



**DEPARTMENT OF THE NAVY**  
SOUTHWEST DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
1220 PACIFIC HIGHWAY  
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California Regional Water Quality Control Board, San Francisco Bay Region  
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Dear BCT Members:

Enclosure (1) is provided for your review and concurrence regarding the proposed response to comments (RTC) on the groundwater Beneficial Use Evaluation dated November 17, 2000, Hunters Point Shipyard. Please provide your response by March 1, 2001. The final Beneficial Use Determination with RTC will be submitted on March 22, 2001.

Should you have any questions concerning this matter, please contact me at (619) 532-0913.

Sincerely,

RICHARD G. MACH JR., P.E.  
BRAC Environmental Coordinator  
By direction of the Commander

Enclosure: (1) Response to comments provided by the U.S. EPA dated December 5, 2000, California Regional Water Quality Control Board dated November 29, 2000, and Lennar/BVHP dated December 18, 2000.

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**HUNTERS POINT SHIPYARD  
GROUNDWATER BENEFICIAL USE EVALUATION PARCELS C, D, AND E  
RESPONSE TO COMMENTS  
FROM U.S. ENVIRONMENTAL PROTECTION AGENCY**

This document presents the Navy's responses to comments from the U.S. Environmental Protection Agency (EPA) on the "Groundwater Beneficial Use Evaluation Parcels C, D, and E, Hunters Point Shipyard (HPS), San Francisco, California," dated November 17, 2000. The comments addressed in the following document were received from EPA on December 5, 2000.

**RESPONSES TO EPA**

**General Comments**

1. **Comment:** **Page 1. Objective and Purpose. The objective and purpose of this document is not to "delineate TDS zones in comparison with Federal and State criteria." but to "classify the A aquifers on parcels C, D and E according to the Federal and State criteria."**

**The Navy should make the groundwater classification designation first, and then refer to the use of Site Specific Factors (SSFs) as part of the Feasibility Study (FS) evaluation of technologies. The aquifer classification system is a set standard used for all federal environmental programs and not exclusively reserved for CERCLA. In some circumstances other compelling site specific factors may be used in deciding what level of cleanup is needed for an aquifer, but these site specific factors in no way affect the classification of an aquifer. As currently written, the draft Groundwater Beneficial Use Evaluation document presents groundwater TDS values but the Navy does not make a groundwater beneficial use determination. Clearly, much of the groundwater at HPS can be classified as a Class II aquifer under the federal classification criteria. In the draft final document, the determination of groundwater beneficial use on Parcels C, D and E must be made.**

- Response:** The text in the first sentence of the second paragraph on page 1 has been revised to state: "The purpose of this document is to classify the A-aquifer in Parcels C, D, and E according to Federal and State criteria."

The conclusions section of this document will be revised to clearly identify which areas are determined to have beneficial uses based on the evaluation. Furthermore, as part of this determination, groundwater in the A-aquifer will be classified as a Class I, II, or III based on the results of the evaluation. Text regarding when and how site-specific factors (SSF) will be used will follow the previously mentioned text regarding the groundwater classification.

2. **Comment:** **Page 2 should be revised. We would suggest, deleting all text after the first two bullets at the top of page 2. This is the text that starts with "According to the National..." through the remainder of this section which ends with a bullet that says "...revised FS reports."**

Then, please insert the following text, after the bullets on the top of page 2:

**“Under California State Water Resources Control Board (SWRCB) Resolution No. 88-63, all groundwater is potentially suitable for municipal or domestic supply, unless:**

- **the total dissolved solids (TDS) exceed 3,000 mg/l- and (emphasis added) it is not reasonably expected by Regional Boards to supply a public water system, or**
- **there is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either best management practices or best economically achievable treatment practices, or**
- **the water source does provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day. (Please note: this is only a suggestion for the purposes of organization of the document, we would defer to the RWQCB (Brad Job) for the exact wording).**

**For the purposes of CERCLA response actions, EPA’s guidelines are used to classify groundwater because EPA guidelines are more protective than state criteria and the State of California does not have an EPA-approved comprehensive state groundwater protection plan.**

**Once the determination of groundwater classification has been made as part of this deliverable using the criteria listed above, other site specific factors (SSFS) will be evaluated in the feasibility study to determine appropriate remedial alternatives and cleanup criteria for the purposes of a CERCLA groundwater cleanup decision. For the purposes of a CERCLA cleanup decision, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) preamble allows for the application of the SSF to determine appropriate remediation goals for Class I and II groundwaters.”**

