N00236.002322
ALAMEDA POINT
SSIC NO. 5090.3

DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE
1455 FRAZEE RD, SUITE 900
SAN DIEGO, CA 92108-4310

5090
Ser BPMOW.CD\0072
January 30, 2006

Ms. Anna-Marie Cook
U.S. EPA
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Ms. Marcia Liao
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

Ms. Judy Huang
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Dear FFA Members:

Subj: DRAFT FINAL PROPOSED PLAN FOR TODD SHIPYARDS (IR SITE 28), FORMER NAS ALAMEDA, ALAMEDA POINT, CALIFORNIA AND RESPONSE TO COMMENTS

Enclosed is a copy of the Draft Final Proposed Plan for Site 28 and Response to Comments. The Navy has incorporated your comments on the Draft Proposed Plan into this version. In agreement with my letter to the FFA Members of January 18, 2006, the submittal date for this document was changed to January 30, 2006 when the FFA members agreed to the Department of Toxic Substances Control (DTSC) request for an extended review period.

Please note that this Draft Final Proposed Plan is not suitable for public release. In accordance with Section 10.2 of the Federal Facility Agreement, this document is scheduled to become final on March 2, 2006. If you have any questions or comments, please call Ms. Claudia Richardson at (619) 532-0935 or me at (619) 532-0907.

Sincerely,

THOMAS L. MACCHIARELLA
BRAC Environmental Coordinator
By direction of the Director

Encl: (1) Proposed Plan For Todd Shipyards (IR Site 28) Former NAS Alameda, Alameda Point, California, January 30, 2006 and Response to Comments

5090
Ser BPMOW.CD\0072
January 30, 2006

Copy to
Mr. Mark Ripperda
U.S. EPA
Region IX
75 Hawthorne Street, (SFD-8-3)
San Francisco, CA 94105-3901

Ms. Dot Lofstrom
Department of Toxic Substances control
8800 Cal Center Drive
Sacramento, CA 95826

Ms. Suzette Leith
US EPA
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Mr. Charlie Huang
Cal EPA/Dept. of Fish and Game
1700 K St., Rm 250
PO Box 944209
Sacrament, CA 94244

Ms. Laurie Sullivan
NOAA
C/O USEPA (H-1-2)
75 Hawthorne St.
San Francisco, CA 94105

Mr. Craig Hunter
Tetra Tech EMI
10860 Gold Center Drive, Suite 200
Rancho Cordova, CA 95670

Mr. Jim Polisini
Human and Ecological Risk Division
1011 N. Grandview Ave.
Glendale, CA 91201-2205

Mr. David Cooper
US EPA (SFD - 3)
75 Hawthorne
San Francisco, CA 94105

5090
Ser BPMOW.CD\0072
January 30, 2006

Ms. Naomi Feger
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Richard Perry
DTSC External Affairs
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

5090
Ser BPMOW.CD\0072
January 30, 2006

Blind copy to:
EVR.DS (Admin. Rec. (3 copies))
BPMOW.CD
BPMOW.GL
BPMOW.TM
Read File
Serial File

Writer: C. Domingo, Code BPMOW.CD, 2-0935
Typist: B. Foster, Code BPMOW.BF, 2-0914, SITE 28 PP 1-30-06TRANSMITTAL LETTER\30 JAN 06

RESPONSES TO REGULATORY AGENCY COMMENTS ON THE DRAFT PROPOSED PLAN, REVISION 1, TODD SHIPYARD INSTALLATION RESTORATION SITE 28, ALAMEDA POINT ALAMEDA, CALIFORNIA

This document presents the U.S. Department of the Navy's (Navy) responses to comments from the regulatory agencies on the "Draft Proposed Plan, Revision 1, Todd Shipyard, Installation Restoration Site 28, Alameda Point, Alameda, California," dated September 2005. The Navy received the comments addressed below from the U.S. Environmental Protection Agency (EPA) on November 17, 2005; from the San Francisco Bay Regional Water Quality Control Board (Water Board) on November 2, 2005; and from the Department of Toxic Substances Control (DTSC) on December 19, 2005.

