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MARE ISLAND
SSIC NO. 5090.3.A

PROPOSED PLAN/ DRAFT REMEDIAL ACTION PLAN

Installation Restoration Site 05, Dredge Pond 7S and Western Magazine Area, Former Mare Island Naval Shipyard, Vallejo, California

March 18, 2015

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U.S. NAVY ANNOUNCES PROPOSED PLAN/ DRAFT REMEDIAL ACTION PLAN

The U.S. Department of the Navy Base Realignment and Closure Program Management Office West encourages the public to provide comments on its proposed cleanup plan for the ***Installation Restoration Site 05 (IR05)***, ***Dredge Pond 7S (DP7S)***, and ***Western Magazine Area (WMA)*** sites located at the former ***Mare Island Naval Shipyard (MINS)***, Vallejo, California (Figure 1). The public comment period and meeting information are found at the bottom of this page. The Navy has worked with the ***California Environmental Protection Agency, Department of Toxic Substances Control (DTSC),*** the ***San Francisco Bay Regional Water Quality Control Board (Water Board),*** and the ***U.S. Environmental Protection Agency (EPA)*** to evaluate cleanup options for the IR05, DP7S, and WMA sites including the proposed cleanup plan.

INTRODUCTION

This ***Proposed Plan (PP)/Draft Remedial Action Plan (RAP)*** announces the recommended cleanup plan for the IR05, DP7S, and WMA sites. Several extensive removal actions to address contaminated soil, ***munitions and explosives of concern (MEC)***, and radiological items have been performed at the IR05, DP7S, and WMA sites. Chemical contaminants from former activities at the sites that impacted soil above standards appropriate for future use as recreational and wetland areas have been removed. The proposed cleanup plan involves ***land-use controls*** to restrict soil disturbance thereby protecting future human receptors from the low residual risk posed by contact with potential buried MEC.

Groundwater beneath the site does not meet California's minimum water quality criteria for a domestic or municipal freshwater supply due to salinity. On this basis, the Water Board granted an exception to the drinking water policy for shallow groundwater at the IR05, DP7S, and WMA sites under State Water Resources Control Board Resolution 88-63 (Resolution 88-63). Because the groundwater is not suitable for domestic use due to salinity, the potential risk to a hypothetical user from ingestion and dermal contact with groundwater was not fully evaluated.

PUBLIC COMMENT PERIOD

March 18, 2015

through

April 17, 2015

For more information:
http://bracpmo.navy.mil

PUBLIC MEETING

March 26, 2015 @ 7:00pm

Mare Island Conference Center,
375 G Street, Vallejo, California

Words in ***bold italic font*** are defined in the glossary of terms on pages 10 and 11.

Figure 1. Site Location Map

INTRODUCTION (Continued)

This PP/Draft RAP details the Navy's cleanup plan for soil and summarizes the site history, environmental investigations, and removal actions performed to date at the IR05, DP7S, and WMA sites (Figure 1). As required by the ***Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)***, this PP/Draft RAP explains the basis for the proposed cleanup plan. The Navy will take into consideration public comments on this PP/Draft RAP before making a final cleanup decision.

THE CERCLA PROCESS

The Navy is issuing this PP/Draft RAP as part of its public participation responsibilities under CERCLA and the ***National Oil and Hazardous Substance Pollution Contingency Plan (NCP)*** to ensure that the public has the opportunity to comment on the proposed cleanup plan. Figure 2 shows the steps in the CERCLA process and the current phase of the IR05, DP7S, and WMA sites within the CERCLA process.

The proposed cleanup plan presented in this PP/Draft RAP is based on the numerous investigations, removal actions and risk assessments performed to date. Documents describing the previous activities at the IR05, DP7S, and WMA sites can be found at the John F. Kennedy Library located at 505 Santa Clara Street in Vallejo, California. Some documents may also be available online at the Navy website: http://bracpmo.navy.mil.

In response to feedback from the community or new information, and in consultation with regulatory agencies, the Navy may modify the cleanup plan or select different remedies. Therefore, the community is encouraged to review and comment on this PP/Draft RAP. A final cleanup decision, documented in the Record of Decision/Final Remedial Action Plan, will not be made until all community comments are considered.

SITE DESCRIPTION AND HISTORY

The Mare Island peninsula is located in Solano County, California, northeast of San Francisco in Vallejo (Figure 1). The Napa River (Mare Island Strait) lies to the east and separates the peninsula from the City of Vallejo; the remainder of the peninsula is bounded by Highway 37 to the north, the Carquinez Strait to the south, and San Pablo Bay to the west. The original Mare Island consisted of approximately 1,000 acres of dry land and 300 acres of wetlands. Over time, the placement of various fill materials and dredged sediments have increased the size of Mare Island to approximately 5,600 acres.