**Response:**

In accordance with the agreement reached during the January 9, 2001, Base Realignment and Closure Cleanup Team meeting and during the conference call with EPA on January 30, 2001, the Navy recommends that the following text be incorporated into the section titled, “Classification Regulation” of the revised beneficial use determination document. In summary, the bulk of the EPA’s recommended text is incorporated as follows. The text that starts with “according to the National” through the remainder of this section, which ends with a bullet that says “revised FS reports,” will be deleted as recommended. The reference to SWRCB Resolution No. 88-63 will be revised exactly as recommended by the Regional Water Quality Control Board (RWQCB) and EPA in their comments.

Two deviations from EPA’s recommended text are proposed. First, EPA’s paragraph stating that EPA’s criteria should be used for groundwater classification purposes should be deleted. Second, the Navy’s decision rule paragraph should be retained. The Navy understands that EPA’s guidelines are more protective than State criteria and that the State of California does not have

an EPA-approved comprehensive state groundwater protection plan. The Navy believes, however, that it is necessary to retain the State criteria in the classification because the evaluation in the revised FS reports based on State guidance will differ significantly compared to the evaluation based on Federal guidance. In particular, State guidance does not cite SSFs as in the NCP preamble. Both criteria are included in the decision rule paragraph.

**Recommended text**

Under California State Water Resources Control Board (SWRCB) Resolution No. 88-63 (1988), all groundwater is potentially suitable for municipal or domestic supply unless at least one of the following applies:

- The total dissolved solids (TDS) exceed 3,000 milligrams per liter (mg/L) and (emphasis added) it is not reasonably expected by Regional Boards to supply a public water system, or
- There is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either best management practices or best economically achievable treatment practices, or
- The water source does provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day (gpd).

Based on the previous regulations and for the purposes of this Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) cleanup action, the following decision rules are made for the determination of the potential beneficial use of groundwater at HPS:

- Areas with TDS concentrations greater than 10,000 mg/L will not be considered suitable for municipal or domestic water supply per the State criteria and will be considered Class III groundwater per the Federal criteria.
- Areas with TDS concentrations between 3,000 mg/L and 10,000 mg/L will not be considered suitable for municipal or domestic water supply per the State criteria and will be considered Class II groundwater per the Federal criteria. These areas will be further evaluated in the revised FS reports.
- Areas with TDS concentrations less than 3,000 mg/L will be considered potentially suitable for municipal or domestic water supply per the State criteria and will be considered Class II groundwater per the Federal criteria. These areas will be further evaluated in the revised FS reports.

Once the groundwater classification has been made as part of this document using the above decision rules, groundwater contamination in Class II areas will be evaluated in the revised FS reports using SSFs to determine appropriate

remedial alternatives and cleanup criteria for the purposes of a CERCLA groundwater cleanup decision. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) preamble allows for the application of SSFs to determine appropriate remediation goals for Class I and II aquifers. Groundwater areas meeting the State criteria will also be further evaluated in the revised FS reports; however, it is understood that the State guidance does not cite SSFs as in the NCP preamble.

For the purposes of the groundwater classification to be made as part of this deliverable, it is assumed that the A-aquifer in Parcels C, D, and E may be capable of a yield of at least 150 gallons per day (gpd) for a short period of time. It is questionable, however, that the A-aquifer can sustain a steady pumping rate of 150 gpd for an extended period of time without deterioration of water quantity and water quality. The revised FS reports may document an evaluation of whether a yield of 150 gpd is sustainable in the Class II A-aquifer areas (and whether a yield of 200 gpd is sustainable in groundwater areas meeting the State criteria).

3. **Comment:** While we agree that the Navy can use the highest TDS value for the determination process, EPA has some concerns about using data collected as far apart as the years 1990 and 2000 in the same data set to make decisions. It might be more appropriate to resample all of the wells the Navy is using to determine the aquifer classification so that all of the data is from the same year. Let's discuss.

