

Land Use Control Remedial Design for Site 17 – Former Building 32 Gould Island

Naval Station Newport
Jamestown, Rhode Island



**Naval Facilities Engineering Command
Mid-Atlantic**

Contract Number N62470-08-D-1001

Contract Task Order WE76

March 2015

**LAND USE CONTROL REMEDIAL DESIGN
FOR
SITE 17 – BUILDING 32, GOULD ISLAND**

**NAVAL STATION NEWPORT
JAMESTOWN, RHODE ISLAND**

**COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT**

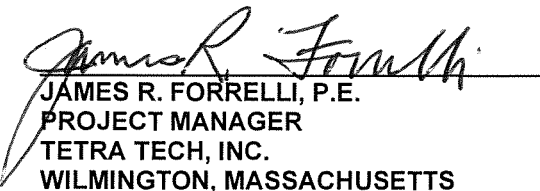
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**CONTRACT NUMBER N62470-08-D-1001
CONTRACT TASK ORDER WE76**

MARCH 2015

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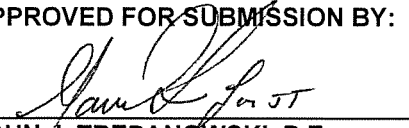

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1.0 INTRODUCTION

This document constitutes the Land Use Control (LUC) Remedial Design (RD) for Site 17 - Operable Unit 6 (OU6), Former Building 32, Gould Island at Naval Station (NAVSTA) Newport, formerly the Naval Education and Training Center (NETC), Jamestown, Rhode Island. This document was prepared by the Department of the Navy's Naval Facilities Engineering Command (NAVFAC) Mid-Atlantic. NAVFAC Mid-Atlantic is the lead agency conducting the evaluation and cleanup of NAVSTA Newport. The LUC RD was developed as part of the RD for Site 17 (the Site) to address LUC implementation actions in accordance with the Site 17 Record of Decision (ROD) 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 BACKGROUND AND SITE 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 Site 17 on 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. NAVSTA Newport is formerly identified as the NETC.

In 1989, the EPA placed NETC/NAVSTA Newport on the National Priorities List (NPL), indicating that the property was a federal priority for environmental investigation and cleanup. Since that time, the Navy has conducted environmental studies and activities at NAVSTA Newport in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Contingency Plan (NCP), which is consistent with the Navy's Environmental Restoration Program. NAVSTA Newport has been assigned federal EPA ID number RI6170085470, and the Former Building 32, Gould Island is identified by the EPA as OU6 at the NETC Superfund Site at NAVSTA Newport.

As illustrated on Figure 1, Former Building 32 is located on the north end of Gould Island in the East Passage of Narragansett Bay, approximately 1.5 miles west of Newport, Rhode Island and between Aquidneck and Conanicut Islands. As illustrated on Figure 2, Site 17 – Former Building 32 includes an area of land and an area of marine sediment adjacent to the northern shoreline, where contaminants from the

former Building 32 and its operations have come to reside. The land portion of the Site is approximately 8.4 acres (Site 17 does not include the Firing Pier or Building 35 located north of Building 32). The marine sediment portion, the proposed dredging area (subject to modification based on the pre-design investigation [PDI] results) of Site 17 is approximately 1 acre; therefore, the total acreage of Site 17, encompassing land and marine sediment, is approximately 9.4 acres. Building 35, outside the Site boundary, is currently the only operational facility at Gould Island. Building 35 is an active test facility operated by NUWC and occupied part time by Navy staff. The Navy retains a total of approximately 9 acres at this northern end of Gould Island, most of which was investigated as a part of Site 17. The southern part of the island is owned by the State of Rhode Island.