The Navy acquired Mare Island in 1853 and started shipbuilding operations the following year. The primary ship construction and maintenance area of the former MINS was established along the northeastern shore of the original island adjacent to Mare Island Strait. During World War II, the former MINS reached peak capacity for shipbuilding, repair, overhaul, and maintenance. Due to the decreasing Navy needs in the postwar environment, shipyard activity decreased, and the former MINS was closed on April 1, 1996, after 142 years of operation.

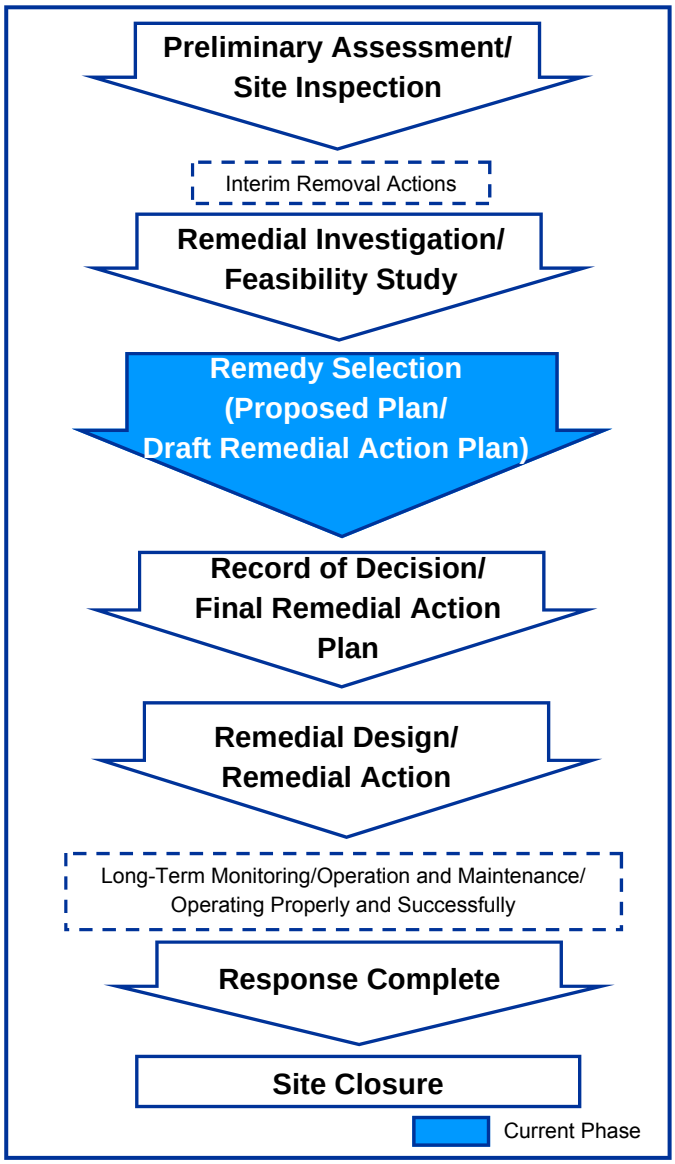

Figure 2. IR05, DP7S, and WMA CERCLA Process

SITE DESCRIPTION AND HISTORY (Continued)

IR05 consists of 35 acres created by the natural deposition of sediments north of Dike 12 in addition to fill from hillside excavations and dredge spoils. A formerly used dredge spoils pipeline runs along the northern border and crosses the northernmost portion of IR05, before ending at the outfall location in Dredge Pond 7. There are no known or suspected outfall locations at IR05. Other facilities historically at IR05 included temporary structures and two storm sewer lines. Between 1947 and 1975, IR05 was used as a munitions storage and disposal area. From 1947 until 1951, the northeastern portion of IR05 was most likely used for open storage of munitions. By 1953, this area was established as an inert materials storage area used to store empty cartridge cases, ammunition containers, and miscellaneous ordnance-related material. The southeastern portion of IR05 was established as an ordnance burning, detonation, and disposal area. Burning and detonation facilities included smokeless powder burn pads, high explosives burn pads, detonation pits, primer/ tracer burning ovens, and pyrotechnic burn pits. Currently there are no buildings at IR05.

DP7S consists of 24 acres, which were originally the southern portion of Dredge Pond 7. With the exception of a suspected historic dredge outfall in the northeastern corner of DP7S, there has been no infrastructure. DP7S and adjacent Dredge Pond 7 were used as an active dredge spoils disposal area through the 1970s, when a berm was built to divide the large area into two smaller ponds. Since then DP7S was no longer used for sediment deposition and it reverted back to native habitat.

