones require additional action and approval through the applicable authority: Naval Ordnance Safety and Security Activity (NOSSA); Department of Defense Explosive Safety Board (DDESB); Space and Naval Warfare Systems Command (SPAWAR); Naval Air Systems Command (NAVAIR); Commander, Navy Installations Command (CNIC); or Chief of Naval Operations (CNO). These reviews will be coordinated by the PWD Planner. Because of the approval chain, allow additional time (1 to 8 months) for processing.
- 6. Site approvals are granted based upon the information in the request. The site approval becomes invalid if any of the conditions in the original request materially change.
- 7. Forms. NAVFAC Site Approval Request Form 11010/31 is supplied by N4, Regional Engineer, as enclosure (2) of this instruction. More detail on the site approval process and Site Approval checklists can be found in references (d) and (e). Environmental Checklists vary by State and can be provided by the Public Works Department at the Installation.

Chief of Staff

Distribution: Electronic only, via CNIC Web site/COMNAVREG MIDLANT: https://g2.cnic.navy.mil/cnichome/pages/cnichome.aspx

COMNAVREGMIDLANTINST 11011.11A 1 4 FEB 2011

SAMPLE SITE APPROVAL REQUEST LETTER

11011 Code

	(Activity Head) Commanding Officer, (Attn: Public Works Officer)
Subj:	REQUEST FOR SITE APPROVAL FOR
Ref:	(a) NAVFACINST 11010.45
Encl:	(1) NAVFAC Site Approval Request Form (NAVFAC 11010/31)
	reference (a), enclosure (1) is forwarded for your approval. Requesting site approval to (briefly explain).
require	addition to completing site approval, request the ed National Environmental Policy Act (NEPA) documentation ciated and completed to allow this project to be executed.
-	point of contact for this project is (name) at cial and DSN phone number), or (E-Mail).

SIGNATURE BLOCK

SAMPLE

REQUEST FOR PR	OJECT SITE APPROVAL	ÆXPLOSIVES SAFET PAR DIRECTIONS IN NAV	T I	AVFAC 11010/31 (1	(AVFAC MIDLANT REV. 8-2009)
SECTION A - INSTALL	ATION SUBMISSION				
1. To:			2. From:		
3. Program Year:	4. Cost (\$000):	5. Type Funding	6. Activity UIC		7. Date:
Category Code and Project Titl	e:		· · · · · · · · · · · · · · · · · · ·		9. Project Number
10. Type of Project: New Construction Change Use Addition to Existing Facility Major Modification to Existin	Repair by R	e and/or Repairs	Other	Expl	f Request: old Safety Site Approval osives Site/Safety Certification Site Approval ubmittal or Standard Site Approval Safety Criteria Involved)
13Sets of Project Maps A	ttached	14Sets Pa	rt II Division(s)	Attached	
SECTION B -NAVFAC	REVIEW				
Name/Code/Phone No. of Revi	ewer/E-Mail Address:				2. Date Received:
3. Evaluation:					
Safety Review Requested: (che NOSSA DDES		☐ NAVAIR	☐ CNO I	OTHER	5. Date Forwarded:
6. Date of Safety Certification:	NOSSA DDE	SPAWAR	NAVAIR	CNO	OTHER
SECTION C - FINAL SITE	APPROVAL ACTION		O Contilled to a bid a shift a ch		
Approvals: Site Approved Site Disapproved			Certification Identificat	ion:	
 □ Deferred/Returned □ Explosives Safety Certification □ Explosives Safety Certification □ Interim Construction Waiver 	on DISAPPROVED		3. Remarks		
· · · · · · · · · · · · · · · · · · ·	d Safety Waiver Required Explosives Safety Review Req	uired	5. Approving Official:		6. Date:





DEPARTMENT OF THE NAVY

NAVAL STATION NEWPORT 690 PEARY STREET NEWPORT, RHODE ISLAND 02841-1522

IN REPLY REFER TO:

NAVSTANPTINST 5090.15C

ENV

MAY 1 8 2015

NAVAL STATION (NAVSTA) NEWPORT INSTRUCTION 5090.15C

From: Commanding Officer, Naval Station Newport

subj: LAND USE RESTRICTIONS FOR INSTALLATION RESTORATION (IR)

SITES AND OTHER CONTAMINATED PROPERTIES

Ref: (a) OPNAVINST 5090.1D, Chapter 42

- (b) OPNAVINST 5100.23G CH-1 Navy Safety and Occupational Health Program Manual
- (c) COMNAVREGMIDLANTINST 5090.2 Installation Restoration; Land Use Controls at Navy Region Mid-Atlantic Installations; Establishment and Maintenance Dated 27 May 2003
- (d) OSHA 29 CFR 1910.120 HAZWOPER
- (e) Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA)
- (f) Toxic Substances Control Act (TSCA)
- (g) Superfund Amendments and Reauthorization Act of 1986 (SARA)
- (h) Resource Conservation and Recovery Act (RCRA)
- (i) Rhode Island Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases
- (j) Federal Facility Agreement of 1992
- (k) Site 9 Land Use Control Remedial Design (LUCRD) for the Old Fire Fighting Training Area Operable Unit 3 of February 2012
- (1) Site 8 Land Use Control (LUC) Remedial Design (RD) for the Naval Undersea Systems Center (NUSC) Disposal Area of October 2013
- (m) Site 1 Land Use Control (LUC) Remedial Design (RD) for McAllister Point Landfill Operable Unit 1 of February 2012
- (n) Site 12 Land Use Control (LUC) Remedial Design (RD) for Decision Unit 4-1 at Tank Farm 4 Operable Unit 11 of April 16, 2014
- (o) Site 13 Land Use Control (LUC) Remedial Design (RD) for Decision Unit 5-1 at Tank Farm 5 Operable Unit 2 of July 23, 2014

- (p) Site 19 Land Use Control (LUC) Remedial Design (RD) for the Former Derecktor Shipyard Operable Units 5 and 12 of 2015
- (q) Site 17 Land Use Control (LUC) Remedial Design (RD) for the Gould island Operable Unit 6 of 2015
- (r) NAVSTA Newport Instruction 5090.27A Land Use Restrictions at the Former Building 86 CHI and Building 355 CP, dated 27 August 2012
- (s) COMNAVREGMIDLANTINST 11011.11 Site Approval Process dated 01 Dec 2004
- (t) COMNAVREGMIDLANTINST 11011.12A Obtaining Work Permits dated 08 May 2003

Encl: (1) IR Site Map for Naval Station Newport

- (2) Former Building 86 CHI and Building 355 CP Areas
- (3) Former Building 70 Midway Site
- (4) Gate 2 Phytoremediation Area
- 1. Purpose. This instruction establishes a local uniform policy and requirements at NAVSTA Newport to restrict land use, site development, and "activities that disturb soil, sediment, groundwater, or surface water" at the IR sites in enclosure (1), the other contaminated or LUC restricted property in enclosures (3) through (4) or the buried asbestos debris sites at Stillwater Basin, Evans Hall Bldg. 1284 CHI, and Ney Hall Bldg. 292 CP to achieve the following:
- a. Protect the remedies in place from damage. Remedies typically consist of engineered soil cover systems as well as asphalt and concrete surfaces.
- b. Protect human health and the environment from exposure to chemicals in the soil, groundwater, surface water, and air.
- c. Enforce the LUCs for the sites in references (k) through (r) as agreed to by the United States Environmental Protection Agency (EPA), Rhode Island Department of Environmental Management (RIDEM), and the Navy.
- d. Control access and use of IR sites and other contaminated or LUC restricted property that do not yet have a LUC because the investigations are ongoing.