RESPONSES TO COMMENTS FROM EPA, ANNA-MARIE COOK, REMEDIAL PROJECT MANAGER

General Comments

1. **Comment:** **EPA is concerned over the length of the Proposed Plans submitted recently. Site 28 is a small site consisting of 3 acres, with no significantly complex environmental problems. Yet the PP is 18 pages in length. Much of the length can be attributed to an overly wordy description of the CERCLA process, redundant information in text and tables concerning remedial alternatives, and lengthy comparison of the nine NCP criteria. The inclusion of ARARs is unnecessary and cumbersome. Please keep in mind that the Proposed Plans should be designed for public review and comment and as such should be fairly short, interesting and informative. Using Site 15 PP as an example, please shorten this and all future PP. Keep the CERCLA process confined to a flow diagram, remove the text description of alternatives and provide this information in a table(s), remove the ARARs section and remove the comparison of the nine criteria.**

   Response: The text discussing the Comprehensive Environmental Response, Compensation, and Liability Act (CERLA) process was revised and shortened to be similar to the Site 15 Proposed Plan; the text for the remedial alternative discussion was deleted; and the text comparing the nine criteria from the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) was reduced to one paragraph. However, the Navy has determined that certain applicable or relevant and appropriate requirements (ARAR) should be included in the proposed plan based on statutory and regulatory requirements. Navy counsel has confirmed that significant ARARs should be identified in the proposed plan in discussions with USEPA counsel. A short discussion of ARARs will be provided within the proposed plan and an abbreviated list of ARARs will be provided as attachment A to the proposed plan.

2. **Comment:** **The discussion of remedial alternatives should focus on the preferred remedy and why it should be selected over the others. The other remedial alternatives should only be presented and compared in a table.**

Response: The comparisons of the remedial alternatives were reduced to a table.

3. **Comment:** **Even though it is not necessary to include a statement to this effect in the PP, EPA would like to reiterate that a re-opener should be included in the ROD to address any relevant information developed in the Site 20 RI/FS process.**

Response: Comment noted.

Specific Comments

1. **Comment:** **Page 2, CERCLA process flow diagram: There is nothing wrong with this diagram, but the one used in the Site 15 PP was more informative. For small sites, like Site 28, it would cut down on text verbiage to incorporate a summary of investigation work in the flow diagram as was done for Site 15. Recommend shortening the text under "CERCLA Process" to duplicate Site 15 PP and expanding the flow diagram to include a short summary of the process to date.**

Response: The CERCLA process flow diagram and the associated text were revised to be similar to the Site 15 proposed plan.

2. **Comment:** **Page 3, Remedial Investigation Summary: The railroad fire of 1902 is missing from the potential sources of contamination.**

Response: The text was revised to identify the railroad fire of 1902 as a potential source of contamination at Site 28.

3. **Comment:** **Page 5, first paragraph: Please remove the phrase "the cancer risk is allowable" and replace it with "the cancer risk is within the risk management range". Same revision for the sentence following. EPA reiterates our comments from the FS that the HI of 2 for construction workers is not acceptable.**

Response: The text was revised as requested. Additionally, the last two sentences of the second paragraph on page 5 were revised as follows: "The HI for the construction worker is greater than 1. However, under the recreational

scenario, the current and planned future use for IR Site 28, an HI of 1 is allowable."

4. **Comment:** **Table 2: Are the risks presented here cumulative or incremental? Please clarify.**

   Response: The following statements were added to the text to clarify whether the risks were cumulative or incremental:

   "Table 2 presents the total cumulative risk assessment results for soil and groundwater at IR Site 28. Total cumulative risk is calculated by adding the potential risks posed by all chemicals and all potential exposure pathways present at the site, including risks posed by background metals and PAHs from fill events. Background metals are defined as metals that occur naturally at the site."

5. **Comment:** **Ecological Risk Assessment: It is not clear why pesticides and PCBs are a threat to terrestrial receptors, but are not included in the list of COCs in soil under the human health risk assessment text.**

   The statement that future land use plans are not likely to create suitable habitat for ecological receptors appears unsupported. A recreational scenario likely involves large tracts of open space, possibly of grass covered or bare soil. This condition is likely to attract terrestrial receptors, more so than the current condition of paved lot.