The WMA consists of 106 acres, created by the natural deposition of sediments north of Dike 12 in addition to fill from upland borrow pits. Initial development at the WMA began in 1931 with the construction of seven buildings (Buildings A147 through A152, and A170) cut into the hillside on the east side of the site. An additional 14 buildings (Buildings A166, A169, A173 through A175, and A178 through A186) and a system of roads and railroad lines were constructed on the fill material in former wetlands between 1938 and 1939. There are two historic outfall locations in the northern WMA. The WMA buildings served as munitions storage magazines with a combined capacity of more than 132,500 square feet. The munitions storage magazines remain at the site; however, the railroad lines were removed in 1994. In the central portion of the WMA is the Horse Stables Area, which was historically used as a horse stables and corral area. Building A166A, the horse stables, is the only remaining structure at the Horse Stables Area.

RCRA SOLID WASTE MANAGEMENT UNITS

Solid Waste Management Units (SWMUs) 79, 80, 81, 101, and 125 were established under the historical ***Resource Conservation and Recovery Act (RCRA)*** permit for Mare Island. Except for SWMU 125, which is a multi-site SWMU, the SWMUs are located in IR05. The SWMUs are described as follows:

- SWMU 79—Concord Annex Circle Pit (IR05)
- SWMU 80—Concord Annex Ordnance Disposal Area (IR05)
- SWMU 81—Concord Annex Storm Sewers (IR05)
- SWMU 101—Concord Annex Ordnance and Addition Sites (IR05)
- SWMU 125—South End of Island (IR05, DP7S, and WMA)

The SWMUs were incorporated into the overall Installation Restoration Program to be remediated under the CERCLA process. They have been investigated and where required excavated through a series of removal actions under the CERCLA program. Once the final remedy is implemented, DTSC will issue a RCRA Corrective Action Complete Determination closing SWMUs 79, 80, 81, 101, and the IR05, DP7S, and WMA portions of SWMU 125. In addition, the three sites will be removed from the facility RCRA permit boundaries.

SITE INVESTIGATIONS

Various environmental investigations have been performed for soil and groundwater at the IR05, DP7S, and WMA sites. These studies have included investigating contamination as required under the CERCLA, RCRA, petroleum, and polychlorinated biphenyl cleanup programs. Key investigation and reports for the site are as follows:

- Initial Assessment Study (1982)
- Verification Study (1987)
- Sampling, Cleaning and Inspection of IR05 Storm Drains (1988)
- ***Remedial Investigation (RI)*** Phase I, Site Characterization Study (1990-1992)
- Basewide Quarterly Groundwater Sampling (1992-1994)
- RI Phase II Investigations
  - Geophysical Survey (1993-1994)
  - Geoprobe, Hand-Auger, and Sediment Sampling (1993-1996)
  - Cone Penetrometer Test Survey (1994)
  - Tidal Influence Study (1996)

SITE INVESTIGATIONS (Continued)

- Ordnance Preliminary Assessment (1995)
- Mare Island ***Unexploded Ordnance (UXO)*** Site Investigation (1995-1997)
- Onshore Ecological Risk Assessment (1997-1999)
- Draft RI Report, Investigation Area I (1997-1999)
- Underground Storage Tank Compliance Program (1997 and 2003)
- Basewide Quarterly Groundwater Sampling (1999-2000)
- RI Report, Investigation Area H1, IR05, and WMA (2002)
- Site Inspection of the Horse Stables Area (2003-2004)
- Data Gaps Sampling (2007-2008)
- ***Munitions Response Action (MRA) Digital Geophysical Mapping (DGM)*** Surveys (2006)
- RI Report, IR05, DP7S, and WMA (2013)
- Feasibility Study, IR05, DP7S, and WMA (2014)

SITE REMOVAL ACTIONS

A variety of removal actions have been conducted to address environmental concerns at the IR05, DP7S, and WMA sites. These actions include the following:

- WMA Emergency Response Actions to address MEC (1990-1994)
- IR05 Surface Sweep to address MEC (1994)
- IR05 UXO ***Time-Critical Removal Action (TCRA)*** to address MEC (1995-1997)
- WMA UXO Intrusive Investigation to address MEC (1997-1998)
- Dredge Spoils Ponds UXO Intrusive Investigation to address MEC (1998-2001)
- Dredge Spoils Ponds Radiological Investigation to address radiological contaminants (2000-2001)
- MRA DGM Anomaly Excavations to address MEC at IR05 and DP7S as well as MEC and radiological items at the WMA(2006-2007)
- Horse Stables Area TCRA to address chemical contamination (2007-2010)
- IR05 TCRA to address chemical contamination (2007-2011)
- MRA "Mag and Flag" Anomaly Excavations to address MEC (2009-2010)

Reports describing the investigation and removal actions at the IR05, DP7S, and WMA sites can be found at the information repositories listed on the last page of this PP/Draft RAP. Some documents may also be available online at the Navy website: http://bracpmo.navy.mil.