- 2. <u>Cancellation</u>. NAVSTA NEWPORT/LOCAL AREA RI COORDINST 5090.15B.
- 3. <u>Applicability</u>. This instruction is applicable to all Navy departments, tenant commands, contractors, visitors, and personnel at NAVSTA Newport.
- Background. NAVSTA Newport was placed on the National Priorities List in 1989 due to the contamination present at the IR sites shown in enclosure (1). A Federal Facility Agreement (FFA), reference (j), was executed in 1992 between the Navy, EPA, and the DEM to facilitate the restoration of these sites. The FFA specifies how the IR sites are studied and cleaned-up. regulatory framework for studying and cleaning-up IR sites is specified in detail in references (d) through (i). The IR sites include: Tank Farms 1, 2, 3, 4 and 5; the former Derecktor Shipyard (Onshore & Offshore); McAllister Point Landfill; Gould Island (Onshore & Offshore); Coddington Cove Rubble Fill; Carr Point Storage Area; Carr Point Shooting Range; various Coddington Cove Buried Asbestos Debris Sites shown in enclosure (1) on page 14 (Nimitz Hall Bldg. 1358 CP, Nimitz Field, Bishops Rock, Prichard Field North and South, Combat Training Pool Bldg. 1357 CP, and the Marine Detachment Bldg. 1112 CP; Naval Underwater System Center (NUSC) Disposal Area, and the Old Fire Fighting Training Area (OFFTA). A portion of the John H. Chafee Fitness Center is also part of the OFFTA IR site.

There are other contaminated and LUC restricted property at NAVSTA Newport. Polychlorinated biphenyl (PCB) contamination is present at Building 355 CP and the former Building 86 CHI. buildings are being studied and cleaned up to satisfy the Toxic Substances Control Act. These 2 PCB contaminated properties are shown in enclosure (2) and the corresponding LUCs are documented in reference (t). Oil contamination and state- and federallyregulated hazardous substances are also present at former Building 70 Midway and Tank Farms 1, 2, 3, 4 and 5. The former Building 70 Midway site, which is shown in enclosure(3), is regulated under state Underground Storage Tank and Site Remediation Regulations, and will also be remediated to satisfy the requirements of the Toxic Substances Control Act. Portions of Tank Farms 1,2,3,4 and 5 are regulated under CERCLA and PCB contamination at Tank Farms 1, 2 and 3 is also being addressed to satisfy the requirements of TSCA. Arsenic contamination is present throughout NAVSTA Newport and is managed under a state approved Soil Management Plan. There is an arsenic phytoremediation area at Gate 2, which is shown in enclosure (4). In addition to the IR site described above as "various Coddington Cove Buried Asbestos Debris Sites", buried asbestos debris has been found at Stillwater Basin, Evans Hall Bldg. 1284 CHI, and Ney Hall Bldg. 292 CP. Buried asbestos debris sites will be controlled through the following actions or requirements:

- (a) Surface materials (building footprints, pavement and structural materials like geotextile layers and reinforced and artificial turf), 2 feet or more of clean soils or a combination of soil and other structural materials will be used to isolate asbestos from exposure. For example, the causeway portion of the Bishop Rock recreation area is covered with a geotextile and 1 foot of gravel;
- (b) Remedial actions will be implemented, likely LUCs, to manage buried asbestos;
- (c) An Asbestos Hazard Reduction Plan will be prepared and approved by the Environmental Office prior to disturbing surface soils or materials; and
- (d) Contractors and government workers will stop work to determine if asbestos is present when building rubble is encountered at any construction or work site.

5. Definitions

- a. <u>Installation Restoration (IR) Site</u>. An IR site is a property included in either the Installation Restoration or Military Munition Response Programs. These programs address contamination from a hazardous substance, pollutant, contaminant, and military munitions waste at active installations. Through these programs, the Navy complies with environmental cleanup laws, such as the Comprehensive Environmental Response, Compensation, and Liability Act, also known as the Superfund Act.
- b. Land Use Controls (LUCs). Also known as "institutional controls," are defined broadly as legal measures that limit human exposure by restricting activity, use, and access to properties with residual contamination. LUCs can consist of institutional controls and/or physical/engineering controls. Institutional controls, such as restrictions, notifications, etc., are typically legal documents in the form of deed restrictions, easements, and restrictive covenants. In the case of an active military base, they can consist of base instructions, notations on installation land use plans, or similar instruments. In the form of legal documents, the institutional controls will run with

the land. Engineering controls are typically barriers, such as asphalt, buildings, or fencing.

- c. Activities that Disturb Soil, Sediment, Groundwater or Surface Water. Any form of damage to remedial infrastructure, excavation, sediment removal, soil penetration, soil compaction, filling, change of topography, or change in land use. The definition includes: any action to dewater excavations; extraction, withdrawal or exposure of groundwater or surface water for discharge, consumption, or use in any way.
- d. Polychlorinated Biphenyl (PCB). A PCB is a synthetic organic chemical compound widely used as dielectric and coolant fluids. PCB production was banned by Congress in 1979. According to the EPA, PCBs cause cancer in animals and are probable human carcinogens.
- e. Change in land Use. A change in land use is any new commercial/industrial, recreational, or residential land use of the property not previously approved by the Environmental Office or restricted by an LUC. Examples include: a picnic or barbecue, construction of a new barracks, a training exercise, crane testing, equipment storage, and any real estate licenses, leases or transfers.
- 6. Action. The following actions are directed:

a. Commanding Officer

- (1) Ensures written plans and procedures are in place to effectively manage contaminated properties in accordance with the state and Federal laws and regulations in references (d) through(i), as well as, Navy policy in references (a) through (c).
- (2) Observes, adheres to, and enforces LUCs and other restrictions for contaminated properties.
- (3) Takes appropriate steps to preclude land use, site development, and activities that disturb soil, sediment, groundwater or surface water in consistent with LUCs and other restrictions. This includes, but is not limited to Site Approvals, Work Permits, Dig safe Permits and incorporating LUCs and other restrictions into infrastructure plans and host/tenant support agreements.
 - b. NAVSTA Newport Departments, Tenant Commands & Contactors

