California Regional Water Quality Control Board
San Francisco Bay Region

Linda S. Adams
Secretary for Environmental Protection

1515 Clay Street, Suite 1400, Oakland, California 9461
(510) 622-2300 • Fax (510) 622-2460
http://www.waterboards.ca.gov/sanfranciscobay

-nold Schwarzenegger
Governor

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ALAMEDA POINT
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Department of the Navy
Base Realignment and Closure Program Management Office West
ATTN: Thomas L. Macchiarella
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

Subject: Comments on the Draft Remedial Investigation/Feasibility Study Report for Site 35, Alameda Point, Alameda, California

Dear Mr. Macchiarella:

Upon review of the *Draft Remedial Investigation/Feasibility Study Report, IR Site 35, Areas of Concern in Transfer Parcel EDC-5, Alameda Point, Alameda, California*, dated July 17, 2006 (Draft RI/FS Report) we have the following comments:

#	Page	Section	Comments
G1		General	**Preliminary Screening Criteria** - What rationale is used in selecting EPA PRGs over other screening levels? Why not use the more conservative between ESLs and PRGs?
G2		General	**Background Metals Concentrations** - We concur with EPA and DTSC comments regarding interpretation of background levels at Alameda Point. Also, see specific comments # S7,S21, and S23. Furthermore, the background metal concentrations presented throughout the document are confusing. When metals are compared with background levels in most tables, it is unclear whether the background levels referenced are the 'Alameda Point' background levels or the elevated background levels as discussed in Section 4.3.
G3		General	**B(a)P Equivalents -** The Alameda Point B(a)P equivalent concentration screening level used throughout this document is 620 ug/kg. The only reference given to support the use of this screening level is (DON 2001a), which refers to Draft PAH Technical Meeting Minutes from 5/31/01. Please include discussion and/or other documentation on the regulatory agencies concurrence that this screening level is acceptable and appropriate.

#	Page	Section	Comments
S1	ES-2	Exec Summary	**Remedial Investigation -** This paragraph mentions that only 14 samples for the Site 35 RI were analyzed for hexavelent chromium. Please include rationale for limiting hexavalent chromium analyses to these samples.
S2	ES-3	Exec Summary	**Third paragraph** - If the groundwater at AOCs 5, 24, and 25 can sustain a yield of 200 gallons per day (and have TDS <3000 mg/L), the Water Board will consider it a potential drinking water source under State Board Resolution 88-63.
S3	ES-4	Exec Summary	**Nature and Extent of Contamination - second paragraph** - Regardless of the conditions present that may or may not have contributed to higher metals concentration due to dissolution, elevated metals concentrations above PSCs/ESLs need to be addressed, as they indicate potential risk to human and aquatic receptors. Also, what rationale was used for taking some samples unfiltered and other samples filtered? Were EPA approved methods used in sample collection and analysis? Furthermore, no discussion was given that may indicate reason/cause of anaerobic conditions or if these anaerobic conditions may or may not have resulted from Navy activities on the site.
S4	ES-9	Exec Summary	**Ecological Risk Assessment** - Please mention where supporting data for statements made in this section may be found in this report.
S5	ES-11	Exec Summary	**Top of page** - Provide rationale for why other metals, benzene, and TPH do not have remediation goals developed for them, even though high concentrations were detected above background and screening levels. Why is the RG for B(a)P above the PSC of 620 ug/kg?
S6		Exec Summary	**Table ES-1** - There are numerous AOCs that seem to exhibit unacceptable cancer or HI risks (even without consideration of metals) that have 'No Further Action' recommendations, with typical argument that concentrations are 'naturally occurring' or 'dissolution' is occurring. Regardless, unacceptable risks are identified throughout this report, indicating some action or use restriction may be required to protect human and aquatic receptors. Elevated risk associated with various contaminants seems to warrant further consideration for remedial action.