CURRENT AND FUTURE SITE USE

Buildings A169 and A180 at the WMA are currently being used for the interim storage of recovered munitions material documented as safe and MEC items, respectively. The remainder of the IR05, DP7S, and WMA sites are currently inactive and remain property of the Navy. The sites are planned for transfer to the California State Lands Commission or City of Vallejo, as appropriate, for reuses including recreational and wetland areas.

EXCEPTION TO SOURCES OF DRINKING WATER POLICY

Shallow groundwater beneath the sites does not meet California's minimum water quality criteria for a domestic or municipal freshwater supply due to salinity. On this basis, the Water Board granted an exception to the drinking water policy for shallow groundwater at the IR05, DP7S and WMA sites under State Water Resources Control Board Resolution 88-63.

SUMMARY OF CONTAMINANTS AND HAZARDS OF CONCERN

Soil/sediment, groundwater, and surface water samples collected from the IR05, DP7S, and WMA sites were evaluated for chemical contaminants consistent with the historical uses of the site. The chemicals of potential concern at the sites include the following:

- Metals (Inorganic Constituents)
- Dioxins/Furans
- Explosives
- Herbicides
- Organotins
- Pesticides
- Polychlorinated Biphenyls
- Semivolatile Organic Compounds
- Total Petroleum Hydrocarbons
- Volatile Organic Compounds

The three sites were also extensively evaluated for MEC and radiological items. Although radiological items were thoroughly investigated at all three sites, they have only been recovered from the two historic outfall locations at the WMA. Radiological screening was performed at over 16,200 locations excavated to recover MEC; however no additional radiological items were encountered at any of the three sites. Therefore no unacceptable risk remains from potential radiological items at the three sites. Despite the extensive MEC investigations, potential risk from hazards associated with MEC items in subsurface soil may still exist at all three sites.

RISK ASSESSMENT PROCESS

A baseline human health and ecological risk assessment was conducted to estimate the theoretical levels of risk to humans and ecological receptors from chemical contamination remaining at the IR05, DP7S, and WMA sites. Regulatory requirements were used to define what is considered acceptable and unacceptable risk.

HUMAN HEALTH RISK ASSESSMENT

A human health risk assessment estimates the theoretical risk to humans based on assumptions designed to overestimate risk and result in assessments that are protective of human health.

The human health risk assessment evaluated cancer risks and adverse non-cancer health effects associated with chemicals of potential concern in soil/sediment, groundwater and surface water for both current and future users. The risks associated with current and planned reuses of the sites, recreational users and construction workers, are discussed below.

Recreational User

Risks were comprehensively evaluated for a future recreational user exposure scenario for all exposure media (soil/sediment, groundwater, and surface water). Recreational users may be exposed to soil/sediment from ingestion, skin contact, inhalation of dust in outdoor air, and inhalation of volatile vapors.

Shallow groundwater beneath the site does not meet California's minimum water quality criteria for a domestic or municipal freshwater supply due to salinity; therefore, ingestion of groundwater was not considered a potential exposure route for recreational users. Recreational users may be exposed to shallow groundwater from inhalation of volatile vapors. Recreational users may be exposed to surface water from ingestion and dermal contact.

Construction Worker

The estimated potential risks/hazards for the construction worker scenario were evaluated for all exposure media (soil/sediment, groundwater, and surface water). Construction workers may be exposed to soil from ingestion, skin contact, inhalation of dust in outdoor air, and inhalation of volatile vapors.

A construction worker may be exposed to groundwater from skin contact, and inhalation of volatile vapors during potential trenching/excavation activities. A construction worker may be exposed to surface water from ingestion and dermal contact.

HUMAN HEALTH RISK ASSESSMENT RESULTS

Conclusions of the human health risk assessment indicate there are no unacceptable risks from chemicals of potential concern to current or planned future recreational users and construction workers. Potential ingestion and dermal contact to groundwater was not fully evaluated for any hypothetical user because shallow groundwater does not meet the minimum water quality criteria for a domestic or municipal freshwater supply due to salinity.

Based on the DGM Anomaly Excavations (2006-2007) and "Mag and Flag" Anomaly Excavations (2009-2010) which included excavation of over 16,200 anomalies, the probability of coming into contact with MEC items at the IR05, DP7S, and WMA sites is low. In addition MEC items are not expected to be present on the surface because 100 percent of accessible areas were visually inspected. However, potential risk from hazards associated with MEC items in subsurface soil may still exist at the three sites.

ECOLOGICAL RISK ASSESSMENT

The ecological risk assessment was conducted initially using conservative assumptions including using the maximum chemical concentration reported as well as assuming all of the species home range and diet is affected by the chemical, and the species foraging area is within the affected property. The conservative assumptions were then revised to more reasonable assumptions if chemicals of concern were identified in the initial approach. In the final step, the chemicals of concern were further evaluated utilizing site-specific receptors and exposure scenarios.

