



# Proposed Plan for Alameda Point Operable Unit-5/FISCA IR-02 Groundwater, Alameda, California



Alameda, California

May 2014

## U.S. NAVY PROPOSES NO FURTHER ACTION FOR GROUNDWATER

The U.S. Navy encourages the public to comment on this Proposed Plan for no further action for groundwater at Alameda Point **Operable Unit (OU)-5/Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex (FISCA) Installation Restoration Program (IR)-02**. OU-5/FISCA IR-02 is located directly to the east of the former Naval Air Station (NAS) Alameda on Alameda Point (Figure 1). This Proposed Plan describes an amendment to the 2007 **Record of Decision (ROD)** for OU-5/FISCA IR-02 groundwater. This amendment follows the implementation of groundwater remedial action and is based on data collected as part of the remedial action, a 2012 reevaluation of the site groundwater use and risk using current methodologies, and results of 2013 indoor air, sub-slab, and outdoor air measurements conducted by the **U.S. Environmental Protection Agency (EPA)**. The EPA, California Environmental Protection Agency (California EPA), **Department of Toxic Substances Control (DTSC)**, and the California EPA **San Francisco Bay Regional Water Quality Control Board (Water Board)** worked with the U.S. Navy on the reevaluation and concur that no further action is required for OU-5/FISCA IR-02 groundwater.

Post-ROD groundwater data evaluation determined that OU-5/FISCA IR-02 groundwater does not present an unacceptable **risk** to human health or the environment under current or future (residential and/or school) land uses. No drinking water wells are located at the site, groundwater does not meet the specifications of a potential source of drinking water, and no future potable groundwater use has been identified. Therefore, the U.S. Navy recommends no further action for OU-5/FISCA IR-02 groundwater.

This Proposed Plan presents the U.S. Navy's recommendation for no further action for groundwater and summarizes the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** process, results of previous pre-ROD and post-ROD investigations, and the basis for no further action. The Navy will consider the public comments on this Proposed Plan during preparation of a ROD Amendment.



Figure 1. Alameda Point/FISCA

**- NOTICE -**

**PUBLIC COMMENT PERIOD**

**May 5 through June 5, 2014**

**PUBLIC MEETING**

**May 20, 2014**

**Alameda Public library  
1550 Oak Street**

**Alameda, California 94501 5:00 to 7:00 p.m.**

## THE CERCLA PROCESS

The U.S. Navy is issuing this Proposed Plan as part of its public participation responsibilities under Section 117(a) of CERCLA and Section 300.430(f) (2) of the **National Oil and Hazardous Substances Pollution Contingency Plan (NCP)**. The flow chart to the right shows the steps in the CERCLA process and identifies the current status of OU-5/FISCA IR-02 groundwater in the CERCLA process.

This Proposed Plan summarizes information detailed in the **Remedial Investigation (RI)/Feasibility Study (FS)** report, ROD, **Remedial Design (RD)/Remedial Action (RA) Work Plan**, and subsequent information from post-ROD remedial action data collection and data evaluation activities. The **post-ROD groundwater data evaluation** considered the full body of site characterization data and used current guidance and methodologies. The findings are presented in a technical memorandum (tech memo) dated December 2012. The tech memo summarizes technical evaluations and conclusions presented in previous documents, including the RI/FS report, ROD, and RD/RA Work Plan as well as additional data collected during implementation of the remedial action. The post-ROD groundwater data evaluation also examined the nature and extent of potential contaminants in OU-5/FISCA IR-02 groundwater and the associated risk to current and future **receptors**.