- (1) NAVSTA Newport departments, tenant commands, and contractors shall obtain prior approval from the NAVSTA Newport Environmental Office before proceeding with any activities that disturb soil, sediment, groundwater or surface water, or change the land use at IR sites and other contaminated or LUC restricted properties shown in enclosures (1) through (4) or buried asbestos debris sites at Stillwater Basin, Evans Hall Bldg. 1284 CHI, and Ney Hall Bldg. 292 CP. Requests for approval shall meet the following requirements:
- (a) Requests shall be submitted to the Environmental Office at the earliest planning phase for any work or project and, at a minimum, 60 days in advance of the start.
- (b) Requests shall include a description of the proposed work, a drawing showing the work area and a schedule or start date.
- (2) NAVSTA Newport departments, tenant commands and contractors are prohibited from applying pesticides, herbicides and fungicides at IR sites and other contaminated or LUC restricted properties shown in enclosures (1) through (4).
- (3) Obey posted instructions and warnings at contaminated properties to restrict access, give notice of LUC restrictions and hazard warnings.
- (4) Prepare and submit an Asbestos Hazard Reduction Plan to the Environmental Office for approval prior to disturbing surface soils or materials at buried asbestos debris sites.
- (5) Stop work to determine if asbestos is present when building rubble is encountered in subsurface soils at any construction or work site.

c. Environmental Office

(1) Processes requests from NAVSTA Newport departments, tenant commands, and contactors to perform activities that disturb soil, sediment, groundwater or surface water, or change the land use at IR sites and other contaminated or LUC restricted properties shown in enclosures (1) through (4) or buried asbestos debris sites at Stillwater Basin, Evans Hall Bldg. 1284 CHI, and Ney Hall Bldg. 292 CP.

- (a) Coordinates the request with the $\ensuremath{\mathsf{EPA}}$ and $\ensuremath{\mathsf{RIDEM}}$ as appropriate.
- (b) Coordinates the request with other NAVSTA departments and other Navy organizations as appropriate.
- (c) Notifies the NAVSTA Newport department, tenant command, and contactor when a determination is complete.
- (d) Specifies any requirements or conditions such as; waste management procedures, standards for protecting remedial infrastructure, restoration of the project site, safety, and personnel training.
- (e) Processes requests for emergency work as expediently as possible.
- (2) After notifying the Commanding Officer, reports to and notifies regulatory agencies.
- (a) Notifies EPA Region 1 and the State of RI 45 days in advance of any proposed change in land use that would require modifications to the LUCs to remain consistent with the LUC performance objectives or the selected remedy. The notice shall describe how the LUCs will be changed and mechanisms by that the new LUCs will be implemented to maintain the protectiveness of the remedy.
- (b) Notifies EPA Region 1 and the State of RI by telephone and by e-mail as soon as practicable, but within 5 working days, after discovery of any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs. Notifies EPA Region 1 and the State of RI regarding how the breach will be or has been addressed within 5 days of sending EPA Region 1 and the State of RI the discovery notification of the breach activity. For more complex breach situations, a telephone call within this 5-day period among Navy, EPA, and the State of RI to discuss options for addressing the breach will be considered sufficient to meet this notification requirement. Furthermore, any activity that is inconsistent with the LUC objectives or use restrictions, or any other actions that may interfere with the effectiveness of the LUCs will be addressed as soon as practicable, but in no case will the process be initiated later than 5 days after the Navy becomes aware of the breach. Immediate notification within 1 hour of discovery is required if

an imminent or substantial endangerment to human health or the environment exists.

- (c) Notifies EPA Region 1 and the State of Rhode Island in writing at least six months prior to an anticipated transfer or sale of the property subject to LUCs out of Navy custody and control, including any federal-to-federal transfer, so that EPA Region 1 and the State of Rhode Island can be involved in discussion with the Navy on the appropriate provisions to be included in the transfer terms and conveyance documents to maintain effective LUCs. If it is not possible to notify EPA Region 1 and the State of Rhode Island at least 6 months prior, make this notification as soon as possible, but no later than 60 days before the transfer or sale of any property subject to LUCs. The Navy shall provide a copy of the executed deed or transfer documents to EPA Region 1 and the State of Rhode Island.
- (3) Ensures signage is posted and maintained at contaminated properties to restrict access, give notice of LUC restrictions and hazard warnings.
- (a) The posted temporary LUC restriction "No Fishing / Shellfishing" signs at Derecktor Shipyard and Gould Island offshore sites.
- (b) The posted LUC restriction and hazard warning "No Unauthorized Access Restricted Area No Digging Safety Hazard Present For Additional Information Contact NAVSTA Environmental 841-7671" signs at various sites.
- (4) Performs annual soil testing of the Gate 2 Phytoremediation Area and submits results to DEM.
 - (5) Reviews and updates this instruction as required.

d. Public Works

(1) Per reference (r), ensure the Project/Planning Checklist or equivalent form for site approvals evaluates the project for activities that disturb soil, sediment, groundwater or surface water, or change the land use at IR sites and other contaminated or LUC restricted properties shown in enclosures (1) through (4) or buried asbestos debris sites at Stillwater Basin, Evans Hall Bldg. 1284 CHI, and Ney Hall Bldg. 292 CP.

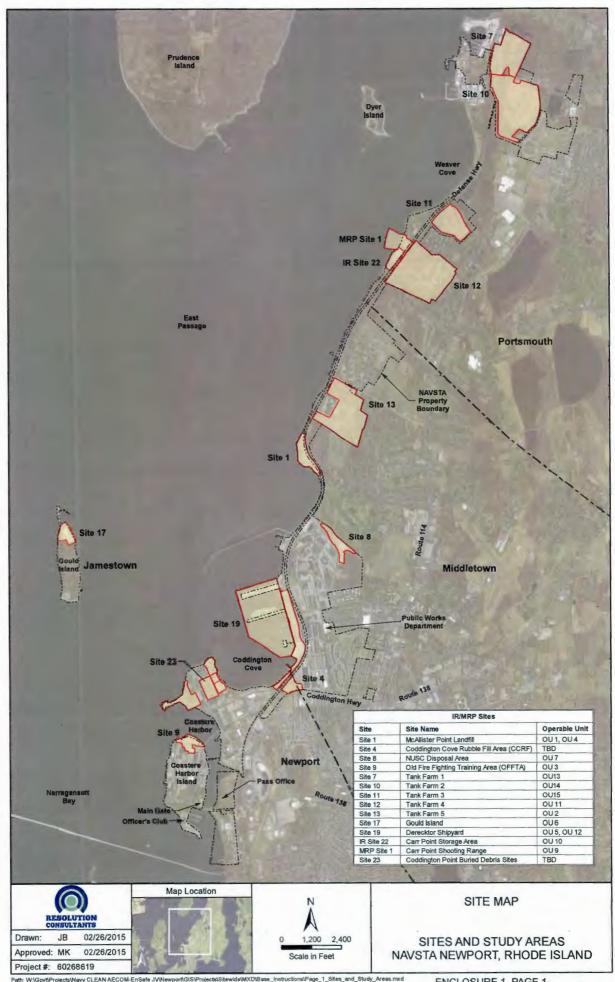
- (2) Per reference (s), ensure the Work Permit or equivalent form for work not administered by Public Works evaluates the project for activities that disturb soil, sediment, groundwater or surface water or change the land use at IR sites and other contaminated or LUC restricted properties shown in enclosures (1) through (4) or buried asbestos debris sites at Stillwater Basin, Evans Hall Bldg. 1284 CHI, and Ney Hall Bldg. 292 CP. Work permits are required for all new construction, repair, and alteration of Commander Navy Region Mid-Atlantic controlled Class I or II property not administered by the Naval Facilities Engineering Command, Mid-Atlantic.
- (3) Ensure site approvals and work permits are endorsed by the Environmental Director or a designated representative.
- (4) Ensure prior approval is received from the NAVSTA Newport Environmental Office before proceeding with any activities that disturb soil, sediment, groundwater or surface water, or change the land use at IR sites and other contaminated or LUC restricted properties shown in enclosures (1) through (4) or buried asbestos debris sites at Stillwater Basin, Evans Hall Bldg. 1284 CHI, and Ney Hall Bldg. 292 CP. Requests for approval shall meet the requirements in paragraph 6(b).
- (5) Prohibit the application of pesticides, herbicides, and fungicides at IR sites and other contaminated or LUC restricted properties shown in enclosures (1) through (4).
- (6) Cut the grass twice a year at the Gate 2 phytoremediation area and remove all of grass clippings for offsite disposal at a licensed sanitary landfill or solid waste management facility.
- (7) Prevent any unauthorized disturbance of the engineered cap that will be installed under Pier 2 as part of the Derecktor Shipyard remedy.
- (8) Ensure no construction, restoration, alteration, or demolition of Piers 1 and 2 below the waterline or over the capped area without prior concurrence by EPA and DEM.