ECOLOGICAL RISK ASSESSMENT RESULTS

Conclusions of the ecological risk assessment indicate that chemicals of potential ecological concern do not pose a significant or immediate total and "incremental site-related" risk to ecological receptors at the sites.

IR05

FEASIBILITY STUDY SUMMARY

The purpose of the Feasibility Study Report is to ensure the development and evaluation of the appropriate ***remedial alternatives*** to address risks at a site. Remedial alternatives are cleanup options available to contain, remove, or treat contamination and hazards to protect human health and/or the environment. Because previous actions have removed the principle risks, including radiological and MEC hazards and chemical constituents in soil/sediment, the feasibility study was streamlined to accelerate the cleanup process. Steps associated with the identification and screening of remedial technologies and development of screening alternatives normally included in a feasibility study were not required.

The remedial alternatives developed in the feasibility study were evaluated against seven of the nine CERCLA criteria, which are described in Figure 3. The remaining two criteria, State and Community Acceptance, will be addressed in the Record of Decision/Final Remedial Action Plan.

REMEDIAL ACTION OBJECTIVES

Remedial action objectives are statements containing a cleanup goal for the protection of human or ecological receptors from contaminants in specific media, such as soil, groundwater, or air. The objectives take into consideration the current and reasonably anticipated future land use. The remedial action objective at all three sites is to control direct exposure and protect future human receptors from the low residual risk posed by potentially buried MEC.

REMEDIAL ALTERNATIVE EVALUATION

Remedial alternatives are evaluated to provide decision-makers with adequate information to allow appropriate selection of a remedy for a site. Based on the numerous investigations and extensive removal activities at the IR05, DP7S and WMA sites, only two remedial alternatives were considered; no action and land-use controls.

Alternative 1—No Action

The No Action Alternative provides a baseline for comparing other alternatives. There are no remedial actions, monitoring, or reporting associated with this alternative.

Threshold Criteria

Overall Protection of Human Health and the Environment
How the risks are eliminated, reduced, or controlled through treatment, engineering, or institutional controls.

Compliance with Applicable or Relevant and Appropriate Requirements
Federal and state environmental statutes met or grounds for waiver provided.

Primary Balancing Criteria

Long-term Effectiveness
Maintain reliable protection of human health and the environment over time, and once cleanup goals are met.

Reduction of Toxicity, Mobility, or Volume Through Treatment
Ability of a remedy to reduce the toxicity, mobility, and volume of the hazardous contaminants present at the site through treatment.

Short-term Effectiveness

Protection of human health and the environment during construction and implementation period including times to meet cleanup objectives.

Implementability
Technical and administrative feasibility of a remedy, including the availability of materials and services needed to carry it out.

Cost
Estimated capital, operation, and maintenance costs of each alternative.

Modifying Criteria

State Acceptance

State concurs with, opposes, or has no comment on the preferred alternative.

Community Acceptance
Community concerns addressed and community preferences considered.

Figure 3. Criteria for Comparison of Cleanup Alternatives

REMEDIAL ALTERNATIVE EVALUATION (Continued)

Alternative 2—Land-Use Controls

The Land-Use Control Alternative would include engineering and ***institutional controls*** for risk and hazard management. Engineering controls such as signage to alert future users of the potential presence of buried MEC may be used together with institutional controls to restrict disturbance of soil. Institutional controls will also prohibit sensitive uses including residences, hospitals, schools, and daycare facilities.

Institutional controls would include legal and administrative mechanisms used to implement land-use restrictions to limit the exposure of future landowner(s) and user(s) of the property to potentially buried MEC unless approved by the DTSC in consultation with the Navy. Upon conveyance of the property from Navy possession, the subsequent property owner will be responsible for enforcing the institutional controls. Property controls in the form of deed restrictions and a ***land use covenant*** will be implemented to legally enforce the institutional controls.

COMPARISON OF ALTERNATIVES

Both alternatives were compared using the nine criteria shown in Figure 3, which are categorized into three groups: threshold criteria, primary balancing criteria, and modifying criteria. Threshold criteria are requirements that each alternative must meet to be eligible for selection as the preferred alternative and include overall protection of human health and the environment and compliance with ***Applicable or Relevant and Appropriate Requirements (ARARs)***. Primary balancing criteria are used to weigh effectiveness and cost tradeoffs among alternatives. The primary balancing criteria include long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost. The primary balancing criteria represent the main technical criteria upon which the alternative evaluation is based.

Modifying criteria include state acceptance and community acceptance, and may be used to modify aspects of the preferred alternative when preparing the Record of Decision/Final Remedial Action Plan.

The modifying criteria will be evaluated after the public comment period discussed in this PP/Draft RAP.

Overall Protection of Human Health and the Environment

Under Alternative 2, Land-Use Controls will restrict disturbance of soil at the sites without regulatory approval, and only if environmental and worker safety control measures are implemented by properly trained personnel. Therefore, Alternative 2—Land-Use Controls achieves a higher level of protection than Alternative 1—No Action, by ensuring that the exposure pathways are controlled.