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S7	1-11	1.5.5	**Background Metals Evaluation** - This paragraph mentiones that only 3 soil borings for the Alameda Point Background evaluation were located in the rather extensive site 35 boundaries. Was this sufficient to evaluate? Furthermore, for these three borings, were elevated metals concentrations reported that are consistent with Navy's position that a "higher background" exists at site 35? Please include information from these three samples for comparison purposes. Furthermore, is there statistically enough local data to justify claim that a higher background exists at Site 35 than other Alameda Point sites?
S8	1-13	1.5.9	**OU5 addendum Sampling** - The Alameda Point B(a)P equivalent concentration screening level used throughout this document is 620 ug/kg. The only reference given to support the use of this screening level is (DON 2001a), which refers to Draft PAH Technical Meeting Minutes from 5/31/01. Please include discussion and/or other documentation on the regulatory agencies concurrence that this screening level is acceptable and appropriate.
S9	1-28	1.6.4.3	**First Sentence** - Clean Water Act was passed in 1972, not 1974.
S10	2-11	2.7	**Second Paragraph** - California EPA does not use the same Federal EPA terminology that defines groundwater as Class I, II, or III. Please include a reference to State Board Resolution 88-63 when discussing California guidelines to define groundwater beneficial uses.
S11	2-12	2.7	**Top Paragraph** - While the groundwater in the central region of Alameda Point may not be currently used as a drinking water source, it is considered a potential drinking water source per State Board Resolution 88-63. CERCLA cleanup decisions need to be protective of present and future beneficial uses, including use as a drinking water source. Please revise all sections of this report to reflect that the groundwater in the central region of Alameda Point, east of Saratoga street, is considered by the Water Board to be a potential drinking water source, unless the groundwater meets the exception criteria specified in State Board Resolution 88-63.

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S12	2-12	2.7	**Second paragraph** – Please clarify when the regulators agreed that groundwater below sites 5, 6, 7, 8, 10, 12, and 25 is unlikely to be a potential drinking water source? I have no record of the Water Board providing formal exemption for these sites?
S13	2-12	2.7	**4th Paragragh** –The text mentions that the Water Board proposed (proposed changes to Basin Plan 4/10/00) to de-designate the MUN designation for shallow bay-front groundwater in the fill layer. As this de-designation process was not completed and is inactive, this information is no longer pertinent? Please delete this paragraph.
S14	2-13	2.7	**Third Paragraph** – Please be cautious when reporting average TDS data across sites, especially when the range between max and min is great, when few data are available, or when portions of the site have groundwater wells that may be tidally influenced. Please include the range of TDS values when discussing average TDS values, and mention if any wells associated with average TDS values may be tidally influenced.
S15	2-14	2.7	**Second Paragraph** - Regardless of arguments presented in this paragraph, the groundwater below most of Site 35 does not meet the criteria specified in State Board Resolution 88-63 that would allow for exemption of drinking water consideration. Please revise.
S16	3-8	3.5	**First Bullet under 'Soil':** This is the first, and only, mention of which constituents are included in the B(a)P equivalent concentration screening level. Please include this information when the concept is first discussed in the text.
S17	4-2	4.1.2	**First Paragragh** - How significant are the "positive interferences" associated with EPA method 8015-M? Are they significant? Regardless, was this data still used in the report? Please elaborate.
S18	4-2	4.1.2	**Total Petroleum Hydrocarbons -** Please explain how AOCs with TPH levels exceeding PSCs will be addressed in/transferred to the TPH program. Discuss if any of the areas with exceedances are within Corrective Action Areas. Briefly discuss how areas with TPH issues that are not in current CAAs will be addressed in the TPH program. Also discuss in section 4.2.2 and any other applicable section.