Further, we do have some questions regarding the accuracy of the TDS values that are very high in one sampling event and much lower in subsequent sampling events. For example:

**IR01MW43A.** The result used was 77,000 mg/L, but this result is clearly anomalous because three prior results and three subsequent results were less than 10,000 mg/L. It appears that a decimal point may have been displaced in this anomalous high value, and it should not be used. Further justification for discarding this result is that all of the TDS concentrations for nearby well IR01MW44A are below 3,000 mg/L.

**IR02MW126A.** 29,700 mg/L was used, but subsequent duplicate sampling results were both below 10,000 mg/L.

**IR03MW218A1.** This well appears to have declining TDS values, but the first and highest result of 17,000 mg/L was used. There are three subsequent results below 10,000 mg/L.

**IR14MW10A.** 20,500 mg/L was used, but there are two subsequent sampling rounds below 10,000 mg/L.

**IR58MW298A.** The TDS concentration of 10,300 mg/L was used but more recent results are all less than 1,000 mg/L.

**IR58MW31A.** The TDS concentration of 17,800 mg/L was used when more recent results are all less than 1,000 mg/L.

**Response:** The Navy agrees that there are some data with anomalously high TDS results;

however, the Navy believes that using data from a single year would not be representative of the natural TDS fluctuations resulting from drought or excessive rainfall. To address the potentially anomalous TDS data, a review of the TDS results will be conducted to determine whether the highest TDS result is representative for contouring purposes. If anomalous TDS data are deemed inappropriate for contouring, Figures 1 and 2 will be revised accordingly. In addition, the Navy would like to clarify that all TDS data has been thoroughly reviewed and meets the quality assurance/quality control standards for the Remedial Investigation.

For example, the anomalously high TDS result at well IR58MW31A is not supported by TDS concentrations in the surrounding wells; therefore, the TDS result at the well is not used for contouring purposes on Figure 2. However, the Navy believes that the elevated TDS data cited by EPA at several Parcel E wells are representative of site conditions based on elevated TDS data at surrounding wells and proximity to San Francisco Bay.

The Navy believes that the TDS concentration at well IR01MW43A is over 10,000 mg/L because the TDS concentrations at nearby well IR01MW42A were greater than 10,000 mg/L for four sampling rounds. In addition, the spatial pattern of elevated TDS concentrations (in excess of 10,000 mg/L) at 28 of the 31 near-shore wells (less than 100 feet from the shoreline) at Parcel E further supports the validity of this data point. Also, the Navy has verified that the TDS concentration cited for well IR01MW43A is not the result of a decimal point misplacement. It is unknown why TDS concentrations from other sampling rounds are less than 10,000 mg/L; however, this well is planned for re-sampling during the Phase II groundwater data gaps investigation (GDGI).

A revised Figure 2 is presented as an attachment to the responses to comments for reference purposes. Note that this figure will be revised as appropriate based on a review of anomalous TDS data and based on TDS data from samples currently being collected for the Phase II GDGI.

4. **Comment:** EPA does not necessarily agree with the Navy's interpretation for Parcel D and E groundwater as shown on Figure 2. For example, a lot of well data presented in Figure 1 indicated that much of Parcel D groundwater proximate to the Bay also meets the criteria of a class II aquifer. However, in Figure 2, many of these lower TDS values are dropped and the Navy concludes that much of the TDS data in this portion of Parcel D is not accurate and can therefore be ignored (e.g., wells for IR sites 55, 50, 22, and 17). While the Navy briefly alludes on page 3 to leaking water lines as a possible cause, additional evidence to support this conclusion must be provided. Further, the TDS data cited for this portion of Parcel D is largely 4 to as much as 10 years old, with no resampling since 1993-94 at IR-22, no resampling at PA50MW07A and IR55MW01A since 1996 and no resampling of the IR 17 wells since 1992. Yet these results are dropped in Figure 2.

For Parcel E, it appears that the area that meets Federal criterion (Figure 2) should be extended to include much of IR-02 and part of IR-01. For example, the area that meets Federal criteria should be extended to include: IR01MW44A, IR01MW373A, IR01MWI41A, IR01MW372A, and