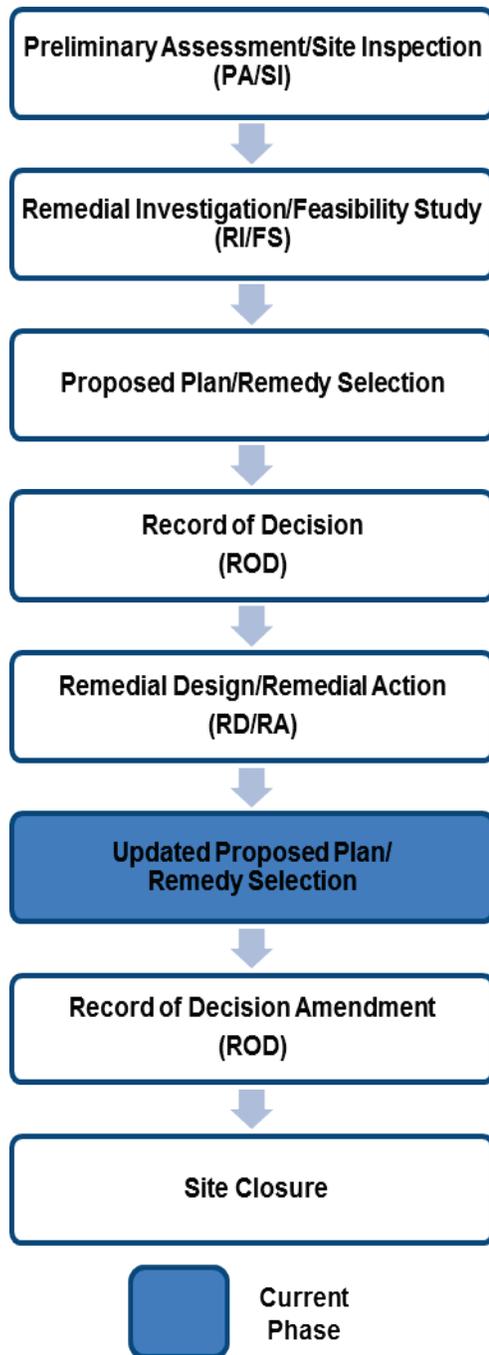
The reports are available for public review at the locations listed on Page 7 of this Proposed Plan. Information about the public meeting for this Proposed Plan and on submitting public comments during the public comment period also is presented on Page 7.

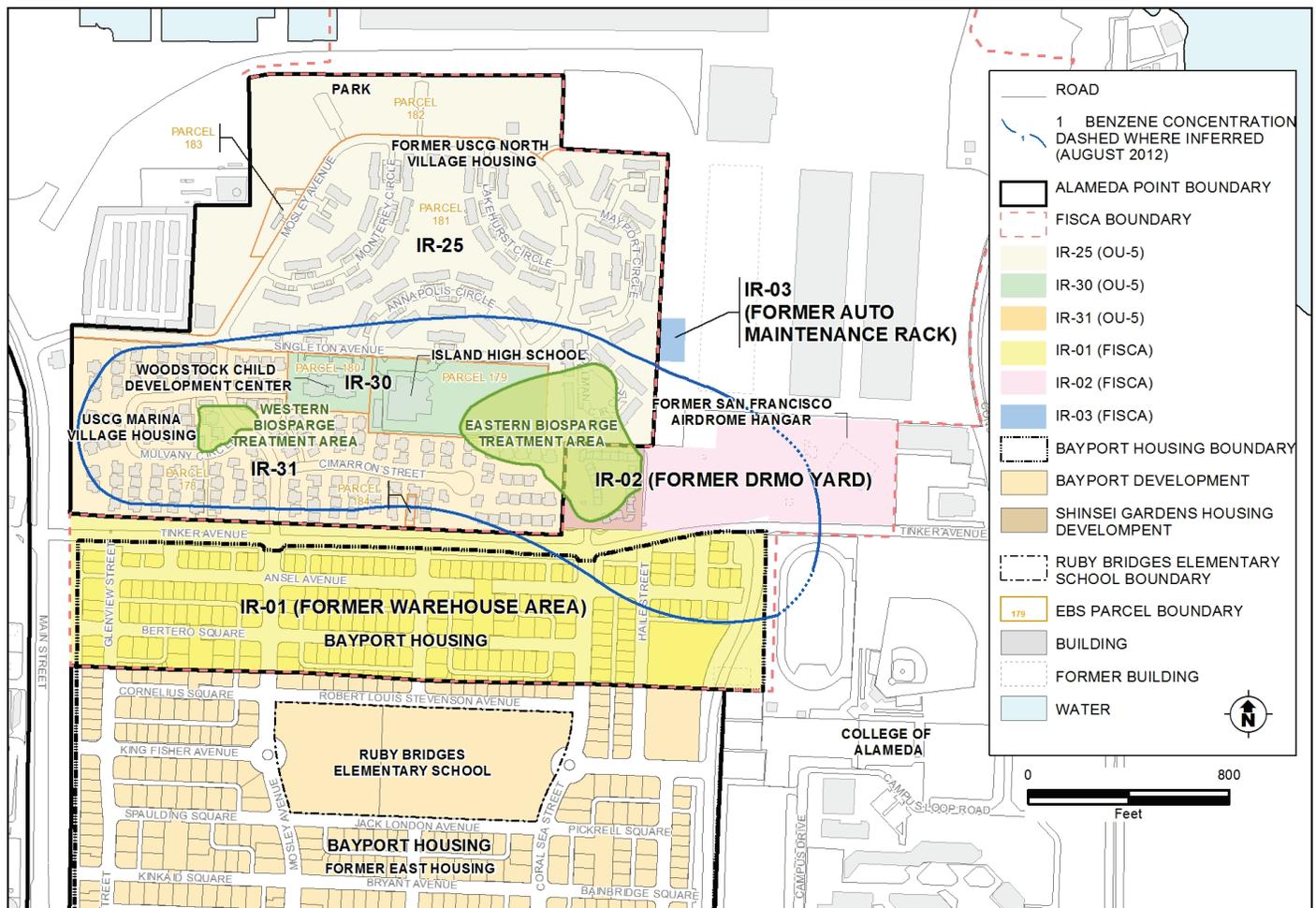
In consultation with the regulatory agencies, the U.S. Navy may modify the proposed recommendation based on feedback from the community. Therefore, the community is encouraged to review and comment on this Proposed Plan. A final decision, documented in the ROD Amendment, will not be made until all public comments are considered.