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S19	4-6	4.1.5	**Second Paragraph** - The PSC for lead (23,000 mg/kg) is significantly higher than the ESLs for lead (150 - 750 mg/kg). Please include rationale for using PRGs instead of ESLs when some ESLs are more protective.
S20	4-9	4.2.1	**Top of page** - Information presented here seems to suggests that the extent of napthalene in groundwater may be limited in the down-gradient direction while the full extent is not fully defined, due to lack of up-gradient information. Please include some justification for why the napthalene plume was not fully characterized.
S21	4-11	4.2.5	**First Paragraph** - We question whether sufficient data has been collected for the statistical justification deciding that high metal concentrations are "naturally occurring", and concur with DTSC and EPA comments regarding metals above background levels. See comment for Section 4.3 below.
S22	4-13	4.2.5	**Top paragraph** - Discuss rationale for developing assumption that the observed Nickel is above background levels if Nickel was not included in the background assessment?
S23		4.3	**General -** The Navy's arguments for why they consider high metal concentrations found throughout Site 35 to be naturally occurring, as detailed in Section 4.3, seems limiting and ignores numerous significantly elevated concentrations of metals found throughout the site. With many of the "background" levels already far exceeding ESL/PRCs, to propose to accept even "higher background" levels site Site 35 in this report seems inappropriate, especially considering the potential risks associated with unrestricted use on areas with metals at the upper limit of the "background" levels.
S24	4-14	4.3.1	**Third Paragraph, First Sentence** - This sentence references (PRC 1997), however, there is no entry in the References section for PRC 1997. Please correct the reference in the text or the References section.
S25	4-15	4.3.1	**Last bullet item ("for most metals...")** - Widespread distribution could result from activities that could have sprayed pollutants, or emitted them gaseously or via fine dust particles.

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S26	4-21 thru 4-24	4.3.2.2	**For each metal summary** - It would also be useful to include the number of samples that were above ESLs/PSCs. This is important information and should not be left out.
S27	4-27	4.4.2	**Last paragragh** - Even considering supporting text, the argument that all the metals detected throughout site 35, except for some Lead at a couple sites, are "naturally occurring" is tenuous. Furthermore, the high levels detected suggest significant risk is associated with most uses of this site. Some discussion about how future benefical uses will be protected, and the risks to human and aquatic receptors is warranted.
S28	5-14	5.2.1.2	**Top paragraph** - MTBE is an important exception to the statement that "Generally, petroleum hydrocarbons that are most mobile in the environment are also readily degraded". Because this section discusses the environmental fate of petroleum hydrocarbons in general, please include a sentence describing the environmental fate characteristics of MTBE.
S29		6.3 & 6.4	**General** - Please also provide the risk including metals in all the AOC subsections to 6.3 and 6.4
S30		Figure 4-5	Why are only metals above PSCs <u>and</u> "background" presented for groundwater? What "background" is referrenced here? The Alameda Background, or the elevated "background" as discussed in Section 4.3?
S31		Figure 11-4 & 11-5	Why is B(a)P equivalent concentration of 1,000 ug/kg used instead of 620ug/kg? Also on Page ES-10.
S32		Figure 11-9	Seems like more samples should be taken to more fully characterize the VC plume. How can the plume be defined and injection points be situated with so few previous sampling locations. Only one sampling location was reported for the site south of Building 66, none further downgradient.
S33		Table 3-6	The PRGs for Benz(a)anthracene through Benzo(a)pyrene range from 62 to 6,200 ug/kg, where as the B(a)P equivalent concentration screening criteria mentioned throughout the text is 620 ug/kg. Presenting this information without further explanation is confusing.

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S34		Table 4-10	**Metals in GW Exceeding PSCs -** There is no indication of the number of samples tested or the number of samples above PSCs at each study area. Is the concentration presented the maximum detected at the site, or something else? Please include more specifics here. Also, it would be helpful to include a table showing metals above background levels as well.
S35		Table K-2-2	**Page 1 and 2 -** The Water Board considers SWRCB Resolutions 68-16 and 92-49 ARARs. Please clearly present this information in this table.

Please contact me at (510) 622-2355 or email ersimon@waterboards.ca.gov if you have any questions.

Sincerely,

Erich Simon
Project Manager

CC (via US Mail and email):

Ms. Anna Marie Cook
U.S. EPA Region IX
75 Hawthorne Street, (SFD-8-2)
San Francisco, CA 94105-3901

Ms. Dot Lofstrom
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826-3200

Greg Lorton
Department of the Navy
BRAC PMO West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

Francis Fadullon
Department of the Navy
BRAC PMO West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

Mr. Peter Russell
Russell Resources
440 Nova Albion Way, Suite 1
San Rafael, CA 94903-3634