**IR02MW114A, IR02MWI41A, IR02MW373A, IR02MW372A, IR02MW87A and IR02MW114A2. If the anomalous high result for IR02MW126A is discarded, this well would also be included in this area. Also, there is an area in the southeast (IR-11, IR-14, IR-15, and IR-17 wells) where the TDS concentration is below 10,000 mg/L; this area is behind a sea wall and should be depicted as meeting Federal criterion on Figure 2. This area should include wells: IR14MW13A, IR17MW13A, IR15MW06A, IR02MW299A, IR15MW07A, PA50MW08A, IR15MW08A, IR73MW04A, IR11MW26A, IR17MW11A, IR11MW27A. The above locations are examples of where TDS values are below the 10,000 mg/L, however, there may be additional locations with TDS concentrations below 10,000 mg/L that are not specifically mentioned here but should be included in the revisions to Figure 2.**

**Response:** Figure 2 has been revised based on EPA's comment and discussions during the conference call with EPA on January 30, 2001. A revised Figure 2 is presented as an attachment to the responses to comments for reference purposes. New TDS data will be collected as part of the Phase II GDGI, and the results will be incorporated as appropriate.

Note that based on the January 30<sup>th</sup> conference call, the Navy is collecting TDS data at the following existing monitoring wells: PA16MW18A, IR17MW11A, IR17MW12A, IR17MW13A, IR22MW20A, PA50MW05A, PA50MW07A, IR50MW15A, IR55MW01A, IR55MW02A, IR70MW04A, IR70MW07A, AND IR70MW11A. New TDS data for Parcel D will be included in the revised beneficial use determination document, currently scheduled for submittal on March 21, 2001. New TDS data for Parcel C and E will not be available until June 2001 and will be included in a supplemental beneficial use determination document currently scheduled for submittal on June 23, 2001.

**5. Comment:** Page 3, first paragraph. The Navy states that TDS concentrations greater than 10,000 mg/l may be related to, among other things, "water line leaks". Then in the second paragraph on page 3, the Navy states that "isolated areas of low TDS may be related to water supply line leaks." The Navy concludes that water line leaks could cause both high TDS and low TDS values in the surrounding groundwater. This needs to be clarified and supported. EPA can understand how fresh water leaks could reduce TDS of adjacent groundwater but how does it result in higher TDS. Also, as said above, additional evidence such as actual field observations and measurements, must be cited to support the Navy's conclusions about the impacts of leaking water lines on groundwater.

**Response:** The text on the first paragraph of Page 3 (section titled "Groundwater Evaluation") will be revised to delete references to the potential for water line leaks as potential sources of elevated TDS concentrations. The revised statement will read "The distribution of TDS concentrations in excess of 10,000 mg/L form a complex pattern that may be related to saltwater intrusion along utility lines or aquifer heterogeneities."

**6. Comment:** Page 3, Conclusions. In the first paragraph, please make the conclusions based on comment 1 above. For example, refer to the figure and state which

portions of the aquifer meet Class I, II or III designations. The remainder of the text can follow as written.

**Response:** The conclusions will be revised based on comment 1 and will refer to the Class II and III groundwater areas identified in Figure 2. The conclusions will state that no Class I groundwater areas are present at HPS. The response to comment 1 explains the revised decision rules that apply beneficial use determination.

**HUNTERS POINT SHIPYARD  
GROUNDWATER BENEFICIAL USE EVALUATION, PARCELS C, D, AND E  
RESPONSE TO COMMENTS FROM  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**

This document presents the Navy's responses to comments from the California Regional Water Quality Control Board (RWQCB) on the "Groundwater Beneficial Use Evaluation, Parcels C, D, and E, Hunters Point Shipyard, San Francisco, California," dated November 17, 2000. The comments addressed in the following document were received from RWQCB on November 29, 2000.

**RESPONSES TO RWQCB**

**General Comments**

1. **Comment:** In particular, we take exception to the Navy's erroneous citation of State Water Resources Control Board Resolution 88-63. The Navy's evaluation incorrectly states that the criteria for a potential drinking water source are:

- "TDS concentrations exceed 3,000 mg/L (5,000 uS/cm, electrical conductivity)"
- "It is not reasonably expected by Regional Boards to supply a water system."

Please revise this section of the evaluation to reflect that all groundwater and surface waters in the state should be considered a potential source of drinking water except where:

- a. The total dissolved solids (TDS) exceed 3,000 mg/L and (emphasis added) it is not reasonably expected by Regional Boards to supply a public water system, or
- b. There is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either best management practices or best economically achievable treatment practices, or
- c. The water source does provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day.