## SITE DESCRIPTION AND HISTORY

Alameda Point is relatively flat and consists of land created in the early 1900s by filling tidelands, marshlands, and sloughs. The OU-5/FISCA IR-02 area is shown on Figure 2. The OU-5 property, located east of Main Street, was acquired by the Navy in various transactions between 1951 and 1968. The U.S. Government purchased the property comprising FISCA, located east of the former NAS Alameda, in various transactions between 1946 and 1966. The former NAS Alameda ceased operations in 1997, and FISCA ceased operations in 1998.

## COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA) PROCESS





**Figure 2. OU-5/FISCA IR-02 Layout**

As shown in Figure 2, the primary land use at OU-5 is residential use, while land use at FISCA is mixed commercial/residential.

OU-5 includes the following:

- **IR-25:** A 42-acre site consisting of the unoccupied former U.S. Coast Guard (USCG) housing at North Village and the current USCG Housing Maintenance Office. Future land use is expected to remain residential.
- **IR-30:** An approximately 6-acre site consisting of the currently unoccupied Island High School and the Woodstock Child Development Center. If the future land use in this area does not return to education, it is expected to become residential.
- **IR-31:** An approximately 25-acre site consisting of the USCG Marina Village housing area. Future land use is expected to remain residential.

The FISCA area includes the following:

- **IR-01:** This site is located on the southwest side of FISCA and is a former warehouse area that is now part of the Bayport Housing development.
- **IR-02:** This site is located on the south-central side of FISCA. A screening lot and scrap yard operated at IR-02 until 1997. The western portion of IR-02 was used as a screening lot, and the eastern portion

of IR-02 was used as a scrap yard and for temporary storage of discarded automobiles, stockpiled scrap metal, and surplus equipment. The Shinsei Garden Housing Development, a multi-family residential project, was constructed on the western portion of IR-02. Commercial and residential use is expected for the remainder of former IR-02.

- **IR-03:** This small site is located in the west-central portion of FISCA. IR-03 formerly consisted of an automotive drive-up maintenance rack over an asphalt-paved area. The area remains undeveloped; future land use is expected to be residential.

## SITE CHARACTERISTICS

### Site Geology

Surface and near-surface soil at the site consists of artificial fill placed during historical filling of the tidal marshlands, which occurred from approximately 1900 to 1930. The artificial fill materials are dredging spoils from San Francisco Bay and the Oakland Inner Harbor. Based on continuous soil cores collected during the RD/RA, the average fill thickness at OU-5/FISCA IR-02 is approximately 17 feet. The Marsh Crust is located at the bottom of the artificial fill material, directly above the native Bay Sediment Unit, which generally consists of gray to black clay with occasional, abundant plant material.

## Site Hydrogeology

OU-5/FISCA IR-02 groundwater is located in the artificial fill material. The saturated portion of the artificial fill is referred to as the First Water-bearing Zone, where the depth to groundwater ranges from 5 to 9 feet **below ground surface (bgs)**. The groundwater flow direction is variable but generally is north to northwest toward Oakland Inner Harbor.