Building 32 was a Navy torpedo overhaul shop from the 1940s until it ceased major operations in the 1950s. During that time, torpedoes were brought to the overhaul shop for dismantling, cleaning, and reassembly. Operations within Building 32 included degreasing, parts washing, electroplating, sandblasting, mechanical and electrical testing, etc. Peripheral to Building 32, but featuring in the environmental investigations, were: Building 33 - a steam plant; Building 34 - a small building for generating acetylene; Building 44 - a fuel pump house and associated underground fuel tanks; Building 41 - a storage shed; and a series of five small transformer buildings – Buildings 53, 54, 56, 58, and 60. All these former buildings were within the footprint of the Site 17 boundary (Figure 2). Minor structures that featured in the environmental releases were an acid storage shed and dust storage equipment associated with indoor sandblasting operations. Other storage sheds and structures (administration building, guard shacks, etc.) that were also present within the Site 17 boundary are also since removed, and are not pertinent to environmental conditions at the Site.

Gould Island is generally unoccupied, with the exception of Building 35 as noted previously. However, the surrounding waters are used for electronic equipment testing by NUWC, and the grounds of Site 17 are intended for similar use. The site is occasionally accessed by trespassers via recreational boating. The former buildings at the Site have been demolished to existing grade, with the at-grade slab foundations left in place, as shown on Figure 2.

At the northern end of Gould Island where Site 17 is located, the island consists of a constructed shoreline that is a combination of filled land, man-made structures, and natural island formations. These include the Firing Pier, a deteriorated rigging platform (a timber dock), a partial breakwater feature made of wood piles, and constructed shoreline (filled land behind bulkhead walls). The northeastern and northwestern intertidal shorelines of the Site are exposed and subject to wave action. The northeastern shoreline consists of a deteriorated sheet-piling bulkhead wall and a stony beach face. The northwestern shoreline is composed of rip-rap.

The Firing Pier dominates the northern tip of Gould Island. This pier extends north from the northern end of the island and supports Building 35. The pier, Building 35, and the sediment under the pier are outside the Site 17 boundary and therefore outside the area identified for the Remedial Action.

A small boat basin referred to as the Stillwater Area is located north of the former Building 32 area. This boat basin is bounded to the west by the Firing Pier and associated Building 35, and to the north by a row of pilings that forms a wave break. These features provide protection for small boats from prevailing west-northwest and northeast winds. During Building 32 operations, equipment and materials were brought by barges which accessed the island via the Stillwater Area. Cranes then lifted materials from barges onto the rigging platform which forms the southern boundary of the Stillwater Area.

A CERCLA action is required at the Site to address unacceptable risk to human and ecological receptors. Unacceptable risks to human health and the environment were identified for current and potential future site exposure scenarios. Residential exposure risks are assumed to be unacceptable and the results of the human health risk assessment (HHRA) indicated that potential unacceptable risks were associated with (1) exposure to shallow groundwater and associated trench air by future construction workers; and (2) both subsistence- and recreational-level consumption of contaminated shellfish by children and adults. While the potential for risk from exposure to chromium in marine sediment by child-visitors (a potential future recreational scenario) is notable, there is no basis for action given the uncertainty in this risk estimation.

The results of the ecological risk assessment (ERA) indicated that there are potential unacceptable risks to benthic invertebrate organisms from exposure to polychlorinated biphenyls (PCBs) and polyaromatic hydrocarbons (PAHs) and from the combined effects from PCBs, PAHs and metals in the marine sediment in the Stillwater Area and possibly along the Northeast Shoreline.

The selected remedy in the ROD for soil at Site 17 includes the following major components:

- soil and sump debris excavation;
- verification sampling;
- transportation and off-site disposal;
- implementation of LUCs and inspections; and
- Five-Year Reviews.

The selected remedy in the ROD for groundwater at Site 17 includes the following major components:

- monitored natural attenuation;
- confirmation sampling for the shallow groundwater after the source control measures are completed to confirm the shallow groundwater remediation goals (RGs) are achieved;
- LUCs to prevent residential uses of the groundwater and protect monitoring wells, and inspections to confirm LUCs are in place and effective; and
- Five Year Reviews until groundwater RGs are achieved.

The selected remedy in the ROD for sediment at Site 17 includes the following major components:

- removal of the rigging platform and repair of the bulkhead, if necessary;
- dredging in affected portions of the Stillwater Area to achieve cleanup levels;
- establishing a dewatering area on the island and treating water from the dewatering process;
- off-site disposal of the dewatered sediment; and
- limited monitoring at the northeast shoreline to ensure sediment conditions continue to improve.