   Response: According to the conclusions of the human health risk assessment presented in the remedial investigation report, polychlorinated biphenyls (PCBs) and pesticides do not pose a risk to the recreational visitor (Bechtel 2004). The human health risk assessment and the ecological risk assessment use entirely different methodologies; therefore the results of these assessment often differ from each other in respect to types and concentrations of chemicals of concern (COC).

   The current and future use of Site 28 is recreational use as a dog park, parking lot, and a small portion of open space. Because the current and future use of the site is more urban in nature, reuse of Site 28 is not expected to provide a habitat that will attract many terrestrial receptors and therefore the exposure pathway for terrestrial receptors is considered incomplete. The exclusion of pesticides and PCBs as COCs will be clarified further in the proposed plan.

6. **Comment:** **Page 6, Remedial Action Objectives: The wording in the second part of the first paragraph is confusing. The text states that the BCT concurs that the remediation goals for the Site 28 groundwater "should be" less strict than MCLs. Please revise to "can be" less strict. Additionally, that sentence as a whole does not make sense:**

The part of the statement "given that risk from groundwater vapors to residents is considered acceptable by EPA" implies that the risk from vapors results in remediation goals being less strict than MCLs. There are no inhalation risks present at the site from vapors in soil and groundwater since the COCs are PAHs and metals.

It would be helpful to know where the RAOs come from -- risk calculations? water quality standards? The levels for arsenic and lead seem too high for aquatic and terrestrial ecological receptors. Please double check with the RWQCB to make sure that the RAOs are suitable for aquatic receptors.

Response: The text was revised to indicate remediation goals "can be" less strict than maximum contaminant levels (MCL), and the statement "given that risk from groundwater vapors to residents is considered acceptable by EPA" was revised to "given that no inhalation risks are present at the site from vapors in soil or groundwater." Additionally, the following two paragraphs were added to the section on remedial action objectives (RAO):

"RAOs were based on risk calculations presented in the human health and ecological risk assessments and on water quality standards. The RAOs for Site 28 are to (1) reduce concentrations of PAHs, arsenic, and lead in soil to concentrations that are protective of recreational visitors and occupational workers based on the current and future uses of the site; (2) reduce arsenic concentrations in groundwater in the inland area to concentrations that are protective of agricultural water supply; and (3) prevent potential exposure of aquatic offshore receptors (In the Oakland Inner Harbor) to copper in surface water adjacent to the sediments along the shoreline area. The remediation goal for PAHs in soil is based on the EPA Region 9 industrial preliminary remediation goal (PRG), which was adjusted for total risk. The remediation goal for arsenic was based on background concentrations at Alameda Point, and the remediation goal for lead was based on the U.S. EPA Region 9 industrial PRG."

"The remediation goal for arsenic in groundwater in the inland area was based on the agricultural water supply objective from the Water Board. The remediation goal for copper in the surface water adjacent to the sediments in the water body (Oakland Inner Harbor) was derived from the California Toxic Rule and values from the Water Board."

The remediation goal for arsenic in groundwater was based on the agricultural use of groundwater that is presented in the basin plan amendment of January 2004 (Water Board 2004). The remediation goals for arsenic and lead in soil are intended only to be protective of recreational visitors and occupational workers.

7. **Comment:** **Page 7 and Page 8: These pages contain duplicative information. It would be easier to read if the text were deleted and the Table 3 revised to include the duration of the ICs and the cost associated with each alternative.**

Response: The duplicate text was deleted, and the duration of the institutional controls (IC) and cost associated with the alternatives were included in Table 3.

8. **Comment:** **Statements on page 8 and other pages that ICs will last for at least 30 years are somewhat misleading, as EPA's assumption is that they will be in place indefinitely. The discussion later in the document that says ICs will last about 30 years or until the regulators say it is OK to remove them is acceptable.**

Response: The text was revised to indicate that ICs will be left in place until the remediation goals are met.