The blue line on Figure 2 shows the approximate extent of the OU-5/FISCA IR-02 groundwater plume. The plume boundary is represented by benzene concentrations at or above 1 microgram per liter ( $\mu\text{g/L}$ ).

## EVALUATION OF GROUNDWATER USE

The site contains no drinking water wells, and the East Bay Municipal Utility District provides water service to this area from a separate source. Groundwater beneficial uses for shallow OU-5/FISCA IR-02 groundwater have been assessed over time. Because of saltwater intrusion and naturally high total dissolved solids (TDS) content, shallow OU-5/FISCA IR-02 groundwater is not suitable as a potential source of drinking water. In June 1999, the Water Board issued a letter stating that shallow groundwater at FISCA meets the exemption criteria in State Water Resources Control Board Resolution No. 88-63 and Water Board Resolution No. 89-39. However, the San Francisco Bay Basin Water Quality Control Plan designates the portion of the groundwater plume underlying OU-5 as a potential drinking water source.

Groundwater quality data were collected during the remedial action. Analysis of post-ROD groundwater quality measurements shows that shallow groundwater does not meet the specifications of a potential source of drinking water. The high level of TDS in shallow groundwater was the primary factor in this determination. However, other groundwater quality parameters also were found to be incompatible with domestic use, including the levels of sulfate, iron, and alkalinity. Neither TDS nor sulfate can be economically removed from the water to provide sufficient quality for domestic drinking water or small- to medium-sized industrial water supply use. The presence of these groundwater constituents is due in part to salt water intrusion and is not associated with any identified contaminant source.

Further evaluation of the groundwater characteristics (presented in the 2012 tech memo) shows that shallow groundwater is sufficiently impaired relative to multiple quality parameters (including TDS content) and that even non-potable beneficial uses (such as water supply for a car wash, landscaping, or irrigation) are not suitable based on operational and aesthetic considerations. In addition, California well standards require that annular sanitary seals extend to at least 50 feet bgs for community and industrial water supply wells and to at least 20 feet bgs for domestic, agricultural, and other types of water supply wells. Because the maximum artificial fill thickness that defines the extent of shallow groundwater at OU-5/FISCA IR-02 is approximately 20

feet, water supply well construction requirements would preclude the installation of water supply wells in shallow groundwater. Therefore, no practical beneficial uses of shallow groundwater (consumptive or non-consumptive) have been identified.

### Findings for Potential Groundwater Use

- Shallow groundwater at the site is not a potential source of drinking water.
- No practical beneficial uses of shallow groundwater (consumptive or non-consumptive) have been identified.
- The site contains no drinking water wells.
- Water supply well construction requirements preclude the installation of water supply wells in shallow groundwater at the site.

## PREVIOUS SITE INVESTIGATIONS

In 2002, the USCG performed a risk assessment for the Marina Village and North Housing residential areas to evaluate potential health risks associated with the migration of vapors from volatile chemicals in groundwater to indoor air. The risk assessment used soil gas and groundwater data from historical investigations as well as data from air samples collected for the USCG report.

Based on the results for outdoor, indoor, and crawl space air samples, there was no evidence of accumulation of vapors from groundwater contaminants in indoor air. Indoor air contaminant concentrations were similar to outdoor air contaminant concentrations, indicating that chemicals in indoor air do not originate from groundwater.

The final groundwater RI/FS report was completed in 2004. The RI/FS included the collection of over 300 groundwater samples. Results showed that benzene and naphthalene are the chemicals of concern in shallow groundwater. Contaminated OU-5/FISCA IR-02 shallow groundwater underlies an area of approximately 42 acres. Benzene and naphthalene concentrations increased with depth, with the highest concentrations at the bottom of the water-bearing zone (at the Marsh Crust at approximately 20 feet bgs).

During the remedial action, estimation of the extent of benzene and naphthalene in groundwater was refined to reflect the most current site conditions. Additional groundwater quality data were collected. Additional site characterization data evaluation confirmed that (1) the highest levels of groundwater contamination were located at the Marsh Crust and (2) groundwater contamination at the water table surface (5 to 9 feet bgs) was many times lower than at the Marsh Crust. Risk assessment results are summarized in the following section.