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.

The ROD selected LUCs including institutional controls and engineering controls as components of the final remedy for Site 17 to control or restrict certain types of property uses. The LUCs included in the selected remedy will be maintained until concentrations of the contaminants of concern (COCs) have been reduced to levels that allow for unlimited use and unrestricted exposure. The following are the Site 17 LUC performance objectives, which were derived from the Remedial Action Objectives (Navy, 2014):

- Prevent exposure of recreational and subsistence fishermen to COCs in shellfish (mussels and clams) until the remedy is complete.
- Prevent exposure to shallow groundwater and trench air by construction workers until debris located in sumps and trenches are removed and non-consumptive groundwater cleanup levels are achieved.
- Prevent residential or unrestricted recreational exposure to site soil in which concentrations of COCs pose unacceptable risk.
- Prevent use of the groundwater at the property for any consumptive purpose, including household use, drinking water supply, or residential irrigation, until groundwater cleanup levels are achieved.
- Prevent industrial exposure to subsurface soil present at concentrations above industrial RGs.
- Prevent removal of monitoring wells and any other components of the remedy without proper engineering controls to prevent uncontrolled exposure to COCs that are present.
- Evaluate vapor intrusion risk, should site development involving construction of buildings occur before groundwater RGs for organic compounds are met.
- Establish inspection requirements and conduct LUC compliance inspections.

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

1. Install and maintain signage to notify persons entering the waters of the Stillwater Area that hazards are present and that shellfish should not be taken from this area until the sediment remedy is completed.
2. Install and maintain signage to notify persons accessing the land portions of the site that the property is restricted, and that hazards are present so as to prevent unauthorized persons from

working at the site and to prevent residential and unrestricted recreational use of the site and to prevent consumptive use of the groundwater until groundwater cleanup goals are met

The 2014 Site 17 ROD approximated the area over which the LUCs would apply. This area will be referred to in this LUC RD as the “Site 17 LUC Area”, and is presented on Figure 3. The LUCs established for the Site 17 LUC Area include the set of restrictions defined below. Following EPA and the Rhode Island Department of Environmental Management (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:

- Any consumptive use of groundwater and installation of water supply wells for any purpose other than monitoring or testing until the cleanup levels are achieved.
- Removal of warning signs that notify persons that shellfish should not be taken from the Stillwater Area until the sediment remedy is completed (Figure 3).
- Removal of warning signs that notify persons that restrictions exist within the LUC boundary for soil and groundwater (Figure 3).
- Removal of monitoring wells and any other components of the remedy without proper engineering controls to prevent uncontrolled exposure to COCs that are present.
- Any residential or recreational uses of the on-land portions of the Site.
- Any use or industrial activity that would interfere with the implementation, effectiveness, integrity, operation, or maintenance of the required remedy components, which include but are not limited to any groundwater monitoring networks installed to ensure that the remedy remains effective and is protective of human health and the environment.
- Any industrial activity that exposes personnel to subsurface soil without providing proper personal protection for personnel.
- Any shellfishing within the limits of contamination defined by the LUC RD until the sediment remedy is completed.

- Any new construction without evaluation of potential vapor intrusion issues and/or mitigation until the groundwater RGs for volatile organic compounds are met.

The following activities and uses are consistent with the LUC objectives and will be allowed in the Site 17 LUC Area as shown on Figure 3:

- Uses that have undergone review and been approved through the site approval process 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 Installation Restoration (IR) Program Manager will provide notice and coordinate project review with the EPA and RIDEM. 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.
- Reuse for industrial activities as determined by the owner (Navy) through the approval process described above.
- Long-term monitoring activities including inspections conducted in accordance with the Long-Term Monitoring Plan (to be developed).
- Environmental investigation and/or remedial actions conducted in accordance with approved work plans, including the installation of groundwater monitoring wells as necessary.
- Utility and facility maintenance activities related to Building 35 (north of Site 17 LUC Area).
- Building construction for non-residential uses in accordance with applicable Base instructions after evaluation of potential vapor intrusion issues and/or mitigation until the groundwater RGs for volatile organic compounds have been met.