9. **Comment:** **Page 8, IC Table, second bullet: Revise this bullet as it is not clear who is going to be allowed access to monitoring wells and remedial action components.**

Response: The second bullet of the IC table was revised as follows: "Allow the Navy and Navy subcontractor access to monitoring wells and other remedial action components."

10. **Comment:** **Page 8: Delete the text on this page and add duration of ICs and costs to Table 4.**

Response: The text was deleted as requested, and the duration of ICs and costs were added to Table 4.

11. **Comment:** **Page 8, Alternative 2: We reiterate our comments on the FS that groundwater monitoring does not protect the environment or meet ARARs.**

Response: Comment noted.

12. **Comment:** **Page 10: It is not appropriate to list out ARARs in a Proposed Plan which is a fact sheet designed to reach a large number of community members. If it were deemed necessary to include a discussion of ARARs in a PP then, to make it appropriate, the Navy should explain what the requirement is, why it is an ARAR, and how it will be used**

in this cleanup. Here, there is generally only a list of requirements, without any explanation of what they are. This is meaningless for the general public, and confusing even for regulator reviewers. We request that the ARARs discussion be removed from this and all future Proposed Plans.

Response: The Navy has determined that certain ARARs should be included in the proposed plan based on statutory and regulatory requirements. Navy counsel has confirmed that significant ARARs should be identified in the proposed plan in discussions with USEPA counsel. An abbreviated list of significant potential ARARs that will be met by the preferred remedy for cleanup of the soil and groundwater at Site 28 are presented in Attachment A following the glossary of the proposed plan.

13. **Comment:** **Page 10, ARARs. It is not clear why CERCLA 121(d)(2)(B)(ii) is an ARAR, or how it would be applied as an ARAR. Since the Navy is selecting water quality standards in the CTR, NTR, and Basin Plan as ARARs, why does it intend to have alternative concentration limits?**

Response: This reference was deleted.

14. **Comment:** **Inclusion of PCB ARAR is confusing to the reader as PCBs were hardly mentioned in the text.**

Response: This ARAR was deleted.

15. **Comment:** **It's unclear how and why Resolution 88-63 is an ARAR. It is not meaningful to list a requirement like this without saying what it is.**

Response: The following explanation was added to Resolution 88-63: "established criteria to identify potential drinking water sources."

16. **Comment:** **Page 11, ARARs, reference to the Inland Surface Water Plan is inaccurate, as those plans were thrown out in court. Reference should be to the Implementation Plan for Inland Surface Waters....**

Response: The ARARs title was revised as suggested.

17. **Comment:** **Pages 12 and 13: The comparison of alternatives is not easy to read since the reader is forced to constantly flip back and forth to find out what each alternative is. The PP should contain a more focused discussion that concentrates on how the preferred alternative rates for each criterion, but also gives a clear picture of how other alternatives**

compare in general, rather than just a recitation of the rating for each alternative number.

Response: The comparison of the alternatives was revised to be included in a table, followed by a brief summary of the preferred alternative and why it is preferred.

18. **Comment:** **Page 12, 13 and 14: We disagree with some of the ratings for the alternatives in the discussion of the 9 criteria:**

a. As stated in our letter on the Site 28 FS, we do not agree that Alternative 2 is protective for the GW.

b. The word "not" is missing for the evaluation of both GW and soil in the statement "Alternative 1 does have long-term effectiveness of permanence since the soil is left in place."

c. Discussion of reduction of toxicity, etc. through treatment is misleading. Neither soil alternative 3 (cap) nor alternative 4 (excavation) involves treatment.

d. Regarding short-term effectiveness of the GW remedies, it is stated that alternative 1 will not have short-term effectiveness because the GW will not be treated, but then it is stated that alternative 2 (ICs) will have short-term effectiveness because ICs can be implemented quickly. However, there is no treatment there either, and it is doubtful whether ICs are effective in either the short or long term for the shoreline GW.

Response: All of the text associated with these comments was deleted in response to general comment 2.