Based on the previous sample results, EPA selected locations near the former school and child care center for indoor air, sub-slab, and outdoor air sampling. This sampling was conducted in October 2013; results were either non-detect or did not indicate any contamination from the groundwater.

## HUMAN HEALTH RISK ASSESSMENT

For environmental investigations, risk is the likelihood or probability that a hazardous substance, when released to the environment, will cause adverse effects on exposed people and/or the environment. Risk assessments are designed to provide a margin of safety to protect public health and the environment by using conservative assumptions that ensure that risks are not underestimated.

A **human health risk assessment (HHRA)** was performed in 2004 as part of the RI that assessed multiple **exposure pathways**, including for residents, car wash workers, and landscape workers. The 2004 report documents that this risk assessment was based on the worst-case scenario using sample results from the bottom of the water-bearing zone.

For benzene and naphthalene, the primary concern is potential cancer risk. Cancer risk is expressed as a statistical probability that an individual could have an increased risk of cancer incidence. A 1 in 10,000 chance is expressed as a risk of  $1 \times 10^{-4}$ . For every 10,000 people, one additional cancer risk may occur as a result of exposure. A 1 in 1,000,000 chance is expressed as  $1 \times 10^{-6}$ . In this case, for every 1,000,000 people, one additional cancer case may occur as a result of exposure. Therefore, a  $1 \times 10^{-4}$  cancer risk is a higher risk than  $1 \times 10^{-6}$ .

In accordance with the NCP, "For known or suspected carcinogens, acceptable exposure levels are generally concentration levels that represent an excess upper bound life-time cancer risk to an individual of between  $10^{-4}$  and  $10^{-6}$ ." The risk management range is defined as risk between  $10^{-4}$  and  $10^{-6}$ . In this range generally no action is warranted, however, site-specific factors are typically considered when the decision is being made about whether cleanup is needed. No action is required when the cancer risk is at or below  $10^{-6}$ ; for example, a cancer risk of  $10^{-7}$  is below  $10^{-6}$ . Action is generally required when the risk is above  $10^{-4}$ .

The 2004 HHRA results modeled using the groundwater samples collected from the bottom of the water bearing zone for the resident, car wash worker, and landscape worker were between  $1 \times 10^{-5}$  and  $3 \times 10^{-5}$ . Therefore, the HHRA concluded that these groundwater use and exposure scenarios are in the risk management range. Based on soil gas data, the 2004 risk evaluation concluded that the risk for residents from vapor intrusion to indoor air are between  $5 \times 10^{-8}$  and  $1 \times 10^{-6}$ .

Because post-ROD data show that the groundwater is not suitable for drinking water or other non-potable uses, the 2012 risk assessment focused on the vapor intrusion pathway. This assessment in the tech memo was conservatively conducted using the current vapor intrusion evaluation methodology and applying the DTSC 2011 attenuation factor for existing residential buildings at each sampling location. Cancer risks for benzene were between  $4.8 \times 10^{-8}$  and  $4.8 \times 10^{-7}$ . Cancer risks for naphthalene were between  $5.6 \times 10^{-8}$

and  $5.0 \times 10^{-6}$ . Results of EPA's 2013 sampling confirm that there is no indoor air contamination due to the groundwater. Therefore, based on both risk assessment results and 2013 sampling results, no further action is required for OU-5/FISCA IR-02 groundwater.

## ECOLOGICAL RISK ASSESSMENT

An ecological risk assessment was conducted for groundwater as part of the RI. As stated in the ROD, "The ecological risk assessment concluded that there are no unacceptable ecological risks at the site." Additionally, the ecological risk assessment states: "The site supports only limited habitat, the presence of terrestrial receptors is limited, and future land uses would not create additional ecological habitat."

## REMEDY SELECTION PROCESS

The CERCLA remedy selection process uses data collected in the RI and/or previous investigations, evaluates risk for this available data, and evaluates the options (remedial alternatives) for the site in accordance with regulations. The CERCLA process, outlined in the flow chart on page 2, enables modification of the remedy through a ROD Amendment if there are new data and/or new protocols or criteria for evaluation.