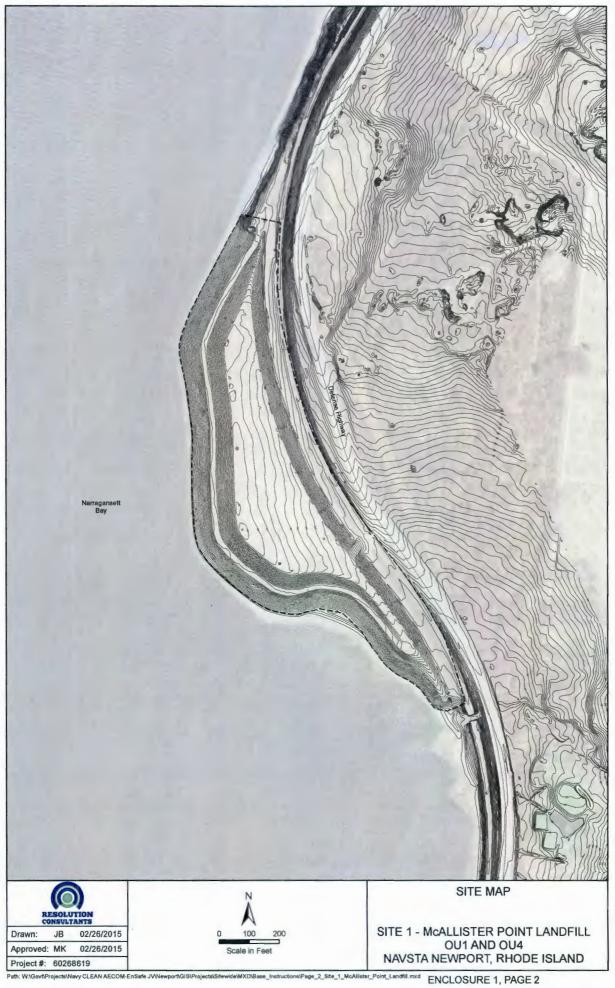
e. Security

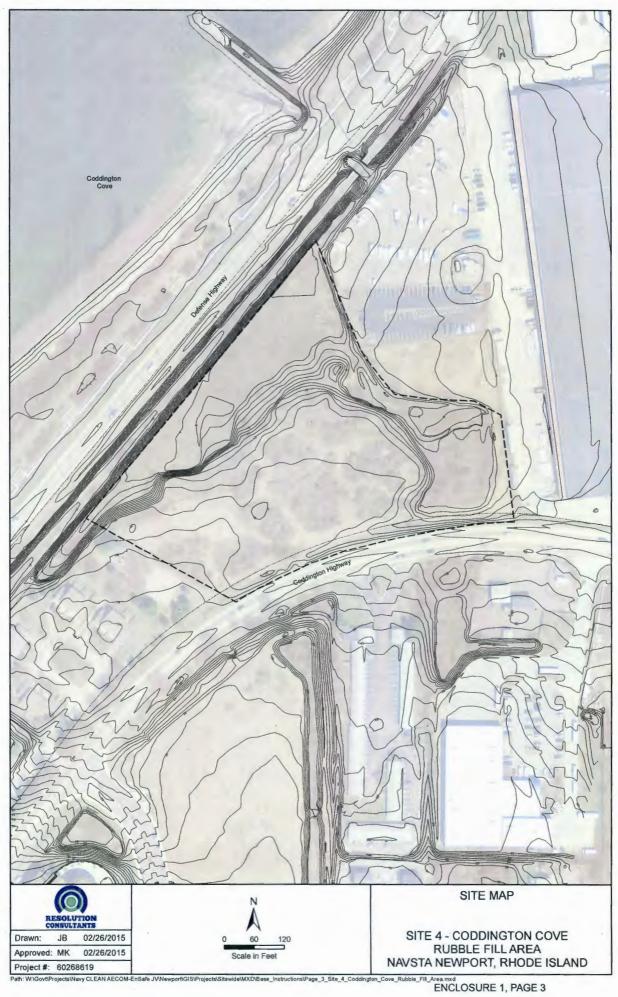
(1) Patrol, as necessary, the IR sites and other contaminated or LUC restricted properties shown in enclosures (1) through (4) or buried asbestos debris sites at Stillwater Basin, Evans Hall Bldg. 1284 CHI, and Ney Hall Bldg. 292 CP.

- (2) Enforce no unauthorized access when posted.
- (3) Enforce no fishing or shellfishing in the offshore areas of former Derecktor Shipyard and Gould Island until the CERCLA remedies are complete.
- 7. Oversight. Land use, site development, and activities that disturb soil, sediment, groundwater or surface water inconsistent with the procedures and requirements in this instruction may result in risk to human health and the environment, and may give rise to civil and criminal liability under Federal law. Thus incidents of this nature should be reported, investigated, and when warranted, appropriate action should be taken to address personal accountability.