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 short- and long-term implementation actions at Site 17 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 ROD, 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).

The Navy will submit a copy of Figure 3 of this LUC RD to the land record offices of the City of Jamestown, 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.

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 17 LUC Area boundaries. Depict on this map the location and boundaries of Site 17 and the extent of the area 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 provided on the Navy Installation Restoration Information Solution (NIRIS) and real estate summary map(s) for the installation, and follow LUC-related procedures pertaining to ground-disturbing activity and changes in land use, as in accordance with Commander, Navy Region, Mid-Atlantic Instruction 5090.2, Installation Restoration; Land Use Controls at Navy Region, Mid-Atlantic Installations; Establishment and Maintenance, as amended. Navy will notify EPA and the state of Rhode Island 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 Figure 3 into the Site 17 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 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 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 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 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 NCP as specified in the Site 17 ROD. The latest five-year review for NAVSTA Newport was completed in December 2014 (Resolution, 2014). The next five year review will be completed in 2019 and will include an evaluation of the Site 17 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 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 17 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.

TABLES

TABLE 1

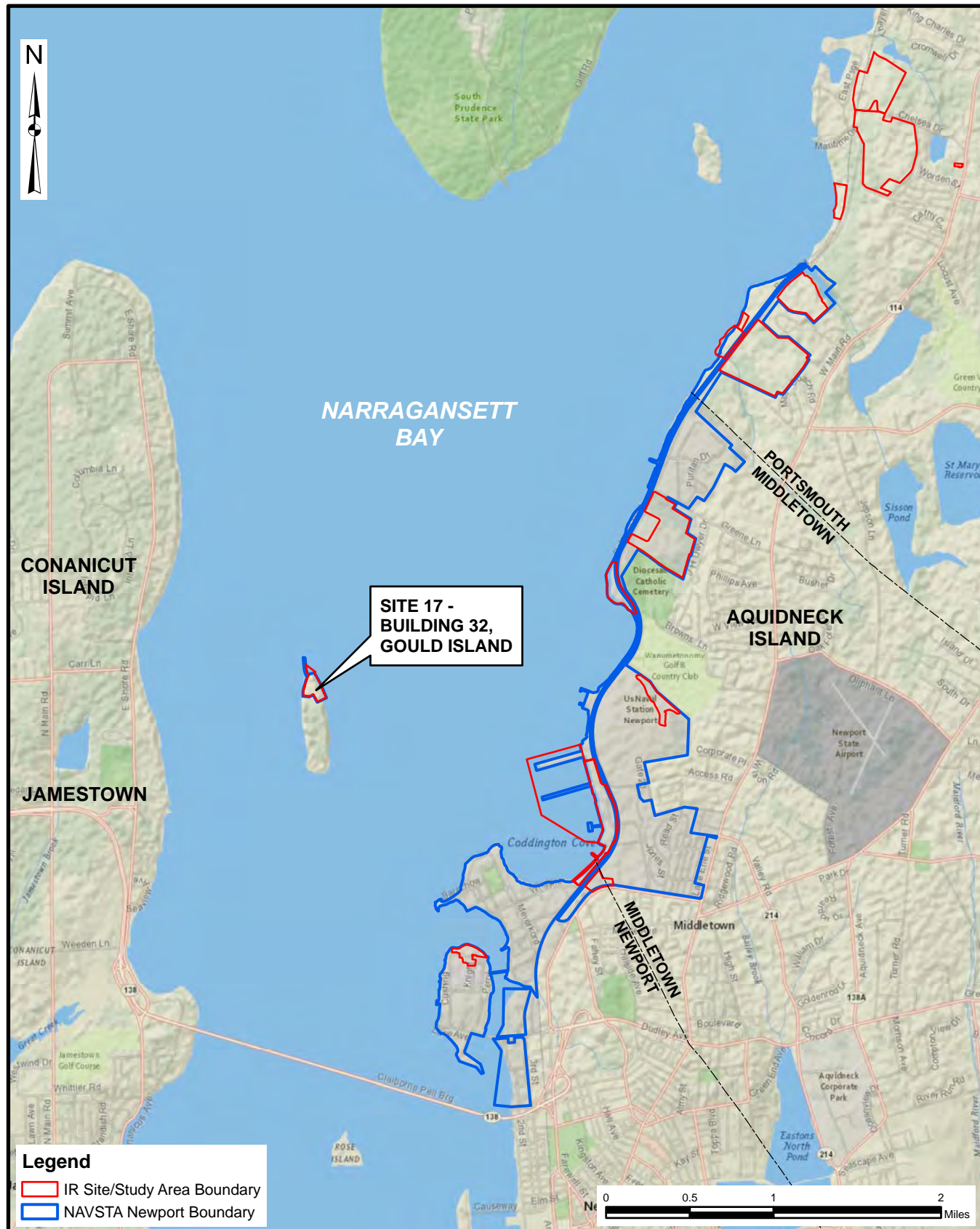
SUMMARY OF LAND USE CONTROL (LUC) IMPLEMENTATION ACTIONS
LAND USE CONTROL REMEDIAL DESIGN FOR SITE 17 – FORMER BUILDING 32, GOULD ISLAND
NAVAL STATION NEWPORT, JAMESTOWN, RHODE ISLAND
PAGE 1 OF 2