**Response:** The citation of State Water Resources Control Board Resolution 88-63 has been revised as requested.

2. **Comment:** In addition, we are concerned that the document title does not reflect the true nature of the beneficial use evaluation as it relates to the beneficial uses of the B- and bedrock aquifers at the site. Please revise the document to reflect that the beneficial use evaluation pertains only to the A-aquifer, and that based on our current understanding, all deeper groundwater at the site is considered to be a potential source of drinking water. As such, all remedial efforts for the A-aquifer should be designed to ensure that

**pollution does not migrate into deeper aquifers. In the event that pollution is encountered in deeper aquifers, drinking water standards will be the applicable cleanup goals.**

**Response:**

The title of the document has been changed to "Groundwater Beneficial Use Determination for A-Aquifer Groundwater, Parcels C, D, and E, Hunters Point Shipyard, San Francisco, California." The conclusions have also been revised to clarify that, based on our current understanding, the B-aquifer is considered a potential beneficial use aquifer. Groundwater cleanup decisions for the A-aquifer will be designed to ensure that contamination does not migrate into deeper aquifers.

**HUNTERS POINT SHIPYARD  
GROUNDWATER BENEFICIAL USE EVALUATION, PARCELS C, D, AND E  
RESPONSE TO COMMENTS FROM  
LENNAR/BAYVIEW HUNTERS POINT PARTNERS**

This document presents the Navy's responses to comments from Lennar/Bayview Hunters Point Partners (Lennar/BVHP) on the "Groundwater Beneficial Use Evaluation, Parcels C, D, and E, Hunters Point Shipyard (HPS), San Francisco, California," dated November 17, 2000. The comments addressed in the following document were received from Lennar/BVHP on December 18, 2000.

**RESPONSES TO LENNAR/BVHP**

**General Comments**

1. **Comment:** The Navy uses the highest historical TDS concentration to represent site conditions. It would be more likely representative of long term future site conditions and certainly more conservative to use the opposite approach and use the lowest concentration data point. The Lennar/BVHP team believes that using the lowest measured TDS value would yield an appropriate analysis as the TDS concentration is likely to decrease with time. This is likely to occur as sewer lines are repaired, the pumping of site groundwater is decreased and the movement of the saltwater onto the site throughout the existing leaky sewers is eliminated (either through the Navy's actions or the developer's as the site is developed). As the repairs are made and the groundwater pumping decreased, the existing groundwater gradients that are inward (from the Bay onto Hunters Point) will reverse, and change to outward (towards the Bay) across the entire base. This should result in an overall decrease in TDS at the site with time as fresh water migrates through these areas. We ask that the Navy create a comparative analysis using this methodology (posting and contouring the lowest TDS concentrations) to assess whether it would significantly change the interpretation.

**Response:** The U.S. Environmental Protection Agency (EPA) and the Regional Water Quality Control Board (RWQCB) concur with the Navy's approach to use the maximum total dissolved solids (TDS) concentration to assist in determining potential beneficial use of A-aquifer groundwater. In addition, the Navy disagrees with the Lennar/BVHP team's assertion that using the lowest TDS concentrations values is (1) more representative of long-term site conditions and (2) an appropriate analysis to determine potential beneficial use. Large quantities of fresh water (estimated at up to 1,000,000 gallons per month) are being leaked from water supply lines at HPS. As the Navy's ongoing effort to repair water supply lines continues, A-aquifer groundwater TDS concentrations may increase with time.

Further, the Lennar/BVHP team's assertion that TDS concentrations will decrease with time assumes that significant saltwater intrusion into the A-aquifer is currently being caused by pumping at Pump Station A. The TDS data collected at the site does not support this position. In particular, an extensive depression in the A-aquifer groundwater surface is located in large portions of

Parcels D and E, presumably caused by pumping of the sanitary sewer system. The TDS concentrations within the majority of the groundwater surface depression are well below 10,000 milligrams per liter (mg/L), and there are several areas with TDS concentrations less than 3,000 mg/L between Pump Station A and the shoreline. Based on this observation and given the large quantities of fresh water currently being leaked to the subsurface, it is likely that the fresh water line leaks are more significant than the influx of saltwater from sanitary sewer or storm drain lines.

In addition, the use of the maximum TDS concentration at a given well to determine potential beneficial use is appropriate since it represents the worst-case scenario for a given well to supply drinking water. Worst-case scenarios may occur during drought or result from excessive pumping, and such scenarios are the only realistic situations that would prompt consideration of HPS groundwater as a drinking water source. The Navy does not believe that a comparative analysis using the lowest TDS concentrations will benefit the program.