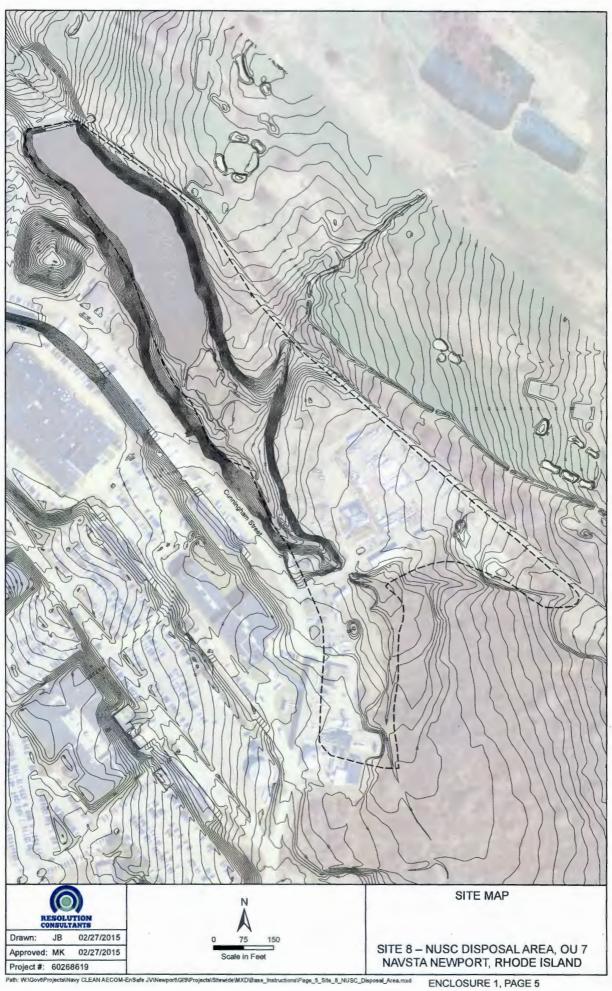
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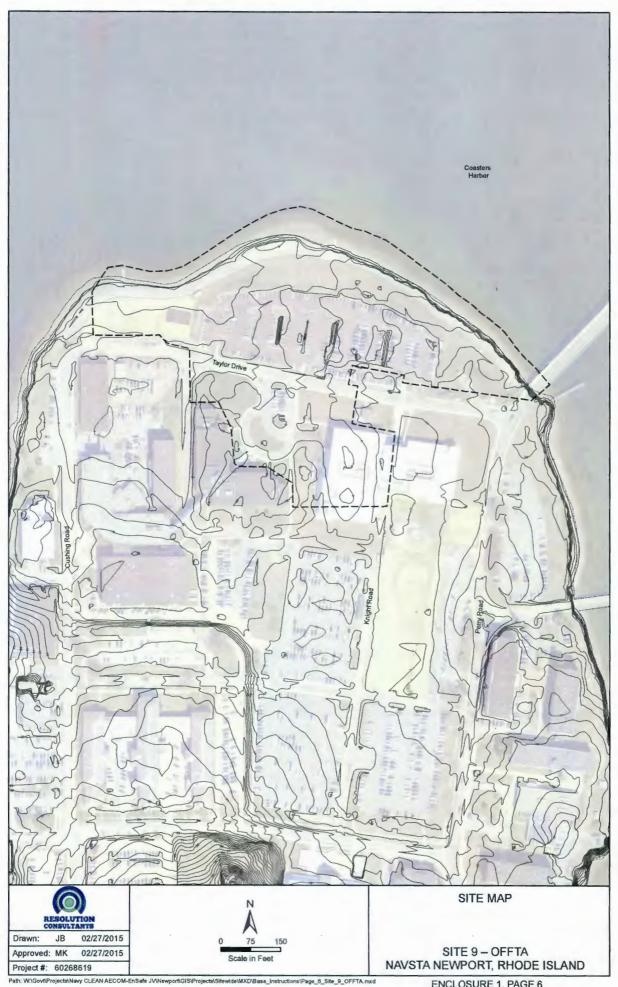