Remedial alternatives are evaluated in the context of **remedial action objectives (RAOs)**. As stated in the OU-5/FISCA IR-02 ROD, the RAO for groundwater is to protect human health by preventing exposure of potential residents and occupational workers to benzene and naphthalene within groundwater at OU-5/FISCA IR-02. The ROD selected remedy of Alternative 4 consists of **biosparging with soil vapor extraction (SVE)** in the plume centers, nutrient/**microorganism** enhancement as required, monitoring, and **institutional controls**. Post-ROD pre-design data collection show that the source for the groundwater contamination is at depth, with the highest groundwater concentrations from approximately 17 to 20 feet below the ground surface. The groundwater treatment system design targeted this zone. The treatment system operated successfully between 2009 and 2013 in accordance with the remedial design. Over this 4-year treatment period, groundwater monitoring results show an overall decrease in benzene and naphthalene concentrations and slight decrease in the overall size of the plume. Therefore, site risk was reduced by the groundwater treatment.

Additional data collection and evaluation during the remedial action shows that for existing conditions and future residential and/or school land uses, human health and the environment are protected and no further action is necessary, so a ROD Amendment is planned.

## SUMMARY AND CONCLUSIONS

Results of human health and ecological risk assessments show that there are no unacceptable risks to human health or the environment and that no further action is needed. This conclusion is supported by all data collected during the remedial action and evaluation of site data using the current methodologies for evaluating vapor intrusion. Based on the previous sample results, EPA selected locations near the former school and child care center for indoor air, sub-slab, and outdoor air sampling. This sampling was conducted in October 2013; results were either non-detect or did not indicate any contamination from the groundwater. No drinking water wells are located at the site, groundwater does not meet the specifications of a potential source of drinking water, and no future potable groundwater use has been identified.

### Multi-Agency Environmental Team Concurs with Preferred Remedy

The environmental team has been working cooperatively to address remedial decisions for Alameda Point OU-5/FISCA IR-02 groundwater. The team will sign the ROD Amendment and consists of the following agencies:

- U.S. Navy
- EPA Region 9
- DTSC
- Water Board

## PROJECT CONTACTS

Community involvement in the decision-making process is encouraged. If you have any questions or concerns about environmental activities at OU-5/FISCA IR-02, please contact any of the following listed project representatives.

- **Mr. Derek J. Robinson**  
**Base Realignment and Closure (BRAC) Program**  
Environmental Coordinator  
Department of the Navy  
BRAC Program Management Office West  
1455 Frazee Road, Suite 900  
San Diego, CA 92108-4310  
Telephone: (619) 532-0951
- **Mr. Chris Lichens**  
Project Manager  
U.S. EPA, Region 9  
75 Hawthorne Street  
San Francisco, CA 94105  
Telephone: (415) 972-3149
- **Mr. James Fyfe**  
Project Manager  
Department of Toxic Substances Control  
700 Heinz Avenue, Suite 200  
Berkeley, CA 94710  
Telephone: (510) 540-3850

- **Mr. Wayne Hagen**  
Public Participation Specialist  
Department of Toxic Substances Control  
700 Heinz Avenue, Suite 200  
Berkeley, CA 94710  
Telephone: (510) 540-3911
- **Mr. John West**  
Project Manager  
San Francisco Bay Water Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612  
Telephone: (510) 622-2438

## COMMUNITY PARTICIPATION

The U.S. Navy, EPA, DTSC, and Water Board encourage the public to gain a more thorough understanding of OU-5/IR-02 and the CERCLA activities that have been conducted at Alameda Point by visiting the information repository, reviewing the **Administrative Record** file, attending public meetings, and getting on the mailing list to receive regular project information. Restoration Advisory Board meetings are held on the second Thursday evening of every other month and are open to the public. For more information, visit the U.S. Navy's website at [www.bracmo.navy.mil](http://www.bracmo.navy.mil).

An update on OU-5/FISCA IR-02 groundwater was presented to the Alameda Point RAB on March 14, 2013. The presentation informed the RAB that the treatment system had been turned off and summarized results of the 2012 risk evaluation. The conclusion of the presentation slide summarizing the risk was that residential and commercial uses are protected without any further action. Several technical questions were posed by RAB members and were answered. The overall RAB response was positive.

The two ways for you to provide comments on this Proposed Plan are summarized below.