Compliance with ARARs

Alternative 1—No Action is not evaluated for this criterion because ARARs are applicable only when a response action is taken. Alternative 2—Land-Use Controls is compliant with all identified ARARs.

Long-term Effectiveness and Permanence

Under Alternative 2—Land-Use Controls, risks to human health would be addressed through engineering and institutional controls. Implementation of land-use controls provides control over future activities and restricts potential exposures from soil disturbance. Ongoing effectiveness of land-use controls would be verified through annual inspections and the 5-year review process. Alternative 2 would be effective in the long term at mitigating risk, and mechanisms would be in place to ensure its continued effectiveness.

Reduction of Toxicity, Mobility, or Volume through Treatment

Neither of the proposed alternatives would reduce the toxicity, mobility, or volume of potential contamination through treatment, because treatment is not a component of either alternative.

Short-Term Effectiveness

The short-term effectiveness evaluation addresses protection of human health and the environment during remedy implementation. Alternative 1—No Action has no effect on human health or the environment in the short term because no action would be performed. Under Alternative 2—Land-Use Controls, the only action is implementation of engineering and institutional controls to restrict use and it would be effective in the short term.

Implementability

Both alternatives are straightforward to implement. Alternative 2—Land-Use Controls can be readily prepared and implemented because the Navy currently retains ownership of the property. As the property owner, the Navy can implement land-use controls and incorporate property controls in the deed when the land is transferred to a new owner.

COMPARISON OF ALTERNATIVES (Continued)

Cost

No active construction or operational activities would occur under Alternative 1—No Action; therefore, there are no associated costs. The capital costs associated with Alternative 2—Land-Use Controls include preparation of a remedial design to describe the institutional controls as well as signage and installation. These costs are assumed to occur in the first year of the operation and maintenance period. The operation and maintenance costs include annual compliance monitoring and 5-year reviews. The cost in present worth for Alternative 2—Land-Use Controls is estimated to be $144,088 over a 30-year period, assuming an interest rate of 1.9 percent.

SUMMARY OF PREFERRED ALTERNATIVE

Based on an analysis of the alternatives, Alternative 2—Land-Use Controls achieves an overall higher level of protectiveness than Alternative 1—No Action. Under Alternative 2—Land-Use Controls, soil disturbing activities would be prohibited through institutional controls, unless authorized by the agencies in consultation with the Navy. Engineering controls in the form of warning features such as signs may also be employed. Land-Use Controls would serve as an effective means to ensure conditions at the IR05, DP7S, and WMA sites are protective.

REGULATORY SUMMARY

California Health and Safety Code

This PP/Draft RAP has been prepared to meet the requirements of the California Health and Safety Code section 25356.1 for hazardous substance release sites. The California Health and Safety Code requires preparation of a RAP for sites that are not listed on the ***National Priorities List (NPL)***, such as the former MINS. Therefore, this document also serves as a Draft RAP to fulfill the public notice and comment requirement of the California Health and Safety Code. The Final RAP will be incorporated in the Record of Decision for the IR05, DP7S, and WMA sites.

California Environmental Quality Act

As required by California state law (the California Environmental Quality Act or CEQA), DTSC has studied the risks associated with the residual chemical concentrations and MEC at the IR05, DP7S, and WMA sites, as well as possible effects of the proposed cleanup on human health and the environment. The findings of the study can be reviewed in a document called a ***Notice of Exemption (NOE)***. The NOE is prepared by DTSC and documents that the proposed cleanup will have no negative impact on human health or the environment.

Nonbinding Allocation of Responsibility

Pursuant to California Health and Safety Code section 25356.1(e) for remedial action plans prepared for DTSC-listed sites, DTSC is to prepare a preliminary nonbinding allocation of responsibility among all identifiable ***potentially responsible parties (PRP)***. Based on the available information regarding the former Mare Island Naval Shipyard, DTSC has determined that the Navy is the only identified PRP.

Munitions Storage Magazines at the WMA

Glossary of Terms

Applicable or Relevant and Appropriate Requirements (ARARs):

Federal, state, and local regulations and standards determined to be legally applicable or relevant and appropriate to remedial (cleanup) actions at a Comprehensive Environmental Response, Compensation, and Liability Act site.

Base Realignment and Closure (BRAC):

The process designed to realign, close, and dispose of military properties.

BRAC Cleanup Team (BCT):

The team of Navy, California Department of Toxic Substances Control, San Francisco Bay Regional Water Quality Control Board, and U.S. Environmental Protection Agency representatives coordinating the environmental investigations and cleanup at the installation.