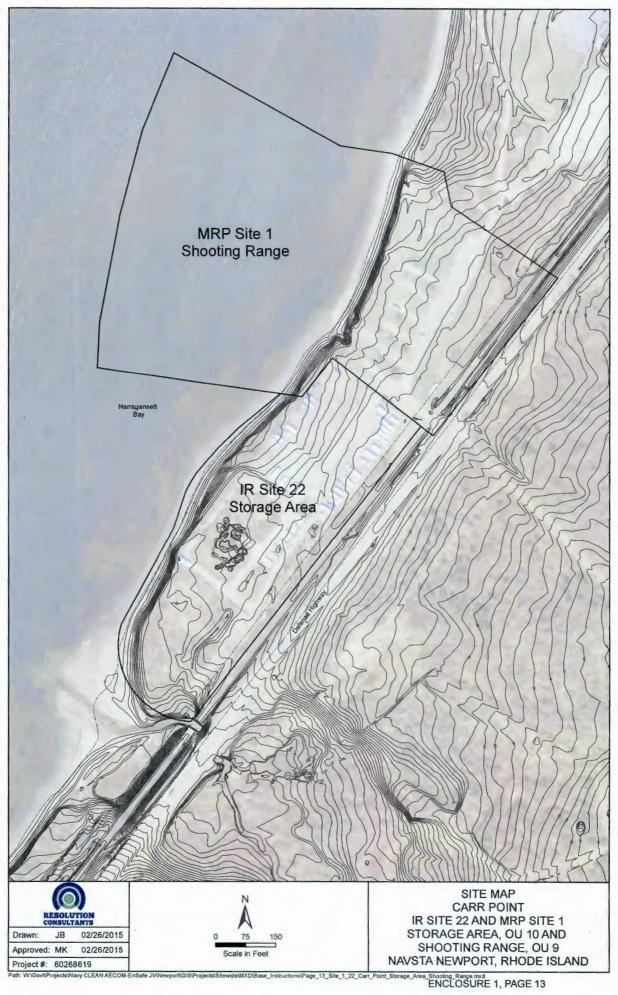


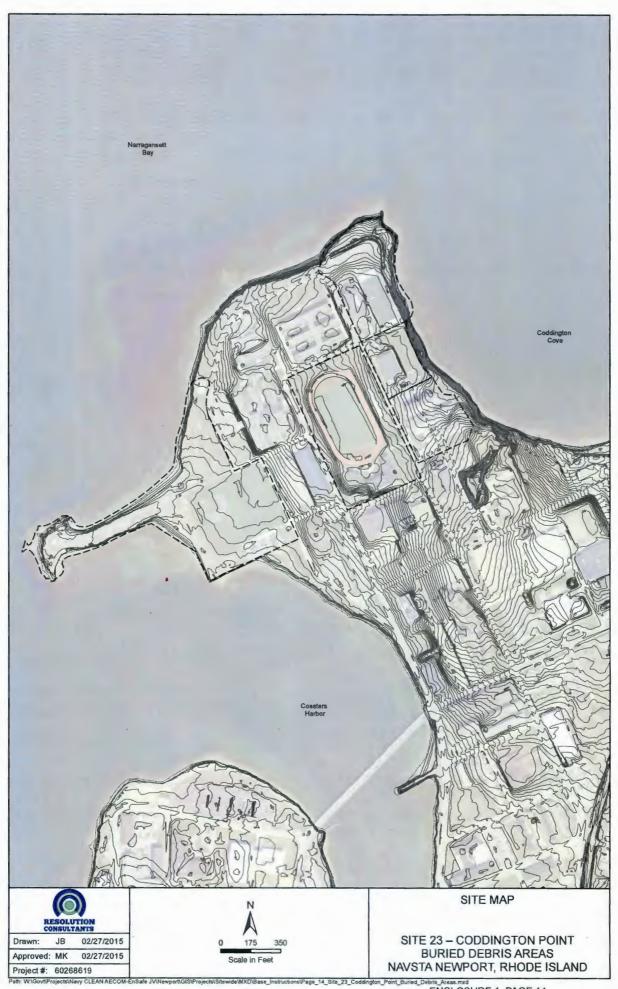




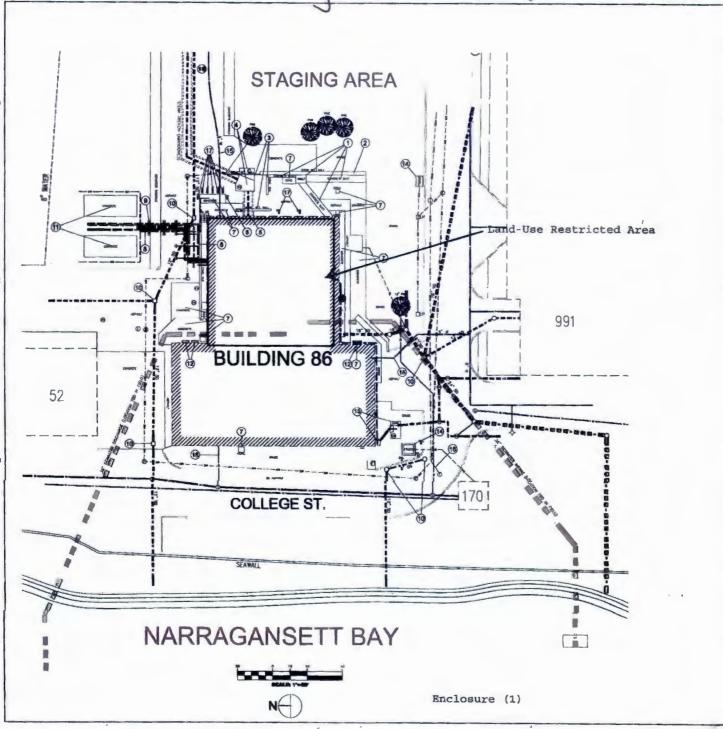






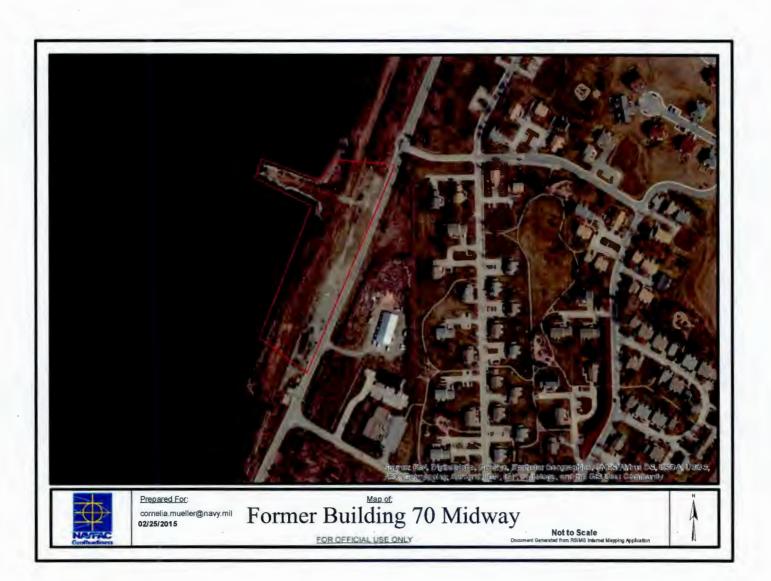


Former Building 86 CHI



Building 355 CP









Prepared by: cornelia.mueller@navy.mil 02/25/2015

Gate 2 Phytoremediation Area

Source: Navy GeoReadiness Repository FOR OFFICIAL USE ONLY

W E

NOT TO SCALE





DEPARTMENT OF THE NAVY

COMMANDER
NAVY REGION, MID-ATLANTIC
6506 HAMPTON BLVD.
NORFOLK, VA 23508-1273

IN REPLY REFER TO:

COMNAVREG MIDLANT INST 5090.2 REG ENG/Code 90

2 7 MAY 2003

COMNAVREG MIDLANT INSTRUCTION 5090.2

Subj: INSTALLATION RESTORATION; LAND USE CONTROLS AT NAVY REGION, MID-ATLANTIC INSTALLATIONS; ESTABLISHMENT AND MAINTENANCE

Ref:

- (a) DUSD (ES/CL) memo of 17 Jan 01
- (b) Navy Environmental Policy Memo 99-02
- (c) Navy-Marine Corps Installation Restoration Manual (COMNAVFACENGCOM Feb 97)
- (d) OPNAVINST 5090.1 Series
- (e) COMNAVREGMIDLANTINST 3120.1
- (f) JAGMAN
- (g) NAVREGS
- 1. <u>Purpose</u>. This instruction prescribes procedures for establishing and maintaining land use controls at sites remediated under the Navy Installation Restoration Program (IRP) and otherwise, and assigns mission, functions, and tasks necessary to successful management and maintenance of land use controls. References (a) through (d) pertain.
- 2. Applicability. This instruction applies to installations under the custody, control, and command of Commander, Navy Region, Mid-Atlantic (COMNAVREG MIDLANT). Reference (e) pertains.

3. Background

a. Land use controls restrict use of, and may also limit access to, real property at which contamination is allowed to remain in place. Land use controls, which are of two types, engineered controls and institutional controls, are placed on IRP (and other) sites to protect human health and the environment until such time, if ever, as they are no longer needed. Engineered controls include fences, signs, and other physical means of regulating access to and use of real property. Institutional controls are legal and administrative restrictions on land use, such as notations on installation land use plans,

[&]quot;Engineering controls" is also used in some texts to refer to engineered controls. For purposes of this instruction these terms are synonymous.

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2 7 MAY 2003

notices recorded in public land records, and periodic site inspections.

- b. Land use controls, which may be of indefinite duration, must be reviewed at least every 5 years for effectiveness. They are, or are part of, a clean-up remedy accepted by or approved for COMNAVREG MIDLANT by the Regional Engineer, as set forth, for example, in the Record of Decision² for an IRP site. After a Record of Decision or other decision document is finalized, terms and conditions for establishing and maintaining land use controls will be developed and memorialized in a Remedial Design (or other document), in the manner Atlantic Division, Naval Facilities Engineering Command (LANTNAVFACENGCOM) (or other Navy authority) shall recommend. Land use controls may be modified as site conditions change.
- c. To be effective, land use controls must be timely imposed, and thereafter maintained for as long as necessary. Long-term maintenance of land use controls requires vigilance, diligence, cooperation, and funding. COMNAVREG MIDLANT, recognizing its role in protecting human health and the environment, has determined that a comprehensive, coordinated approach to land use controls is required for its installations. This approach requires close cooperation between the Regional Engineer, the Regional Program Manager for Facilities and Environmental programs, and LANTNAVFACENGCOM, the IRP program manager.

4. Action. The following action is directed:

a. Regional Engineer

- (1) Execute Records of Decision, decision documents, and other land use control related documents on behalf of COMNAVREG MIDLANT.
- (a) In so doing, coordinate closely with LANTNAVFACENGCOM, to ensure that operational flexibility, accomplishment of core mission requirements, combat readiness, security, force protection, and cost are taken into consideration in remedy selection.

² Records of Decision are issued under authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Land use controls are also imposed in clean-ups carried out under the Resource Conservation and Recovery Act (RCRA).