1. **Public Comment Period from May 5 through June 5, 2014:** During the public comment period, you can use the comment form included with this Proposed Plan to send written comments to the BRAC Program Environmental Coordinator, Mr. Derek Robinson, at the address listed under Project Contacts. You can also submit comments electronically to Mr. Robinson using e-mail ([derek.j.robinson1@navy.mil](mailto:derek.j.robinson1@navy.mil)) or by fax to (619) 532-0995.
2. **Public Meeting:** You can provide written or oral comments during the public meeting on **May 20, 2014**, which will be held at the Alameda Public Library at 1550 Oak Street in Alameda, California. A stenographer at the meeting will record all public comments.

After the public comment period is over, the U.S. Navy will review and consider the comments. In consultation with the regulatory agencies, the U.S. Navy may modify the recommendation in this Proposed Plan based on feedback from the community or on new information.

The community is encouraged to review and comment on this Proposed Plan. A final decision will not be made until all comments have been considered. Community acceptance will be evaluated after the public comment period for this Proposed Plan. The U.S. Navy will address comments in a responsiveness summary to be presented in the ROD Amendment. All relevant site-related documents are available for review at the locations listed below.

### Administrative Record

The Administrative Record file includes the ROD, RD/RA Work Plan, and documentation of actions discussed in this Proposed Plan. Please contact Ms. Diane Silva at the number provided below to make an appointment to view the Administrative Record.

- **Naval Facilities Engineering Command, Southwest**

ATTN: Ms. Diane Silva, Records Manager  
Naval Base San Diego  
2965 Mole Road, Building 3519  
San Diego, CA 92132-5190

- Telephone: (619) 556-1280

### Information Repository

Individuals interested in the full technical details can visit the local Information Repository in Alameda listed below.

- **Alameda Point Information Repository**

950 West Mall Square, Building 1, Room 240  
(Alameda City Hall West)  
Alameda, CA 94501

Recent reports are also available at the Alameda Public Library located at 1550 Oak Street in Alameda (Telephone: 510-747-7777).

## PUBLIC COMMENT PERIOD

The 30-day public comment period for the OU-5/FISCA IR-02 groundwater Proposed Plan is **May 5 through June 5, 2014.**

### Submit Comments:

- Offer verbal comments during the public meeting
- Provide written comments by mail, e-mail, or fax no later than June 5, 2014. **Public Meeting:**



The public meeting will be held from 5:00 to 7:00p.m. on **May 20, 2014**, at the Alameda Public Library located at 1550 Oak Street, Alameda, California. The meeting

will provide an opportunity to discuss the information presented in this Proposed Plan. U.S. Navy representatives will provide visual displays and information on the environmental investigations conducted at the site. You can ask questions and formally comment on this Proposed Plan.



### Send Comments to:

Mr. Derek J. Robinson  
BRAC Environmental Coordinator  
Department of the Navy  
BRAC Program Management Office West  
1455 Frazee Road, Suite 900  
San Diego, CA 92108-4310  
Telephone: (619) 532-0951  
Fax: (619) 532-0995  
e-Mail Address: [derek.j.robinson1@navy.mil](mailto:derek.j.robinson1@navy.mil)



For more information, visit

[www.bracmo.navy.mil](http://www.bracmo.navy.mil).

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## GLOSSARY OF TECHNICAL TERMS

**Administrative Record** – Reports and historical documents used by the decision-making team to select cleanup or environmental management alternatives.

**Base Realignment and Closure (BRAC) Program** – Program established by Congress under which Department of Defense installations undergo closure, environmental cleanup, and property transfer to other federal agencies or communities for reuse.

**Below ground surface (bgs)** – Collection depth of a sample or depth of an excavation or other feature.

**Biodegrade** – Destruction of contaminants by microorganisms in groundwater.

**Biosparging** – This technology introduces air into groundwater as an oxygen source at a low, controlled flow rate for aerobic degradation, thereby accelerating naturally occurring aerobic biodegradation processes.

**Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)** – Also known as Superfund, this federal law regulates environmental investigation and cleanup of sites in a manner that is protective of human health and the environment.

**Department of Toxic Substances Control (DTSC)** – A department with the California Environmental Protection Agency charged with overseeing the investigation and cleanup of hazardous waste sites.

**Ecological risk assessment** – The evaluation of potential harmful effects to plants, animals, and habitat as a result of exposure to chemicals in the environment.

**Exposure pathway** – The way that a chemical comes into contact with a living organism

**Feasibility Study (FS)** – Analysis of proposed remedial alternatives to evaluate their effectiveness in reducing risk to human health and the environment.