California Environmental Protection Agency Department of Toxic Substances Control (DTSC):

A part of the California Environmental Protection Agency and California's lead environmental regulatory agency. Its mission is to protect public health and the environment from toxic substances. DTSC is represented on the BCT for the former MINS.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

Also known as "Superfund," this federal law was passed in 1980 and regulates environmental investigation and cleanup of sites identified as possibly posing a risk to human health and/or the environment.

Digital Geophysical Mapping (DGM):

A method of detecting certain physical properties below the ground surface. The data produced provides the location of subsurface anomalies.

Dredge Pond 7S (DP7S):

An area of land encompassing approximately 24 acres located between the San Pablo Bay tidal wetlands and IR05 along the southern end of Mare Island.

Engineering Controls:

Engineering controls may include items such as signage to warn personnel of exposure to potential contamination.

Installation Restoration Site 05 (IR05):

An area of land encompassing approximately 35 acres located along the Dike 12 breakwater at the southern end of Mare Island.

Institutional Controls:

Non-engineering mechanisms established to limit human exposure to contaminated soil, sediment, and/or groundwater.

Land-Use Controls

Engineering and institutional controls restricting activity, use, and access to properties with residual contamination.

Land Use Covenants:

Proprietary controls that specify requirements or limit the use of real property and affect the title of the property.

Mare Island Naval Shipyard (MINS):

A naval shipyard established by the Navy in 1854 and closed in April 1996. The former MINS is located on a peninsula in Solano County, California, about 25 miles northeast of San Francisco.

Munitions and Explosives of Concern (MEC):

Discarded military munitions and munitions constituents present in high enough concentrations to pose an explosive hazard.

Munitions Response Action (MRA):

Response actions, including investigation, removal actions, and remedial actions, to address explosives safety or environmental risk.

Glossary of Terms

National Oil and Hazardous Substance Pollution Contingency Plan (NCP):
The federal regulation that guides determination of the sites to be corrected under both the Superfund Program and the program to prevent or control spills into surface waters or elsewhere.

National Priorities List (NPL):
The list of national priority sites among the known releases or threatened releases of hazardous substances, pollutants, or contaminants.

Notice of Exemption (NOE):
A form prepared by DTSC to document the site does not have potential impacts on the environment.

Potentially Responsible Party (PRP)
An individual or company, such as the owner, operator, transporter, or generator of hazardous waste that is potentially responsible for the contamination problems at a site.

Proposed Plan (PP)/Draft Remedial Action Plan (RAP):
The document that reviews the remedial alternatives presented in the Feasibility Study, summarizes the proposed preferred remedial alternative, explains the reasons for recommending the alternative, and notifies the community of the preferred alternative.

Remedial Alternatives:
The cleanup options available to contain, remove, or treat hazardous waste to protect human health and/or the environment.

Remedial Investigation:
An in-depth study designed to gather data needed to determine the nature and extent of contamination and assess the risk to human health and the environment.

Resource Conservation and Recovery Act (RCRA):
A federal law passed in 1976 that established the framework for treatment, storage, transportation, and disposal of solid and hazardous wastes.

San Francisco Bay Regional Water Quality Control Board (Water Board):
The San Francisco Bay Regional Water Quality Control Board is part of the California Environmental Protection Agency. Its mission is to preserve, enhance, and restore California's water resources. The Water Board is represented on the BCT for the former MINS.

Solid Waste Management Unit (SWMU):
Any discernible area where solid waste may have been placed at any time, irrespective of whether the area was intended for the management of solid or hazardous waste.

Time-Critical Removal Action (TCRA):
Removal actions where, based on the site evaluation, a determination is made that a removal is appropriate, and that less than six months exists before on-site removal activity should begin.

Unexploded Ordnance (UXO):
Munitions that have been prepared for action but did not explode when they were employed and still pose a potential risk of detonation.

U.S. Environmental Protection Agency (EPA):
The federal agency that is charged with protecting human health and the environment. The EPA is represented on the BCT for the former MINS.

Western Magazine Area (WMA):
An area of land encompassing approximately 106 acres between a hilly upland area and the San Pablo Bay tidal wetlands at the southern end of Mare Island.

COMMUNITY PARTICIPATION

The Navy is issuing this PP/Draft RAP as part of its public participation responsibilities under CERCLA and the NCP to ensure that the public has the opportunity to comment. This PP/Draft RAP summarizes information detailed in the documents, including the RI and Feasibility Study Reports available in the Administrative Record. The Navy encourages the public to review these documents to gain an understanding of the environmental investigations, removal actions, and risk assessments that have been conducted. Key documents generated for the IR05, DP7S, and WMA sites are listed on pages 4 and 5. These documents are available for public review at the information repositories listed on the last page.