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- (2) Implement institutional controls in the manner and within the time prescribed in Records of Decision and other decision documents.
- (a) In so doing, program and budget for the cost of maintaining land use controls the responsibility for which has transferred from LANTNAVFACENGCOM to COMNAVREG MIDLANT.
- (3) Integrate land use controls into site approval processes, dig permits, infrastructure plans, installation maps, and geographic information systems, and, in the name of COMNAVREG MIDLANT, deny permission to conduct ground-disturbing activity at, make use of, or develop sites in a manner inconsistent with approved land use controls.
- (a) In so doing, implement procedures and safeguards to withhold or deny site approval until it has been verified that no land use controls exist, or that the proposed use or development is consistent with existing land use controls, references (c) and (d), and other legal authorities. The site approval process is a key element of the regional program to protect human health and the environment through maintenance of land use controls.
- (4) Establish procedures to conduct and budget for site inspections, other monitoring of land use controls, and 5-year reviews, and to notify and interact with regulators.
- (5) Retain Records of Decision and other land use control documents for all sites to which this instruction applies.
- (6) Inform Installation Commanders, Program Managers, and tenant activities at least annually, of land use controls at their installations and installations at which they conduct operations. This may be accomplished by inviting these parties' attention to a list of land use controls published on the Regional Engineer's website.
- (7) Include information on land use controls and compliance obligations in statements of work prepared for facility support contracts and other contracts involving use of or ground-disturbing activity at IRP sites and other locations where land use controls have been imposed.

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(8) Take appropriate steps to preclude ground-disturbing activity by Navy public works personnel (or contractors) that is inconsistent with approved land use controls.

b. Installation Commanders and Regional Program Managers

- (1) Observe, adhere to, and publicize to their organizations (and, in the case of installation commanders, tenant activities), land use controls imposed on their installations and installations at which they conduct operations. This is especially important for Navy Family Housing and Morale, Welfare, and Recreation³ facilities and activities.
- (2) Take appropriate steps to preclude land use, site development, and ground-disturbing activity inconsistent with approved land use controls. This includes, but is not limited to, following site approval procedures, adhering to dig permit requirements, and incorporating land use controls into infrastructure plans and host/tenant support agreements.
- (a) Commanders of installations not served by Environmental Compliance Departments of the Regional Environmental Group perform the functions assigned to the Regional Engineer in subparagraphs a (1)-(8) of this paragraph.
- (3) Include information on land use controls and compliance obligations in statements of work prepared for contracts involving use of or ground-disturbing activity at IRP sites and other locations subject to land use controls.
- (4) Report to the Regional Engineer all activity inconsistent with known land use controls and conditions, e.g., failure of an engineered control, which may affect human health or the environment. The Regional Engineer, in turn, will inform the cognizant LANTNAVFACENGCOM Remedial Program Manager.

c. Tenant Activities of COMNAVREG MIDLANT Installations

(1) Observe, adhere to, and publicize to their organizations, land use controls imposed on installations at which they conduct operations.

³The Support Services Program Manager will develop a standard clause for Non-Appropriated Fund Instrumentality contracts that requires contractors to comply with land use controls.

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- (2) Take appropriate steps to preclude land use, site development, and ground-disturbing activity inconsistent with approved land use controls. This includes, but is not limited to, consulting the Regional Engineer organization during the site approval process and when applying for dig permits.
- (3) Include information on land use controls and compliance obligations in statements of work prepared for contracts involving use of or ground disturbing activity at IRP sites and other locations subject to land use controls.
- (4) Report to the Regional Engineer all activity inconsistent with known land use controls and conditions, e.g., failure of an engineered control, which may affect human health or the environment. The Regional Engineer, in turn, will inform the cognizant LANTNAVFACENGCOM Remedial Program Manager.

5. Coordination with LANTNAVFACENGCOM

- a. Per reference (d), COMNAVFACENGCOM is responsible for the IRP. LANTNAVFACENGCOM is the NAVFAC component that serves the installations to which this instruction applies. In carrying out its program responsibilities LANTNAVFACENGCOM works with Regional Engineer staff to:
- (1) Consider operational flexibility, security, force protection, combat readiness, and maintenance costs in selecting land use controls;
- (2) Develop land use controls, including but not limited to:
 - (a) Engineered and institutional controls;
- (b) Remedial Designs and other similar land use control documents; and
 - (c) 5-year reviews and other long-term management;
- (3) Report to the Regional Engineer activity, including performance of contracts supervised by Resident Officers in Charge of Construction, inconsistent with known land use controls, or conditions, e.g., failure of an engineered control, that may affect human health or the environment; and

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- (4) Include appropriate clauses in contracts for work to be performed on or affecting sites to which land use controls apply.
- 6. Oversight. Land use, site development, and ground-disturbing activity inconsistent with applicable land use controls may result in risk to human health and the environment, and may give rise to civil and criminal liability under Federal law. Thus, incidents of this nature should be reported per reference (d), investigated per reference (f), and when warranted, appropriate action should be taken to address personal accountability. Regional Program Managers, Installation Commanders, Commanding Officers, and Officers in Charge should work closely with the Regional Engineer to cooperate with regulatory agencies per reference (g). The Regional Engineer and the Regional Environmental Coordinator staff should be notified promptly of the commencement of any enforcement action related to breach or neglect of land use controls.

G. E. EICHERT Chief of Staff

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APPENDIX B

LAND USE CONTROL ANNUAL COMPLIANCE INSPECTION CHECKLIST OU5 - MARINE SEDIMENT

Land Use Control (LUC) Inspection Checklist

Site 19 - Former Derecktor Shipyard, OU5 - Marine Sediment

Naval Station (NAVSTA) Newport, Rhode Island

Site Description:

Site 19 is located at Coddington Cove in the central portion of NAVSTA Newport. OU5 of Site 19 is the marine sediment portion of the Site and comprises approximately 110 acres within Coddington Cove. At OU5, there are exceedances of contaminants of concern (COCs) in the marine sediment. The LUC boundaries for OU5 - Marine Sediment - are shown on Figure 3 of the Land Use Control Remedial Design (LUC RD).

Documentation Questionnaire:

		Yes	No
1	Is the complete, updated LUC RD (latest version) available on file with the Navy (NAVFAC and NAVSTA)? (If no, describe below.)		
2. 2a.	Is it correct that there are no EPA or RIDEM notifications on file regarding the following items? (if notifications were issued, then mark "no" and describe below): Activities inconsistent with LUCs		!
2b.	Corrective actions regarding activities inconsistent with LUCs		
2c.	Changes in procedures affecting LUCs		
2d.	Proposed land use changes		
2e.	Proposed transfer or sale of the site property		
3.	Is the LUC RD documentation provided to the EPA, RIDEM, and the Town of Middletown up to date? (i.e., if the LUC RD has been revised recently, has the updated version been provided to the stakeholders?)		
4.	Have the LUCs been annotated in the Navy's GIS Database and the real estate summary maps?		
	Inspection Questionnaire:		
5.	Is the area free of any indication of disturbance or damage to the engineered sand/gravel cap at the target sub-pier area at Pier 2? If no, describe below.	Yes	No
6.	Is the area free of any indication of work being performed at Pier 2, such as construction, restoration, alteration, or demolition of the pier below the water line or over the capped area? If no, describe below.		
7.	Is the area free of any indication of dredging or management of dredged sediment being performed without adherence to the precautionary measures and safe work practices (to mitigate potential for exposure to asbestos that may be present in sediment)? If no, describe below.		
8.	Is the area free of any indication of residential development or residential use? If no, describe below.		
9.	Is the area free of any indication of unlimited (e.g., public) recreational use? If no, describe below.		
10.	Is the area free of any indication of land/marine area use that is not consistent with the Site 19 Record of Decision for OU5 and LUC RD? If no, describe below.		