19. **Comment:** **Page 14, Table 6. We disagree that GW alternative 2 is protective and meets ARARs.**

Response: As noted in the feasibility study (FS), groundwater (GW) in regards to alternative 2, "The Navy believes this alternative would be protective of offshore receptors because the point of compliance for numeric criteria for protection of surface water aquatic life is the receiving water, following initial dilution."(Bechtel 2005)

20. **Comment:** **Page 14, bullets on the preferred soil alternative: We recommend putting the bullets that discuss permanent removal of contaminant mass and reducing concentrations of PAHs and metals before the bullet on ICs.**

Response: The bullets were moved as requested.

21. **Comment:** **Page 15: The discussion of the two sets of GW -- inland and shoreline -- remains confusing. It is clear what the preferred alternative is for the shoreline GW, but there should be a clearer statement that the preferred alternative for the inland GW is ICs.**

Response: The following text was added to the discussion of groundwater remedial alternatives:

"Under this alternative, contaminated groundwater in the inland area would be linked to ICs prohibiting the extraction and use of groundwater for agricultural or industrial use. ICs also would be established for the shoreline area prohibiting the extraction and use of groundwater for, agricultural or industrial use."

22. **Comment:** **Page 18, glossary**

a. ARAR: Remove "and local".

b. HI: Change "protective of HH" to "acceptable risk for HH."

Response: The text was revised as requested.

Editing Comments

1. **Comment:** **Page 5, first indented paragraph beginning "The federally established....." The second sentence should not start with "For."**

Response: The text was revised as requested.

2. **Comment:** **Page 11, need to removal of underlining under "Compliance with ARARs."**

Response: The underline was removed as requested.

3. **Comment:** **Page 12, item 3, "do not requiring land use restrictions" should be "do not require."**

Response: The text was revised as requested.

RESPONSES TO COMMENTS FROM THE WATER BOARD, JUDY C. HUANG, P.E., PROJECT MANAGER

Specific Comments

1. **Comment:** **Page 1, Fourth Paragraph: This paragraph stated that the Navy proposes to clean up contaminated groundwater at IR Site 28 by injecting a compound into the groundwater to immobilize copper and prevent its discharge into the Oakland Inner Harbor. This proposal only addresses copper contamination. In addition to the clean up of copper, the objective of groundwater treatment at IR Site 28 also includes the cleanup of elevated arsenic levels in the groundwater.**

   Recommendation: Revise the Draft PP to include references to groundwater arsenic cleanup.

   Response: The following statement was modified to address the elevated concentrations of arsenic:

   "Active remediation of arsenic-affected groundwater is not proposed because prohibiting the extraction and use of groundwater at IR Site 28 for agricultural and industrial use will prevent human exposure to groundwater."

2. **Comment:** **Page 5, Ecological Risk Assessment, Last Paragraph: This paragraph stated, "Because groundwater in the shoreline area is tidally influenced, elevated concentrations of copper in groundwater may migrate to the sediment in the Oakland Inner Harbor. The ERA results indicated that such migration is a potential risk to benthic (sediment-dwelling) aquatic life." The remediation objective for Site 28 groundwater is not only for the protection of benthic organisms in the sediment. It is also to protect saltwater aquatic life living in the Oakland Inner Harbor from impacts by the contaminated groundwater from Site 28.**

   Recommendation: Revise the Draft PP to include references to salt water aquatic life.

   Response: The text was revised to include saltwater aquatic life as well as benthic aquatic life.

3. **Comment:** **Page 6, Feasibility Study, Remedial Action Objectives, Last Bullet: This bullet specifies the Remedial Action Objective (RAO) for arsenic as 2,000 micrograms per liter (µg/L). The San Francisco Bay Basin Water Quality Control Plan (Basin Plan), January 2004 amendment revised the arsenic objective from 2,000 µg/L to 36 µg/L.**

Recommendation: Revise the Draft PP Arsenic RAO from 2,000 µg/L to 36 µg/L.

Response: The criterion of 36 micrograms per liter (µg/L) applies to benthic aquatic life; however, benthic aquatic life are not considered a receptor for arsenic contamination in the inland area based on the amount of time it would take for this contaminated groundwater to reach the Oakland Inner Harbor. The RAO was based on the criterion for agricultural use of groundwater, which is 2,000 µg/L and is presented in the Basin Plan, January 2004 amendment (Water Board 2004).