2. **Comment:** **Many of the TDS data points that the Navy is relying upon to represent TDS contours were collected during 1990/1991 and have not been re-validated by current sampling results. In addition, many of the locations have been sampled have been samples only once, and may not be representative of actual conditions at the particular locations as there are no other data with which to compare the result. Lastly, several well samples exhibited the highest concentration that was not consistent with the historical TDS concentration range for that well (for example, see wells IR06MW45A, IR28MW122A, and IR58MW31A). The Navy states that additional A-aquifer TDS data collection is proposed to be part of its phase II data gaps groundwater sampling. To address the above stated concerns, we propose that the Navy re-sample wells that are currently represented by only 1 data point, are only represented by older 1990/1991 data, or where the data points used in its contouring is not consistent with the historical range for that well.**

**Response:** The Navy acknowledges the concerns identified by Lennar/BVHP and notes that similar concerns were identified by EPA during their review of the subject document. Please refer to the Navy's responses to EPA comments 3 and 4 for clarification of the Navy's position.

New TDS data will be collected as part of the Phase II groundwater data gaps investigation (GDGI), and the results will be incorporated as appropriate. New TDS data for Parcel D will be included in the revised beneficial use determination document, currently scheduled for submittal on March 21, 2001. New TDS data for Parcel C and E will not be available until June 2001 and will be included in a supplemental beneficial use determination document currently scheduled for submittal on June 23, 2001.

3. **Comment:** **The Navy has improperly quoted the Regional Water Quality Control Board resolution 88-63. The Navy's letter implies that groundwater may not be considered potentially suitable for municipal or domestic supply based solely upon the expectation by Regional Boards for the groundwater to supply a water system.**

**The accurate quote from resolution 88-63 is:**

**“a. The total dissolved solids (TDS) exceed 3,000 mg/L (5,000 uS/cm, electrical conductivity) and it is reasonably expected by Regional Boards to supply a public water system, or...”**

**In other words, in order to disqualify a groundwater resource from beneficial use under Resolution 88-63, both conditions must be met before the groundwater can be considered non-suitable or potentially non-suitable for municipal or domestic supply.**

**Response:** The citation of State Water Resources Control Board Resolution 88-63 has been revised as requested by the RWQCB and the EPA.

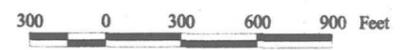
- 4. Comment:** The Navy’s Figure 2 “Areas Assumed to Meet State and Federal TDS Criteria in A-Aquifer Groundwater” misrepresents the extent of TDS. In several instances on Parcels C, D, and especially on Parcel E, the Navy has without technical justification moved the boundary between areas that “do not meet Federal or State criteria” and “meets only Federal Criteria” too far inland. The Navy’s interpretation is not practical or reasonable and the Navy should either adjust these boundary lines to more accurately represent the data or eliminate Figure 2 from its report.

**Response:** The Navy notes that similar concerns were identified by EPA during their review of the subject document. Figure 2 has been revised based on EPA’s comment and discussions during a conference call with EPA on January 30, 2001. A revised Figure 2 is presented as an attachment to the responses to comments for reference purposes.



**Legend**

- W020M74A 8200 A-Aquifer Monitoring Well With Maximum TDS Concentration (mg/L)
- ▲ W020B298 7430 Hydropunch/Soil Boring With Maximum TDS Concentration (mg/L)
- Class III Per Federal Criterion Class II Per Federal Criterion
- Class II Per Federal Criterion and Meets State Criteria
- ⊕ Water Line Repairs
- Water Utility Line
- Storm Drain
- Sanitary Sewer
- Seawall
- Parcel E Sheet Piles
- Shoreline Features
- San Francisco Bay
- Roads
- ▭ Parcels
- ▭ Buildings
- mg/L - milligrams per Liter
- TDS - Total Dissolved Solids



**Tetra Tech EM Inc.**

**HUNTERS POINT SHIPYARD  
SAN FRANCISCO, CALIFORNIA**

**FIGURE 2  
AREAS ASSUMED TO MEET STATE  
AND FEDERAL BENEFICIAL USE  
CLASSIFICATION CRITERIA  
IN A-AQUIFER GROUNDWATER**