Is the			Yes	_ N
othe	the OU5 portion of Site 19 free of any use or activity that would interfere with the effectiveness or operation of the disturbance of the engineered sand/gravel cap at the target sub-pier area at Pier 2, etc.)? If no, describe before the disturbance of the engineered sand/gravel cap at the target sub-pier area at Pier 2, etc.)?	he remedy components (e.g., signs of anchoring near or elow.		
Are	e Site 19, OU5 Sediment warning signs (A/C) and Engineered Cap Under Pier 2 warning signs (B) in good con	dition (e.g., undamaged, legible)? If no, describe below.		
Are t	e there any observations of shellfishing in the Sediment LUC area? (Only applicable until the sediment remedy	is completed).		
Is the	there any documentation by base personnel of shellfishing within the restricted area?			
Com	pmments: (Provide related question number for each comment. Attach more pages, if needed.)		<u> </u>	<u> </u>
Rec	ecommendations: (Also enter any suggested improvements to this form.)			
I here	vy Annual Certification: ereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for eitems noted on this inspection form have been assessed with respect to the intent of the implemented remedial action object		performed a	nd th
I here	ereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for		performed a	nd th
I here the it	ereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for items noted on this inspection form have been assessed with respect to the intent of the implemented remedial action object		performed a	nd th
Navy	ereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for terms noted on this inspection form have been assessed with respect to the intent of the implemented remedial action object by Representative Title		performed a	nd th
Navy Signa Onsi	ereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for items noted on this inspection form have been assessed with respect to the intent of the implemented remedial action objective. Title phature Date		performed a	nd th
Navy Signa Onsi	ereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for items noted on this inspection form have been assessed with respect to the intent of the implemented remedial action objective. Title Institute Inspection Team Roster:		performed a	nd th
Navy Signa Onsi	ereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for items noted on this inspection form have been assessed with respect to the intent of the implemented remedial action object by Representative Title phature Date Isite Inspection Team Roster: Title/Affiliation		performed a	nd ti
Navy Signa Onsi	ereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for items noted on this inspection form have been assessed with respect to the intent of the implemented remedial action object by Representative Title phature Date and Inspector Title/Affiliation phature Date of Inspection hers Present:		performed a	
I here the it here	ereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for items noted on this inspection form have been assessed with respect to the intent of the implemented remedial action objective. Title prature and Inspection Team Roster: and Inspector Title/Affiliation Date of Inspection thers Present:	tives for the site.		on

APPENDIX C

LAND USE CONTROL ANNUAL COMPLIANCE INSPECTION CHECKLIST OU12 - SOIL AND GROUNDWATER

Land Use Control (LUC) Inspection Checklist

Site 19 - Former Derecktor Shipyard, OU12 - Soil and Groundwater

Naval Station (NAVSTA) Newport, Rhode Island

Site Description:

Site 19 is located at Coddington Cove in the central portion of NAVSTA Newport. OU12 of Site 19 is the on-shore soil and groundwater portion of the Site and is bounded by Pier 2 to the north, Defense Highway to the east and south, and by Coddington Cove (including the Site 19 OU5 - Marine Sediment) to the west. At OU12, there are exceedances of contaminants of concern (COCs) in soil and groundwater. The LUC boundaries for OU12 - Soil and Groundwater - are shown on Figure 4 (Soil) and Figure 5 (Groundwater) of the Land Use Control Remedial Design (LUC RD) for OU12.

Documentation Questionnaire:

		Yes	No
1	Is the complete, updated LUC RD (latest version) available on file with the Navy (NAVFAC and NAVSTA)? (If no, describe below.)		
2.	· · · · · · · · · · · · · · · · · · ·		
2a.	Activities inconsistent with LUCs		
2b.	Corrective actions regarding activities inconsistent with LUCs		
2c.	Changes in procedures affecting LUCs		
2d.	Proposed land use changes		
2e.	Proposed transfer or sale of the site property		
3.	Is the LUC RD documentation provided to the EPA, RIDEM, the Town of Middletown and the City of Newport up to date? (i.e., if the LUC RD has been revised recently,		
	has the updated version been provided to the stakeholders?)		
4.	Have the LUCs been annotated in the Navy's GIS Database and the real estate summary maps?		
••		<u></u>	<u>. </u>
	Inspection Questionnaire:		1
_		Yes	No
5.	Is the area free of any indication of disturbance or damage to the soil and asphalt/concrete/pavement covers/barriers and/or fencing? If no, describe below.		
6.	Is the area free of any indication of a recently installed groundwater extraction well? (includes drinking water and irrigation wells). If no, mark the location of the well on a site map and describe below.		
7.	Is the area free of any indication of the use of groundwater for any purpose, such as dewatering? If no, describe below.		
8.	Are the Navy's monitoring wells in good condition (e.g., undamaged casing/road box, properly closed/locked)? If no, describe below.		
0.			
9.	Is the area free of any indication of new commercial/industrial construction (which would have to be evaluated for potential vapor intrusion and/or mitigation)? If no, describe below.		
10.	Is the area free of any indication of residential development or residential use? If no, describe below.		
11.	Is the area free of any indication of unlimited (e.g., public) recreational use, other than the permitted recreational use along the paved exercise path (constructed on		
	existing cover) shown on Figure 4? If no, describe below.		
		1	

ls g	the OU12 portion of Site 19 free of any use or activity that would interfere with the effectivener roundwater monitoring system, etc.)? If no, describe below.	s or operation of the remedy com	ponents (e.g., disturbance of		
Ir	the LUC Area (Figure 4), is the area free of any indication of unauthorized excavation? If no,	describe below.			
A	re OU12 warning signs (see Figure 4 for locations) in good condition (e.g., undamaged, legible	? If no, describe below.			
C	omments: (Provide related question number for each comment. Attach more pages, if neede	H.)		'	
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R	ecommendations: (Also enter any suggested improvements to this form.)				
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l tř	avy Annual Certification: nereby certify that a complete and thorough inspection and an evaluation of compliance with land use contribute items noted on this inspection form have been assessed with respect to the intent of the implemented reavy Representative	medial action objectives for the site.	ce with the 2014 Record of Decision have been perfo	ormed and	d that
IN	avy Representative	=			
S	ignature Da	e			
<u>c</u>	nsite Inspection Team Roster:				
L	ead Inspector Tit	e/Affiliation			
S	ignature Da	e of Inspection			
C	thers Present:				
N	ame Aff	liation Name		Affiliation	า