DESCRIPTION OF LUC REQUIREMENT	FREQUENCY
INSTITUTIONAL CONTROLS	
Issue final LUC RD	One time
Conduct annual LUC compliance inspections	Annually
Issue LUC Monitoring Report and completed Inspection checklist to EPA and RIDEM	Annually
ENGINEERING CONTROLS	
Install and maintain shellfish warning signs	Installation - one time Maintenance - as necessary until sediment remedy is complete
Install and maintain land access warning signs	Installation - one time Maintenance - as necessary
Conduct MNA groundwater monitoring	In accordance with the Long-Term Monitoring Plan (to be developed)
Prepare and issue MNA Groundwater Monitoring Report	Annually
Conduct Northeast Shoreline sediment monitoring	In accordance with the Long-Term Monitoring Plan (to be developed)
Prepare and issue Northeast Shoreline Sediment Monitoring Report	In accordance with the Long-Term Monitoring Plan (to be developed)
Prepare and issue Inspection Report	Annually
NOTIFICATION REQUIREMENTS	
The Navy will notify EPA Region 1 and the State of Rhode Island 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 the State of Rhode Island 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

TABLE 1
SUMMARY OF LAND USE CONTROL (LUC) IMPLEMENTATION ACTIONS
LAND USE CONTROL REMEDIAL DESIGN FOR SITE 17 – FORMER BUILDING 32, GOULD ISLAND
NAVAL STATION NEWPORT, JAMESTOWN, RHODE ISLAND
PAGE 2 OF 2

NOTIFICATION REQUIREMENTS (continued)	
The Navy will notify EPA Region 1 and the State of Rhode Island 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 State of Rhode Island, 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, in writing, the EPA Region 1 and the State of Rhode Island 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 the State of Rhode Island at least six months prior, the Navy will make this notification as soon as possible, but no later than 60 days before the transfer or sale of the property subject to LUCs.	Per event, 6 months advance notice, but not less than 60 days
The Navy will submit a copy of the Site 17 Land Use Control Area Figure (Figure 3 of this LUC RD) to the Land Record Offices of the Town of Jamestown, Rhode Island, and a listing of land use controls 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

FIGURES

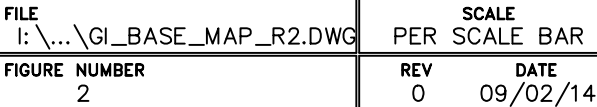


NAVAL STATION NEWPORT
JAMESTOWN, RHODE ISLAND

SITE LOCATION

SITE 17 - BUILDING 32, GOULD ISLAND
LAND USE CONTROL REMEDIAL DESIGN

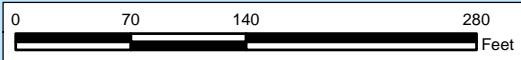
SCALE PER SCALE BAR	
FILE	NEWPORT_SITE-17_ LOCATION.mxd
REV	DATE
0	03/09/15
FIGURE NUMBER	
1	