RESPONSES TO COMMENTS FROM THE DTSC, MARCIA LIAO, REMEDIAL PROJECT MANAGER

1. **Comment:** **Remedial Action Objectives: Please provide the basis for the remedial action objectives (RAOs) listed in the PP (page 6).**

   Response: The RAOs were based on risk calculations, water quality standards, and the current and planned future use of Site 28 as recreational (dog park, parking lot, and open space). The following text was revised in the RAOs section of the proposed plan.

   "RAOs were based on risk calculations presented in the human health and ecological risk assessments and on water quality standards. The RAOs for Site 28 are to (1) reduce concentrations of PAHs, arsenic, and lead in soil to concentrations that are protective of recreational visitors and occupational workers based on the current and future uses of the site; (2) reduce arsenic concentrations in groundwater in the inland area to concentrations that are protective of agricultural water supply; and (3) prevent potential exposure of aquatic offshore receptors (In the Oakland Inner Harbor) to copper in surface water adjacent to the sediments along the shoreline area. The remediation goal for PAHs in soil is based on the EPA Region 9 industrial preliminary remediation goal (PRG), which was adjusted for total risk. The remediation goal for arsenic was based on background concentrations at Alameda Point, and the remediation goal for lead was based on the U.S. EPA Region 9 industrial PRG."

2. **Comment:** **RAO for Arsenic in Soil: The proposed RAO for arsenic in soil is 9.1 mg/kg which appears to be the 95 percentile for arsenic at the pink area of Alameda Point, rather than 95 percent upper confidence limit (UCL) as the FS has stated (FS page 3-14). Please clarify.**

   Furthermore, the Alameda Point soil background concentrations have yet to be completely reviewed and finalized. This could impact the arsenic cleanup level. Please acknowledge it in the PP.

   Response: The proposed RAO for arsenic in soil (9.1 mg/kg) is based on the 95^{th} percentile. It should be noted that the FS (Bechtel 2005) mischaracterized the 95^{th} percentile as the 95 UCL. A discussion on background concentrations is included in the proposed plan.

3. **Comment:** **RAOs for PAHs in Soil: The proposed RAO for polynuclear aromatic hydrocarbons (PAHs) in soil is 2.1 mg/kg of benzo(a)pyrene (BaP) equivalent which is the USEPA industrial preliminary remediation goal (PRG) adjusted to 10^{-5} cancer risk. DTSC agrees that BaP equivalent concentration in soil of 2.1 mg/kg is appropriate as long as**

means of assurance that 2 feel of clean soil (defined as < 0.62 mg/kg of BaP equivalent) will remain in place. Please specify this in the PP.

Response: ICs will be established to prevent possible exposure to contaminated deeper soils by limiting excavation. The ICs are summarized in Table 3 and in the preferred alternatives section of the proposed plan. The preferred soil alternative section and Table 3 were revised as follows (see italicized text).

"Remove contaminated soil to a depth of 2 feet, transport soil off site for disposal, and implement ICs to prevent possible exposure to contaminated deeper soils *by restricting excavation* and *limiting* land use to recreational activities *excluding recreational uses for children such as a playground.*"

The preferred alternative box within the proposed plan now includes the following text: "Under this alternative, ICs would be established that would restrict future land use to recreational activities and that would *restrict excavation. If excavation is necessary*, health and safety precautions *would be required* during excavation."

4. **Comment:** **RAO for Lead in Soil: The proposed RAO of 800 mg/kg for lead is the USEPA industrial PRG for adults which may not be appropriate for certain types of recreational land uses (e.g. playground). Please point out this restriction in the PP and make sure appropriate land use control (LUC) measures will be established in the Record of Decision (ROD).**

Response: See the response to comment 6. Also, the RAOs section was revised as follows:

The text pertaining to the ICs in Table 3 and the preferred soil alternative section were revised as follows:

"...limiting land use to recreational activities, excluding recreational uses for children such as a playground."