**Human health risk assessment (HHRA)** – The estimate of potential harmful effects humans may experience as a result of exposure to chemicals in the environment.

**Installation Restoration Program (IR)** – The Department of Defense's comprehensive program to investigate and clean up environmental contamination at military facilities in full compliance with CERCLA.

**Institutional control** – Administrative or legal control established and administered to restrict use of property to limit human exposure to contaminated waste, soil, sediment, or groundwater and to protect the integrity of the remedy.

**Microorganisms** – Microscopic organisms that live in groundwater.

**National Oil and Hazardous Substances Pollution Contingency Plan (NCP)** – The federal regulation that guides the CERCLA (Superfund) program.

**Operable unit (OU)** – Group of one or more IR sites that share common characteristics. These groups are created to facilitate investigations and, if needed, remedial action.

**Post-ROD groundwater data evaluation** – This evaluation reviewed and assessed data collected since the issuance of the ROD and evaluated previously collected data using current methodologies.

**Remedial Design (RD)/Remedial Action (RA) Work Plan** – A document that outlines how the implementation of the selected remedy stated in the ROD will be carried out.

**Receptor** – The human or ecological entity that may be exposed to potential site contaminants.

**Record of Decision (ROD)** – A legal document that explains the selected site remedy. It is signed by the U.S. Navy and regulatory agencies and is a binding agreement regarding the final site remedy.

**Remedial action objective (RAO)** – Cleanup objective.

**Remedial Investigation (RI)** – One of the two major studies that must be completed before a decision can be made about how to clean up a site. The RI is conducted to determine the nature and extent of contamination at the site and the associated risk. The FS is the second study and is conducted only when the RI recommends development of cleanup options for a site.

**Risk** – Likelihood or probability that a hazardous substance released to the environment will cause adverse effects on exposed human or biological receptors. Classified as carcinogenic (causes cancer) or noncarcinogenic (causes other illnesses).

**Risk management** – Evaluation and implementation of options or measures to reduce risk, including, but not limited to, options such as no action, monitoring, active treatment, or collection of additional data before making a decision.

**San Francisco Bay Regional Water Quality Control Board (Water Board)** – The California water quality authority, a department within the California Environmental Protection Agency. California is covered by nine regional boards. Alameda is within the San Francisco Bay Region (Region 2).

**Soil vapor extraction (SVE)** – Process by which contaminant vapors in soil are extracted and treated.

**U.S. Environmental Protection Agency (EPA)** – The federal agency established to protect human health and the environment.

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# Proposed Plan Comment Form

## *Alameda Point OU-5/FISCA IR-02 Groundwater*

The public comment period is from **May 5 through June 5, 2014**, for the Proposed Plan for OU-5/FISCA IR-02 groundwater at former NAS Alameda at Alameda Point, Alameda, California. A public meeting to present the Proposed Plan will be held at the Alameda Public Library at 1550 Oak Street, Alameda, California, on **May 20, 2014, from 5:00 to 7:00 p.m.** You can provide your comments verbally at the public meeting, where all comments will be recorded by a stenographer. Alternatively, you can provide written comments in the space provided below or on your own stationery. All written comments must be postmarked no later than **June 5, 2014**. You can also submit this form to a U.S. Navy representative at the public meeting. Comments sent by e-mail also are accepted. Please address e-mail comments to [derek.j.robinson1@navy.mil](mailto:derek.j.robinson1@navy.mil).

Name: \_\_\_\_\_

Representing  
(if applicable): \_\_\_\_\_

Telephone Number  
(optional): \_\_\_\_\_

Address  
(optional): \_\_\_\_\_

Please check here if you would like to be added to the U.S. Navy's Environmental Mailing List for Alameda Point.

Comments:

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Mail to:

Attn: Mr. Derek Robinson  
BRAC Environmental Coordinator  
Department of the Navy  
BRAC Program Management Office West  
1455 Frazee Road, Suite 900  
San Diego, CA 92108-4310

Don't forget: A Public Meeting for the Proposed Plan will be held on May 20, 2014, at the Alameda Public Library.

Mr. Derek Robinson  
BRAC Environmental Coordinator  
Department of the Navy  
BRAC Program Management Office West  
1455 Frazee Road, Suite 900  
San Diego, CA 92108-4310



**Proposed Plan for  
Alameda Point Operable Unit-5/FISCA  
IR-02 Groundwater,  
Alameda, California**