Sediment LUC Boundary Points		
Point No.	Easting	Northing
S01	370314.79	166171.77
S02	370509.89	166184.49
S03	370697.95	166051.72
S04	370623.86	165648.15
S05	370594.21	165696.37
S06	370431.68	165603.53
S07	370384.35	165691.67
S08	370342.92	165841.22
Coordinates are provided in NAD 1983		

Soil & Groundwater LUCBoundary Points		
Point No.	Easting	Northing
G01	370431.68	165603.53
G02	370594.21	165696.37
G03	370623.86	165648.15
G04	370781.08	165357.49
G05	370843.90	165226.83
G06	370973.15	164905.16
G07	370920.75	164868.59
G08	370895.77	164884.06
G09	370714.65	164798.62
G10	370596.92	165000.74
G11	370579.42	165005.07
G12	370424.89	164922.78
G13	370377.86	164941.31
G14	370257.44	164995.25
G15	370271.94	165127.95
G16	370259.16	165146.09
G17	370360.12	165456.66
G18	370383.88	165537.95

Coordinates are provided in NAD 1983



NAVAL STATION NEWPORT
JAMESTOWN, RHODE ISLAND

LAND USE CONTROL BOUNDARY

SITE 17, BUILDING 32, GOULD ISLAND
LAND USE CONTROL REMEDIAL DESIGN

FILE I:\...GI_ROD_GW_REMEDY2-R2.MXD	SCALE PER SCALE BAR	
FIGURE NUMBER 3	REV 0	DATE 03/09/15

APPENDIX A
LUC INSTRUCTIONS

A.1 COMNAVREG MIDLANT INSTRUCTION 5090.2



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

27 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
(COMNAVFACEGCOM Feb 97)
(d) OPNAVINST 5090.1 Series
(e) COMNAVREGMIDLANTINST 3120.1
(f) JAGMAN
(g) NAVREGS

1. Purpose. 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 controls¹ 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,

¹"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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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).

(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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A.2 COMNAVREG MIDLANT INSTRUCTION 11011.11A



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

14 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. Purpose. 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. Background. 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. Policy. 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).

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. Implementation. 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).

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.


G. E. WOMACK
Chief of Staff

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

COMNAVREGMIDLANTINST 11011.11A
1 4 FEB 2011

SAMPLE SITE APPROVAL REQUEST LETTER

11011
Code

From: (Activity Head)
To: 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)

1. Per reference (a), enclosure (1) is forwarded for your review/approval. Requesting site approval to (briefly explain).
2. In addition to completing site approval, request the required National Environmental Policy Act (NEPA) documentation be initiated and completed to allow this project to be executed.
3. My point of contact for this project is (name) at (commercial and DSN phone number), or (E-Mail-----).

SIGNATURE
BLOCK

SAMPLE

Enclosure (1)

REQUEST FOR PROJECT SITE APPROVAL/EXPLOSIVES SAFETY CERTIFICATION NAVFAC 11010/31 (NAVFAC MIDLANT REV. 8-2009)

PART I

DIRECTIONS IN NAVFACINST 11010.45

SECTION A – INSTALLATION SUBMISSION

1. To:			2. From:		
3. Program Year:	4. Cost (\$000):	5. Type Funding	6. Activity UIC	7. Date:	
8. Category Code and Project Title:				9. Project Number	
10. Type of Project: <input type="checkbox"/> New Construction <input type="checkbox"/> Relocation of Structure <input type="checkbox"/> Other <input type="checkbox"/> Change Use <input type="checkbox"/> Maintenance and/or Repairs <input type="checkbox"/> Addition to Existing Facility <input type="checkbox"/> Repair by Replacement <input type="checkbox"/> Major Modification to Existing Facility <input type="checkbox"/> Demolition			11. Type of Request: <input type="checkbox"/> Airfield Safety Site Approval <input type="checkbox"/> Explosives Site/Safety Certification <input type="checkbox"/> EMR Site Approval <input type="checkbox"/> Re-submittal or Standard Site Approval (No Safety Criteria Involved)		
12. Project Description					
13. _____ Sets of Project Maps Attached			14. _____ Sets Part II Division(s) _____ Attached		