"Under this alternative, ICs would be established that would restrict future land use to recreational activities, excluding recreational uses for children such as a playground..."

5. **Comment:** **RAO for Nickel, Zinc and Mercury in Groundwater: Since there is no established Alameda Point background groundwater concentrations, RAOs should be determined for nickel, mercury, and zinc. These metals were reported in groundwater at concentrations exceeding California Toxics Rule (CTR) but were screened out of the FS because of being within the Alameda Point "background" range (see page 3-16 of the FS).**

Response: The standard practice for studies at Alameda Point is to use the Alameda Point background study to screen out metals that do not require further evaluation during the RI stage. The remaining chemicals of potential concern (COPC) were evaluated based on their contributions to overall site risk. This process is explained in Section 3.0 of the FS (Bechtel 2005). Mercury, nickel, and zinc in groundwater were not identified as COCs because they occur at levels that are considered within the limits for background.

6. **Comment:** **Proposed Soil Remediation Area: Please provide a map in the PP to illustrate the areas where the soil will be remediated.**

Response: A figure was added to the final proposed plan illustrating the areas where soil will be excavated.

7. **Comment:** **Point of Compliance: As stated in our comments to the draft final FS dated June 27, 2005, DTSC disagrees that the point of compliance for metals in groundwater is in the receiving surface water. We also disagree that the existing shoreline wells should be used as the point of measurement for monitoring. DTSC request that the Navy install guard wells and monitor groundwater discharges closer to the shoreline.**

Response: The Navy's position is that the point of compliance for chemicals in groundwater as it is entering surface water is within the ambient receiving water itself, following initial dilution. The water quality standards contained in 40 *Code of Federal Regulations* 131.36 and 131.38 are potential applicable federal ARARs for IR Site 28 groundwater cleanup remedial actions that discharge to surface water.

8. **Comment:** **End Point Determination: The duration of groundwater monitoring for the preferred alternative is assumed to be five years according to the FS (page ES-27). Such duration may fall short of what it really entails. DTSC requests that the PP and/or the Record of Decision (ROD) specifies the end point determination of success (e.g. achieving the RAOs) and discusses contingencies for failure.**

Response: Groundwater monitoring will continue until RAOs have been achieved. Table 5 of the proposed plan was revised as follows (see italicized text).

"Inject metal reducing compound into groundwater in the shoreline area to reduce copper concentrations in groundwater; continue groundwater monitoring at the site *until remediation goals are met*; and implement ICs to prohibit extraction and use of groundwater for agricultural and industrial use."

The following sentence was added to the preferred groundwater alternative section. *"This alternative also includes a groundwater monitoring program that would be in place until RAOs are met."*

The endpoint determination of success and contingencies for failure will be addressed in the ROD.

9. **Comment:** **Storm Drain: It has been verified that storm drains with outfalls into Oakland Inner Harbor intersect contaminated groundwater at IR Site 28. The PP should acknowledge it and explain how the Navy plans to assess the potential impact on offshore sediment at the storm drain outfalls (particularly City Outfall East).**

Response: The evaluation of offshore sediment, including sediment near the storm drain outfalls, is discussed in the remedial investigation report for IR Site 20; therefore, it is not addressed in this proposed plan for IR Site 28.

REFERENCES

Bechtel Environmental, Inc. (Bechtel). 2005. "Final Feasibility Report, IR Site 28, Todd Shipyards, Alameda Point, Alameda, California." June.

Bechtel. 2004. "Final Remedial Investigation Report, IR Site 28, Todd Shipyards, Alameda Point, Alameda, California." September.

California Regional Water Quality Control Board (Water Board). 2004. "Amendment to Water Quality Control Plan, San Francisco Bay Basin, Region 2." July.

N00236.002322
ALAMEDA POINT
SSIC NO. 5090.3

ENCLOSURE 1

DRAFT FINAL PROPOSED PLAN
SITE 28, TODD SHIPYARDS

DATED 01 FEBRUARY 2006

IS ENTERED IN THE DATABASE AND FILED AT ADMINISTRATIVE RECORD NO. **N00236.002323**