There are two ways for you to provide comments on this PP/Draft RAP:

1. Public Comment Period

During the 30-day public comment period from March 18 to April 17, 2015, you may use the comment form included with this PP/Draft RAP to send written comments to the ***Base Realignment and Closure (BRAC)*** Environmental Coordinator, Navy BRAC Program Management Office West at 1455 Frazee Road, Suite 900, San Diego, California 92108-4310. You may also submit comments electronically via email to the BRAC Environmental Coordinator (janet.lear@navy.mil) or via fax to (619) 532-0780.

2. Public Meeting

You may provide written or oral comments during the public meeting at 7:00 PM on March 26, 2015, which will be held in the Mare Island Conference Center at 375 G Street, Vallejo, California. A stenographer will be at the meeting to record all public comments.

After the public comment period is over, the Navy will review and consider the comments and in consultation with the regulatory agencies, the Navy may modify the proposed cleanup plan based on feedback from the community or on new information. Therefore, the community is strongly encouraged to review and comment.

A final decision will not be made until all comments are considered. Community acceptance will be evaluated after the public comment period for this PP/Draft RAP. The Navy will address any comments in a responsiveness summary presented in the Record of Decision/Final Remedial Action Plan. A Public Notice will be published in the Vallejo Times-Herald announcing when the Record of Decision/Final Remedial Action Plan is available to the public in the information repositories.

Proposed Plan/Draft Remedial Action Plan Comment Form
Installation Restoration Site 05, Dredge Pond 7S, and
Western Magazine Area
Former Mare Island Naval Shipyard, Vallejo, California

The 30-day public comment period for this Proposed Plan/Draft Remedial Action Plan for the Installation Restoration Site 05, Dredge Pond 7S, and Western Magazine Area sites located at the former Mare Island Naval Shipyard, Vallejo, California, is from March 18 to April 17, 2015. A public meeting to present this Proposed Plan/Draft Remedial Action Plan will be held at the Mare Island Conference Center at 375 G Street, Vallejo, California, on March 26, 2015 at 7:00 PM. You may provide comments verbally at the public meeting, where all comments will be recorded by a court reporter. Alternatively, you may provide written comments in the space provided below or on your own stationary. All written comments must be postmarked no later than April 17, 2015. After completing your comments and your contact information, please mail this self-addressed form. You may also submit this form to a Navy representative at the public meeting. Comments are also accepted by email or fax; please address email messages to janet.lear@navy.mil or by fax to (619) 532-0780.

Name: _____

Representing: (optional) _____

Phone Number: (optional) _____

Address: (optional) _____

☐ Please check the box if you would like to be added to the Navy's Environmental Mailing List for the former Mare Island Naval Shipyard.

Comments:

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BRAC Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

Postage is required

Ms. Janet Lear
BRAC Environmental Coordinator
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

INFORMATION REPOSITORIES

The John F. Kennedy Library provides public access to technical reports and other former MINS environmental information that supports this PP/Draft RAP. The administrative record file is a collection of reports and historical documents used in the selection of cleanup or remedial alternatives.

John F. Kennedy Library
505 Santa Clara Street, Vallejo, California 94590
(866) 572-7587
Hours: Mon & Wed 10:00am - 9:00pm
Tues & Thurs 10:00am - 6:00pm
Fri & Sat 10:00am - 5:00pm
Sun 1:00pm - 5:00pm

Administrative Record File
Contact: Ms. Diane Silva, Records Manager
Naval Facilities Engineering Command Southwest
Naval Base San Diego, Building 3519
2965 Mole Road
San Diego, California 92132-5190
(619) 556-1280

Multi-Agency Environmental Team Concurs with the IR05, DP7S, and WMA Sites Preferred Remedy

The ***BRAC Cleanup Team (BCT),*** composed of representatives from the Navy, DTSC, Water Board, and EPA, was established with the primary goals of protecting human health and the environment, expediting the environmental cleanup, and coordinating the environmental investigation and cleanup at the installation.

The BCT obtains a consensus on issues regarding the installation's environmental activities and makes a concerted effort to integrate current and potential future uses into the cleanup decisions. The BCT has reviewed all major documents and activities associated with the IR05, DP7S, and WMA sites. This review included the Removal Action Completion Reports and the Remedial Investigation and Feasibility Study Reports.

Based on reviews and discussions of key documents and activities, the multi-agency BCT recommends Alternative 2—Institutional Controls for the IR05, DP7S, and WMA sites as stated in this PP/Draft RAP.

PROJECT CONTACTS:

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INVITATION TO COMMENT

On the Proposed Remedial Action for the Installation Restoration Site 05, Dredge Pond 7S, and Western Magazine Area Sites Former Mare Island Naval Shipyard, Vallejo, California

IMPORTANT DATES TO REMEMBER

PUBLIC COMMENT PERIOD

March 18, 2015 to April 17, 2015

PUBLIC MEETING

March 26, 2015 at 7:00 PM
Mare Island Conference Center
375 G Street, Vallejo, California

See details inside.

BRAC Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310