SECTION B –NAVFAC REVIEW

1. Name/Code/Phone No. of Reviewer/E-Mail Address:			2. Date Received:		
3. Evaluation:					
4. Safety Review Requested: (check appropriate box(es)) <input type="checkbox"/> NOSSA <input type="checkbox"/> DDESB <input type="checkbox"/> SPAWAR <input type="checkbox"/> NAVAIR <input type="checkbox"/> CNO <input type="checkbox"/> OTHER					5. Date Forwarded:
6. Date of Safety Certification: _____ NOSSA _____ DDESB _____ SPAWAR _____ NAVAIR _____ CNO _____ OTHER					

SECTION C – FINAL SITE APPROVAL ACTION

1. Approvals: <input type="checkbox"/> Site Approved <input type="checkbox"/> Site Disapproved <input type="checkbox"/> Deferred/Returned <input type="checkbox"/> Explosives Safety Certification Approved <input type="checkbox"/> Explosives Safety Certification DISAPPROVED <input type="checkbox"/> Interim Construction Waiver Approved		2. Certification Identification: 3. Remarks	
4. Other Approvals <input type="checkbox"/> Airfield Safety Waiver Required Required <input type="checkbox"/> Final Explosives Safety Review Required		5. Approving Official: 6. Date:	

APPENDIX B

LAND USE CONTROL ANNUAL COMPLIANCE INSPECTION CHECKLIST

Land Use Control (LUC) Inspection Checklist
Site 17 - Former Building 32, Gould Island
Naval Station (NAVSTA) Newport, Rhode Island

Site Description:

Site 17 is located on Gould Island in Narragansett Bay. There are exceedences of contaminants of concern (COCs) in surface soil, subsurface soil, groundwater, and sediment. The LUC boundary is shown on Figure 3 of the Land Use Control Remedial Design (LUC RD).

Documentation Questionnaire:

- 1 Is the complete, updated LUC RD (latest version) available on file with the Navy (NAVFAC and NAVSTA)? (If no, describe below.)
2. 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):
 - 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 documentation provided to EPA, RIDEM, and the Town of Jamestown 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?

Yes	No

Inspection Questionnaire:

5. 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.
6. Is the area free of any indication of residential development or residential use? If no, describe below.
7. Is the area free of any indication of unlimited (e.g., public) recreational use? If no, describe below.
8. Is the area free of any indication of land use that is not consistent with the Site 17 Record of Decision and LUC RD? If no, describe below.
9. Is the site free of any use or activity that would interfere with the effectiveness or operation of the remedy components (e.g., disturbance of groundwater monitoring system, etc.)? If no, describe below.
10. Are the Navy's monitoring wells in good condition (e.g., undamaged casing/road box, properly closed/locked)? If no, describe below.
11. Are Site 17 sediment warning signs (A) and land warning signs (B) in good condition (e.g., undamaged, legible)? If no, describe below. (Note that sediment warning signs are only necessary until sediment remedy is completed.)
12. Are there any observations of shellfishing within the sediment LUC boundary (only applicable until the sediment remedy is completed).
13. Is the area free of any indication of new commercial/industrial construction (that has not been evaluated for potential vapor intrusion and/or mitigated)? If no, describe below.

Yes	No

Comments: (Provide related question number for each comment. Attach more pages, if needed.)

Recommendations: (Also enter any suggested improvements to this form.)

Navy Annual Certification:

I hereby certify that a complete and thorough inspection and an evaluation of compliance with land use controls established for the site in accordance with the 2014 Record of Decision have been performed and that the items noted on this inspection form have been assessed with respect to the intent of the implemented remedial action objectives for the site.

Navy Representative Title

Signature Date

Onsite Inspection Team Roster:

Lead Inspector Title/Affiliation

Signature Date of Inspection

Others Present:

Name Affiliation

Name Affiliation

Name Affiliation

Name Affiliation